



Peace Airshed Zone Association

Ambient Air Monitoring Network Summary

**Continuous Ambient Air Quality Monitoring Program
Monthly Report
March 2012**

Operations and Reporting

FOCUS
AIR QUALITY MONITORING

April 30th, 2012

Alberta Environment
 11th Floor, Oxbridge Place
 9820-106 Street
 Edmonton Alberta T5K 2J6

RE: Peace Airshed Zone Association (PAZA) – March 2012 Ambient Air Report

Enclosed is the PAZA Ambient Monitoring Network Report for the month of **March 2012**.

This report is submitted by PAZA on behalf of the industrial member companies to satisfy the requirements of the following facility Operating Approvals:

| Company | Facility | LSD | AENV Approval Number |
|------------------------------------|---------------------|-----------------|----------------------|
| Advantage Oil & Gas Ltd. | Glacier | 05-02-076-13-W6 | 262479-00-00 |
| AltaGas Ltd. | Pouce Coupe | 03-03-081-13-W6 | 247673-00-00 |
| | Ante Creek | 02-26-068-25-W5 | 266694-00-00 |
| | Gordondale | 16-31-78-11-W6M | 287474-00-00 |
| Barrick Energy Inc. | Sturgeon/Valleyview | 02-02-069-22-W5 | 1633-02-00 |
| Birchcliff Energy Ltd. | Pouce Coupe | 03-22-078-12-W6 | 252529-00-00 |
| Bonavista Energy Corporation | Rycroft | 08-25-077-06-W6 | 11351-02-00 |
| | Spirit River | 08-34-077-06-W6 | 11096-02-00 |
| Canadian Natural Resources Limited | Bonanza | 11-25-081-11-W6 | 29-01-01 |
| | Progress/Gordondale | 01-01-077-10-W6 | 10036-02-00 |
| | Gold Creek | 13-26-067-05-W6 | 10446-02-00 |
| | Teepee Creek | SE-2-074-04-W6 | 1635-02-02 |

| | | | |
|--|------------------------------------|-----------------|--------------|
| Conocophillips Canada Energy Partnership | Wembley | 06-19-073-08-W6 | 212-01-00 |
| Devon Canada | Tangent | 16-20-080-24-W5 | 11346-02-00 |
| | NW Belloy (Dunvegan) | 16-36-079-03-W6 | 9810-02-00 |
| | Eaglesham (South) | 02-14-077-25-W5 | 47669-01-00 |
| | Puskwaskau | 03-26-074-01-W6 | 17524-01-00 |
| | North Normanville | 03-36-079-23-W5 | 47455-01-00 |
| | West Culp | 05-34-078-25-W6 | 136284-00-00 |
| | Cecil | 08-15-084-08-W6 | 10032-02-00 |
| EnCana Corporation | Hythe Brainard | 11-18-074-12-W6 | 10910-02-02 |
| | Sexsmith | 04-08-075-07-W6 | 10002-01-00 |
| Galleon Energy Inc. | Eaglesham | 01-25-076-01-W6 | 241532-00-00 |
| | Kakut | 14-12-075-03-W6 | 248469-00-01 |
| | Donnelly | 06-01-077-21-W5 | 87-02-00 |
| Grande Prairie Generation Inc. | Northern Prairie Power Project | 04-19-073-08-W6 | 238762-00-02 |
| Longview Oil Corp. | Sunset House | 06-22-70-20-W5 | 138884-01-00 |
| Penn West Petroleum Ltd. | Tangent | 13-29-080-23-W5 | 1746-02-01 |
| | Pouce Coupe | 16-07-078-11-W6 | 614-01-00 |
| Spectra Energy Midstream Corporation | Fourth Creek | 16-11-082-09-W6 | 263-01-00 |
| Suncor Energy Inc. | Progress | 07-22-078-09-W6 | 11428-02-00 |
| Taq North Ltd. | Valhalla | 13-21-076-09-W6 | 17620-01-01 |
| Weyerhaeuser Canada | Grande Prairie Pulp and Wood Plant | 01-14-070-05-W6 | 113-02-00 |

Included in this report is a summary of the monthly continuous monitoring, detailed hourly average reports and multipoint calibration reports of all instruments. Operational summaries can be found on the “Monthly Continuous Data Summary” and “Continuous Network Equipment Summary” pages of the report.

Continuous Monitoring: Six (6) Stations including Henry Pirker (Grande Prairie), Evergreen Park, Smoky Heights, Beaverlodge, Valleyview, and Portable-Sunset House.

During the month of **March** the following events were noted:

Henry Pirker Station:

- ◆ The measured ambient air quality was within the Alberta Ambient Air Quality Objectives (AAAQO) for the Henry Pirker station.
- ◆ All analyzers and sensors at the Henry Pirker station had an operational uptime greater than 90% for the month of March.

Evergreen Park Station:

- ◆ The measured ambient air quality was within the AAAQO for the Evergreen Park station.
- ◆ All analyzers and sensors at the Evergreen Park station had an operational uptime greater than 90% for the month of March

Smoky Heights Station:

- ◆ The measured ambient air quality was within the AAAQO for the Smoky Heights station.
- ◆ All analyzers and sensors at the Smoky Heights station had an operational uptime greater than 90% for the month of March

Beaverlodge Station:

- ◆ The measured ambient air quality was within the AAAQO for the Beaverlodge station.
- ◆ All analyzers and sensors at the Beaverlodge station had an operational uptime greater than 90% for the month of March

Valleyview Station:

- ◆ The measured ambient air quality was within the AAAQO for the Valleyview station.
- ◆ All analyzers and sensors at the Valleyview station had an operational uptime greater than 90% for the month of March
- ◆ An exceedence of the H₂S 1-hour guideline was reported on March 21st and rescinded on final review of the data for reporting.

Sunset House Station:

- ◆ The measured ambient air quality was within the AAAQO for the Sunset House station.
- ◆ All analyzers and sensors at the Sunset House station had an operational uptime greater than 90% for the month of March
- ◆ Calibration of the Ozone analyzer returned a 24.9% change in response from the previous calibration. This is determined to be due to operator error in the previous calibration and accepted as a valid change. No further action will be taken.

Passive Monitoring - 46 Stations throughout the PAZA zone:

There were five duplicate sites sampled in the month of March: Wanham, Eaglesham, Grande Prairie I, Peavine, and Girouxville 3. The passive sample analyses were performed by MAXXAM Analytics Inc.

A summary of the passive data collected are reported as follows:

- Monthly average concentrations for SO₂ passives ranged from 0.1 ppb to 1.5 ppb, with a mean of 0.3 ppb.
- Monthly average concentrations for NO₂ passives ranged from 0.1 ppb to 5.0 ppb, with a mean of 0.8 ppb.
- Monthly average concentrations for O₃ passives ranged from 34.4 ppb to 57.9 ppb, with a mean of 46.6 ppb.
- Monthly average concentrations for H₂S passives ranged from 0.1 to 0.3 ppb, with a mean of 0.2 ppb.

If you have any questions or concerns, please contact Shelly Pruden, PAZA Program Manager at 780.833.4343 or 780.882.4071.

On Behalf of the,
Peace Airshed Zone Association



Shelly Pruden
Program Manager

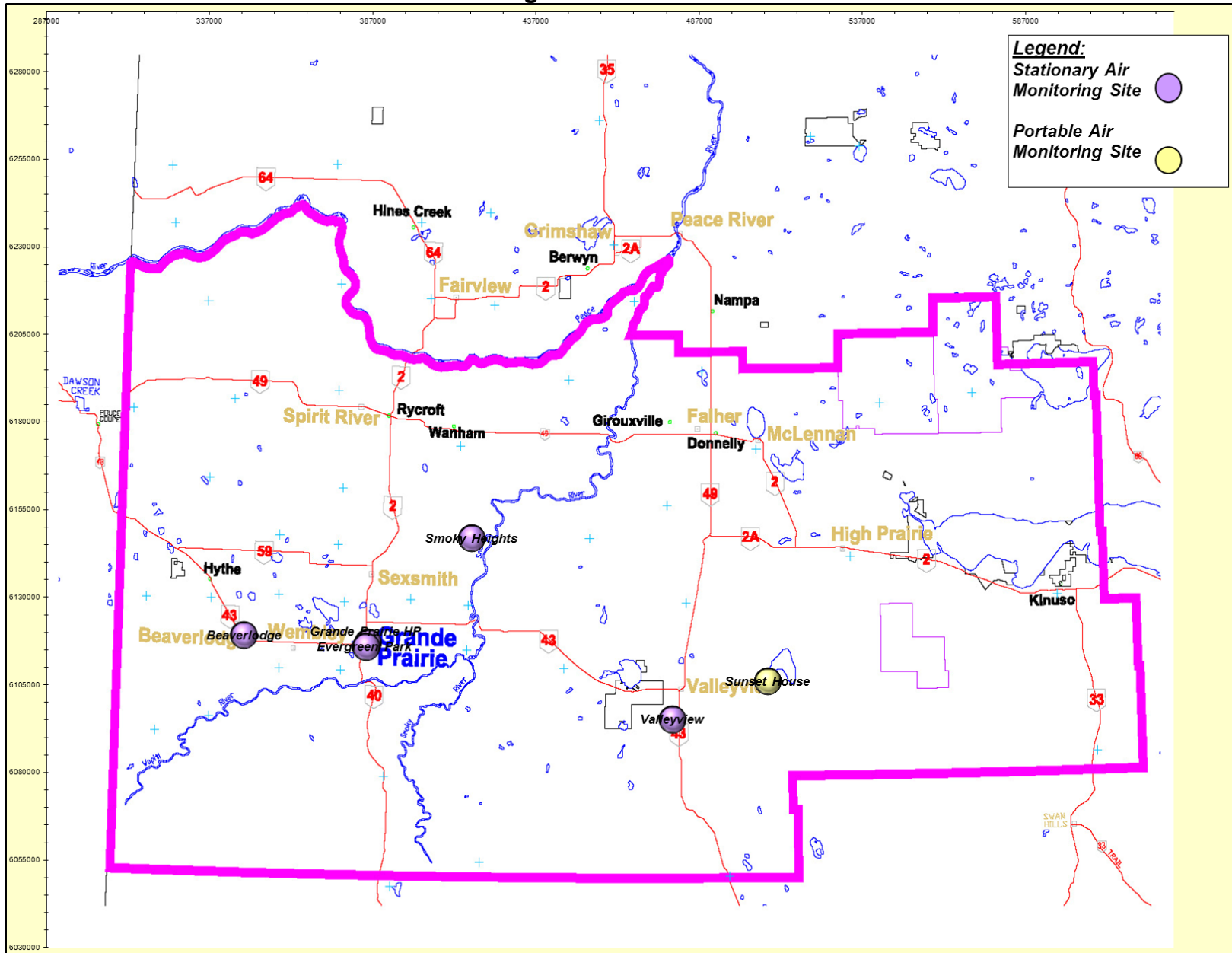


Patrick Andersen, B.Sc.
FOCUS AQM Data Specialist



Jeff Cooper, C.Tech.
AQM Operations Manager

Location of PAZA Continuous Monitoring Stations



PAZA Monthly Continuous Data Summary

| Mar-2012 Peace Airshed Zone Association | | | | | | | Maximum Recorded Values | | | | Operational Time (%) |
|---|------------|-------|----------------|-----------------|------------|-------|-------------------------|--------------|--------------|--------|----------------------|
| Pollutant (units) | Objectives | | Station | Monthly Average | Exceedence | | 1-hr | | 24-hr / 8-hr | | |
| | 1-hr | 24-hr | | | 1-hr | 24-hr | Conc | Day | Conc | Day | |
| SO ₂ (ppb) | 172 | 48 | Henry Pirker | 0.4 | 0 | 0 | 9.3 | Mar-13 11:00 | 1.6 | Mar-13 | 100% |
| SO ₂ (ppb) | 172 | 48 | Evergreen Park | 0.2 | 0 | 0 | 4.3 | Mar-12 11:00 | 0.8 | Mar-01 | 100% |
| SO ₂ (ppb) | 172 | 48 | Smoky Heights | 0.6 | 0 | 0 | 10.6 | Mar-04 10:00 | 1.8 | Mar-04 | 100% |
| SO ₂ (ppb) | 172 | 48 | Beaverlodge | 0.4 | 0 | 0 | 3.9 | Mar-23 03:00 | 1.0 | Mar-01 | 100% |
| SO ₂ (ppb) | 172 | 48 | Valleyview | 0.5 | 0 | 0 | 18.6 | Mar-04 03:00 | 2.4 | Mar-04 | 100% |
| SO ₂ (ppb) | 172 | 48 | Sunset House | 0.2 | 0 | 0 | 2.4 | Mar-26 04:00 | 0.8 | Mar-26 | 100% |
| NO (ppb) | | | Henry Pirker | 4.1 | 0 | 0 | 86.4 | Mar-15 22:00 | 15.0 | Mar-15 | 100% |
| NO ₂ (ppb) | 159 | 106 | Henry Pirker | 11.9 | 0 | 0 | 44.7 | Mar-12 08:00 | 21.8 | Mar-15 | 100% |
| NO _x (ppb) | | | Henry Pirker | 16.0 | 0 | 0 | 130.7 | Mar-15 22:00 | 36.8 | Mar-15 | 100% |
| NO (ppb) | | | Beaverlodge | 0.5 | 0 | 0 | 9.4 | Mar-24 09:00 | 2.0 | Mar-24 | 100% |
| NO ₂ (ppb) | 159 | 106 | Beaverlodge | 3.5 | 0 | 0 | 19.7 | Mar-22 07:00 | 7.1 | Mar-24 | 100% |
| NO _x (ppb) | | | Beaverlodge | 4.0 | 0 | 0 | 22.7 | Mar-22 08:00 | 9.2 | Mar-24 | 100% |
| NO (ppb) | | | Sunset House | 0.1 | 0 | 0 | 2.1 | Mar-03 22:00 | 0.3 | Mar-24 | 100% |
| NO ₂ (ppb) | 159 | 106 | Sunset House | 1.4 | 0 | 0 | 4.4 | Mar-15 21:00 | 2.4 | Mar-28 | 100% |
| NO _x (ppb) | | | Sunset House | 1.5 | 0 | 0 | 6.4 | Mar-03 22:00 | 2.6 | Mar-28 | 100% |
| O ₃ (ppb) | 82 | | Henry Pirker | 26.3 | 0 | - | 48.6 | Mar-30 15:00 | 35.1 | Mar-30 | 100% |
| O ₃ (ppb) - 8-hr | | | Henry Pirker | | 0 | | | | 46.4 | Mar-30 | |
| O ₃ (ppb) | 82 | | Beaverlodge | 34.7 | 0 | - | 52.2 | Mar-26 18:00 | 43.7 | Mar-31 | 100% |
| O ₃ (ppb) - 8-hr | | | Beaverlodge | | 0 | | | | 49.8 | Mar-30 | |
| O ₃ (ppb) | 82 | | Sunset House | 36.4 | 0 | - | 57.9 | Mar-27 19:00 | 52.6 | Mar-27 | 100% |
| O ₃ (ppb) - 8-hr | | | Sunset House | | 0 | | | | 55.9 | Mar-27 | |
| CO (ppm) | 13 | | Henry Pirker | 0.25 | 0 | - | 1.2 | Mar-15 22:00 | 0.4 | Mar-15 | 100% |
| CO (ppm) - 8-hr | | 5 | Henry Pirker | | 0 | | | | 0.5 | Mar-16 | |
| THC (ppm) | | | Henry Pirker | 2.17 | - | - | 3.0 | Mar-26 07:00 | 2.4 | Mar-25 | 100% |
| TRS (ppb) | | | Henry Pirker | 0.3 | - | - | 1.2 | Mar-29 16:00 | 0.5 | Mar-14 | 100% |
| TRS (ppb) | | | Evergreen Park | 0.6 | - | - | 1.5 | Mar-02 09:00 | 0.9 | Mar-14 | 100% |
| TRS (ppb) | | | Smoky Heights | 0.3 | - | - | 0.5 | Mar-28 08:00 | 0.4 | Mar-17 | 100% |
| TRS (ppb) | | | Sunset House | 0.3 | - | - | 0.6 | Mar-02 03:00 | 0.4 | Mar-02 | 100% |
| H ₂ S (ppb) | 10 | 3 | Valleyview | 0.1 | 0 | 0 | 8.4 | Mar-21 13:00 | 0.8 | Mar-21 | 100% |
| PM2.5 (µg/m3) | 80 | 30 | Henry Pirker | 6.7 | 0 | 0 | 35.6 | Mar-15 22:00 | 14.8 | Mar-25 | 95% |
| PM2.5 (µg/m3) | 80 | 30 | Evergreen Park | 3.8 | 0 | 0 | 20.8 | Mar-26 09:00 | 11.3 | Mar-25 | 99% |
| PM2.5 (µg/m3) | 80 | 30 | Smoky Heights | 4.1 | 0 | 0 | 63.9 | Mar-17 12:00 | 12.9 | Mar-17 | 99% |
| PM2.5 (µg/m3) | 80 | 30 | Beaverlodge | 7.6 | 0 | 0 | 28.5 | Mar-28 05:00 | 17.5 | Mar-28 | 100% |
| PM2.5 (µg/m3) | 80 | 30 | Sunset House | 2.1 | 0 | 0 | 12.0 | Mar-25 19:00 | 7.0 | Mar-28 | 99% |

PAZA Monthly Continuous Data Summary – continued

| Mar-2012 | | Peace Airshed Zone Association | | | | Maximum Recorded Values | | | | | |
|------------------------|--|--------------------------------|-------|---|---|-------------------------|--------------|--------------|--------|------|--|
| | | | | | | 1-hr | | 24-hr / 8-hr | | | |
| RH (%) | | Henry Pirker | 63.9 | - | - | 89.4 | Mar-29 06:00 | 77.3 | Mar-29 | 100% | |
| RH (%) | | Evergreen Park | 67.1 | - | - | 97.8 | Mar-29 08:00 | 83.8 | Mar-11 | 100% | |
| RH (%) | | Beaverlodge | 71.8 | - | - | 100.0 | Mar-10 21:00 | 96.5 | Mar-11 | 97% | |
| RH (%) | | Valleyview | 65.7 | - | - | 95.7 | Mar-29 07:00 | 84.9 | Mar-22 | 100% | |
| SR (W/m ²) | | Henry Pirker | 115.8 | - | - | 635.4 | Mar-31 14:00 | 197.4 | Mar-31 | 100% | |
| Temp (°C) | | Henry Pirker | -3.0 | - | - | 9.9 | Mar-29 17:00 | 4.9 | Mar-09 | 100% | |
| Temp (°C) | | Evergreen Park | -3.0 | - | - | 10.0 | Mar-29 16:00 | 5.7 | Mar-09 | 100% | |
| Temp (°C) | | Smoky Heights | -3.7 | - | - | 11.9 | Mar-29 16:00 | 3.9 | Mar-09 | 100% | |
| Temp (°C) | | Beaverlodge | -2.4 | - | - | 9.8 | Mar-29 15:00 | 5.3 | Mar-09 | 97% | |
| Temp (°C) | | Valleyview | -1.3 | - | - | 13.0 | Mar-29 16:00 | 6.4 | Mar-09 | 100% | |
| Temp (°C) | | Sunset House | -1.6 | - | - | 11.5 | Mar-29 17:00 | 6.1 | Mar-09 | 100% | |
| WSPD s (km/hr) | | Henry Pirker | 8.7 | - | - | 31.0 | Mar-03 15:00 | 16.5 | Mar-09 | 100% | |
| WSPD s (km/hr) | | Evergreen Park | 12.0 | - | - | 48.0 | Mar-07 15:00 | 28.3 | Mar-07 | 100% | |
| WSPD s (km/hr) | | Smoky Heights | 12.6 | - | - | 38.0 | Mar-09 13:00 | 20.0 | Mar-09 | 100% | |
| WSPD s (km/hr) | | Beaverlodge | 10.8 | - | - | 48.0 | Mar-09 16:00 | 27.1 | Mar-09 | 100% | |
| WSPD s (km/hr) | | Valleyview | 5.6 | - | - | 20.0 | Mar-02 18:00 | 9.0 | Mar-18 | 100% | |
| WSPD s (km/hr) | | Sunset House | 12.2 | - | - | 30.0 | Mar-15 13:00 | 20.5 | Mar-27 | 100% | |
| WSPD v (km/hr) | | Henry Pirker | 2.5 | - | - | 31.0 | Mar-03 15:00 | 14.0 | Mar-09 | 100% | |
| WSPD v (km/hr) | | Evergreen Park | 4.1 | - | - | 47.0 | Mar-07 15:00 | 26.5 | Mar-07 | 100% | |
| WSPD v (km/hr) | | Smoky Heights | 3.8 | - | - | 37.0 | Mar-09 13:00 | 18.6 | Mar-09 | 100% | |
| WSPD v (km/hr) | | Beaverlodge | 3.4 | - | - | 47.0 | Mar-09 16:00 | 25.3 | Mar-09 | 100% | |
| WSPD v (km/hr) | | Valleyview | 1.1 | - | - | 20.0 | Mar-02 18:00 | 7.8 | Mar-18 | 100% | |
| WSPD v (km/hr) | | Sunset House | 4.1 | - | - | 30.0 | Mar-15 16:00 | 19.1 | Mar-27 | 100% | |
| WDIR | | Henry Pirker | WNW | - | - | - | - | - | - | 100% | |
| WDIR | | Evergreen Park | WNW | - | - | - | - | - | - | 100% | |
| WDIR | | Smoky Heights | WNW | - | - | - | - | - | - | 100% | |
| WDIR | | Beaverlodge | W | - | - | - | - | - | - | 100% | |
| WDIR | | Valleyview | WNW | - | - | - | - | - | - | 100% | |
| WDIR | | Sunset House | S | - | - | - | - | - | - | 100% | |

Continuous Network Equipment Summary

PAZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on March 6th (CO & THC), March 7th (SO₂, NO_x & O₃), and March 8th (TRS). A site tour was conducted on March 30th with an analyzer response demonstration, invalidating a portion of the 11th hour for PM_{2.5} and O₃ due to the nature of the analyzer responses.

| Parameter | Make | Model | Notes |
|-------------------------------------|---------|-----------|---|
| SO ₂ | TEI | 43C | No operational issues observed. |
| NO _x /NO/NO ₂ | TEI | 42C | No operational issues observed. |
| O ₃ | TEI | 49C | One (1) hour flagged as maintenance during site visit. |
| CO | TEI | 48C | No operational issues observed. |
| THC | TEI | 51-CLT | No operational issues observed. |
| TRS | TEI | 45C/43C | No operational issues observed. |
| PM _{2.5} | R&P | 1400AB | Thirty-Four (34) hours were flagged invalid due to negative readings and one (1) hour flagged as maintenance during site visit. Filter cleaned on March 8 th . |
| RH | Met One | 083D | No operational issues observed. |
| ET | Met One | 083D | No operational issues observed. |
| SR | Met One | 096-1 | No operational issues observed. |
| WS / WD | Met One | 010C/020C | No operational issues observed. |

PAZA – Evergreen Park Station

General Station Issues

Routine monthly calibration performed on March 21st (SO₂, and TRS). SO₂ analyzer maintenance performed on March 24th and re-calibrated.

| Parameter | Make | Model | Notes |
|-------------------|---------------|--------------|--|
| SO ₂ | TEI | 43i | No operational issues observed. |
| TRS | TEI | 43C | No operational issues observed. |
| PM _{2.5} | R&P | 1400AB | Five (5) hours were flagged invalid due to negative readings. Fliter cleaned on March 21 st . |
| ET | Met One/Gill | 083D | No operational issues observed. |
| RH | Met One/Gill | | No operational issues observed. |
| WS / WD | Met One/ Gill | | No operational issues observed. |

PAZA – Smoky Heights Station

General Station Issues

Routine monthly calibrations were performed on March 28th (SO₂ and TRS).

| Parameter | Make | Model | Notes |
|-------------------|-------------|--------------|---|
| SO ₂ | TEI | 43C | No operational issues observed. |
| TRS | TEI | 43C | No operational issues observed. |
| PM _{2.5} | R&P | 1400AB | Six (6) hours were flagged invalid due to negative readings. Filter was cleaned on March 28 th . |
| ET | Met One | 083D | No operational issues observed. |
| WS / WD | Met One | 010C/020C | No operational issues observed. |

PAZA – Beaverlodge Station

General Station Issues

Routine monthly calibrations performed on March 14th (SO₂, NO_x, O₃).

| Parameter | Make | Model | Notes |
|-------------------------------------|-------------|--------------|---|
| SO ₂ | TEI | 43CTL | No operational issues observed. |
| NO _x /NO/NO ₂ | TEI | 42C | No operational issues observed. |
| O ₃ | TEI | 49C | No operational issues observed. |
| PM _{2.5} | R&P | 1400AB | Filter was cleaned March 14 th . One hour of data was flagged invalid due to analyzer instability. |
| ET | n/a | n/a | Electrical continuity between sensor and data acquisition system caused loss of data on March 17, 18, 19 and 20 th . |
| RH | n/a | n/a | Electrical continuity between sensor and data acquisition system caused loss of data on March 17, 18, 19 and 20 th . |
| WS / WD | Blue Sky | 857 | No operational issues observed. |

PAZA – Valleyview Station

General Station Issues

Routine monthly calibrations were performed on March 12th (SO₂ & H₂S).

| Parameter | Make | Model | Notes |
|------------------|-------------|--------------|--|
| SO ₂ | TEI | 43i | Two hours flagged invalid due to signal instability. |
| H ₂ S | TEI | 43A | Two hours flagged invalid due to signal instability. |
| ET | Gill | Met Pak 3 | No operational issues observed. |
| RH | Gill | Met Pak 3 | No operational issues observed. |
| WS / WD | Gill | Met Pak 3 | No operational issues observed. |

PAZA – Portable-Sunset House Station

General Station Issues

Routine monthly calibrations were performed on March 12th (SO₂, O₃, NO_x) and March 13th (TRS). The station experienced failure of the data acquisition system to capture analyzer data on March 29th that self-rectified.

| Parameter | Make | Model | Notes |
|-------------------|-------------|--------------|--|
| SO ₂ | TEI | 43i | No operational issues observed. |
| O ₃ | TEI | 49C | No operational issues observed. |
| TRS | TEI | 39C | No operational issues observed. |
| PM _{2.5} | R&P | 1400AB | Filter was cleaned March 12 th . 2 hours flagged invalid due to analyzer instability. |
| ET | Gill | Met Pak 3 | No operational issues observed. |
| WS / WD | Gill | Met Pak 3 | No operational issues observed. |

PAZA

Henry Pirker Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

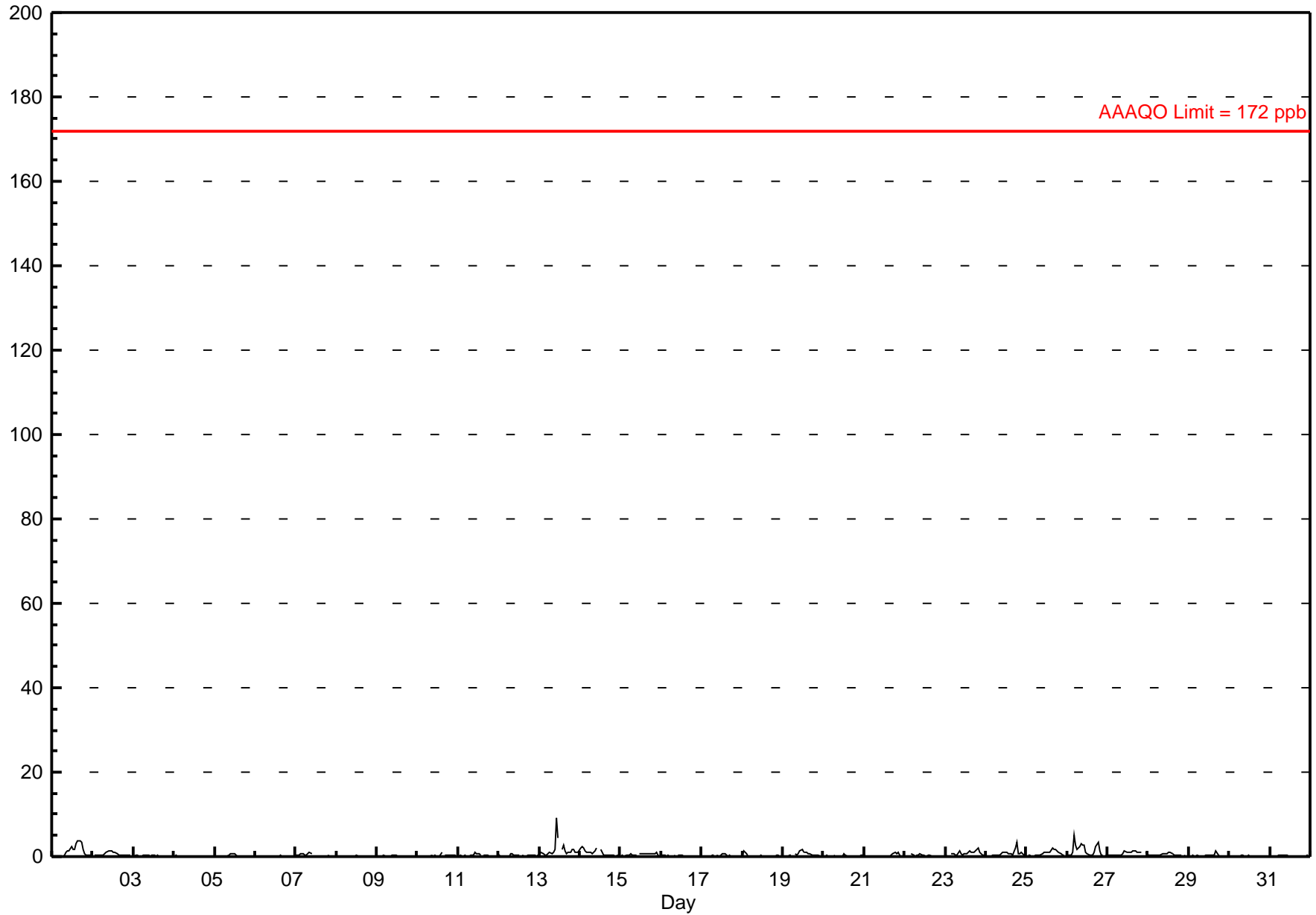
Sulphur Dioxide (SO₂) - ppb

Henry Pirker - March 2012

| | |
|--|--|
| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 | Hours in Service: 744 |
| Maximum Value: 9.3 ppb on Mar 13 11:00 | Maximum Daily Average: 1.6 ppb on Mar 13 |
| Minimum Value: 0 ppb on Mar 1 01:00 | Hours of Data: 708 |
| Maximum Diurnal Average: 0.9 ppb at hour 11 | Hours of Missing Data: 36 |
| Monthly Average: 0.43 ppb | Hours of Calibration: 36 |
| Minimum Daily Average: 0.0 ppb on Mar 6 | Percent Operational Time: 100.0 |
| Minimum Diurnal Average: 0.2 ppb at hour 24 | |
| Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.5 P ₉₀ = 1.0 P ₉₉ = 3.2 | |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 1.2 | 3.7 |
| 2-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 1.3 |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.2 | 0.4 |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.1 | 0.2 |
| 5-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.1 | 0.7 |
| 6-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.0 | 0.4 |
| 7-Mar | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | C | C | C | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.0 |
| 8-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.2 |
| 10-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1.1 |
| 11-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.2 |
| 12-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.8 |
| 13-Mar | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 9 | 4 | A | 2 | 3 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1.6 | 9.3 |
| 14-Mar | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | A | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 2.3 |
| 15-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0.5 | 1.0 |
| 16-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.4 |
| 17-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.6 |
| 18-Mar | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1.2 |
| 19-Mar | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.7 |
| 20-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.7 |
| 21-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0.2 | 1.1 |
| 22-Mar | 0 | 0 | 0 | A | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.7 |
| 23-Mar | 0 | 0 | A | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | 0.7 | 2.0 |
| 24-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 2 | 3 | 1 | 1 | 1 | 0 | 0 | 0.8 | 3.3 |
| 25-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | A | 0.8 | 1.9 |
| 26-Mar | 0 | 0 | 0 | 1 | 5 | 3 | 2 | 2 | 3 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 1 | 2 | 3 | 1 | 0 | 0 | A | 0 | 1.5 | 5.0 |
| 27-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.3 |
| 28-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.5 | 0.9 |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.2 | 1.2 |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.1 | 0.4 |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 |
| | 0.2 | 0.3 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.9 | 0.7 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | Diurnal Average | |
| | 2.1 | 2.3 | 2.0 | 1.5 | 5.0 | 2.6 | 1.7 | 2.3 | 3.2 | 2.9 | 9.3 | 4.4 | 1.7 | 1.8 | 3.2 | 3.7 | 3.7 | 3.4 | 3.3 | 2.0 | 1.6 | 1.1 | 0.9 | 0.9 | Diurnal Maximum | |

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb



Hourly Maximums

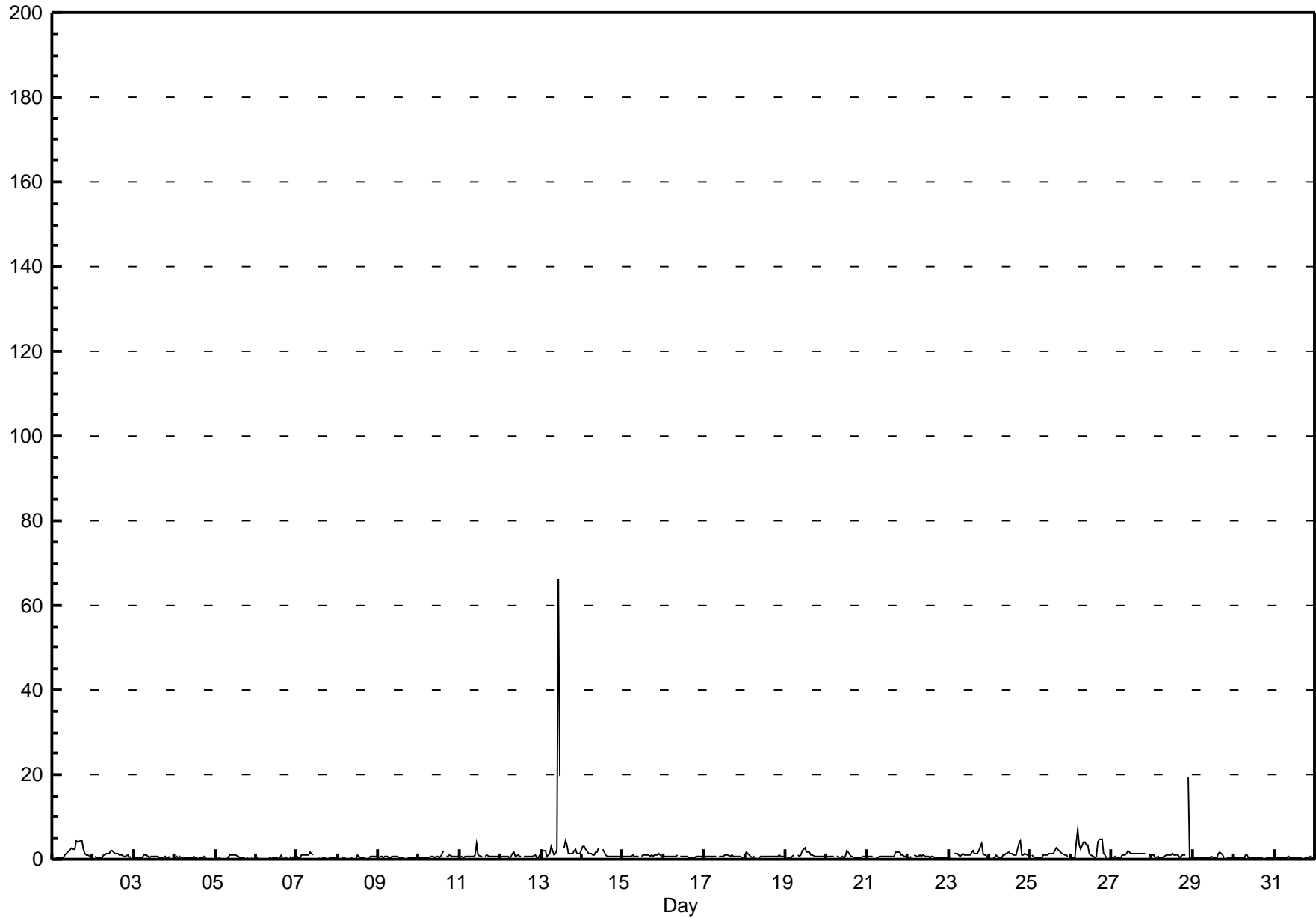
Sulphur Dioxide (SO₂) - ppb

Henry Pirker - March 2012

| Maximum Value: 66.1 ppb on Mar 13 11:00 | | Maximum Daily Average: 5.4 ppb on Mar 13 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|-----|---------------------------------|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|---------------|-----------------|--|
| Minimum Value: 0 ppb on Mar 5 23:00 | | Minimum Daily Average: 0.3 ppb on Mar 6 | | Hours of Data: 708 | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 3.3 ppb at hour 11 | | Minimum Diurnal Average: 0.5 ppb at hour 24 | | Hours of Missing Data: 36 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 0.96 ppb | | Percentiles: P ₁ = 0.0 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 1.0 P ₉₀ = 1.5 P ₉₉ = 4.2 | | Hours of Calibration: 36 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 4 | 4 | 4 | 4 | 2 | 1 | 1 | 1 | 1 | 0 | 1.7 | 4.4 | |
| 2-Mar | A | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | A | 0.9 | 1.9 | |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | A | 0 | 0.5 | 1.0 | |
| 4-Mar | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0.3 | 0.7 | |
| 5-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.4 | 1.0 | |
| 6-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | A | 1 | 0 | 1 | 0 | 0.3 | 1.0 | |
| 7-Mar | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | C | C | C | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.6 | 1.5 | |
| 8-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 1 | 1 | 1 | 0.4 | 1.1 | |
| 9-Mar | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.4 | 0.7 | |
| 10-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.5 | 2.1 | |
| 11-Mar | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 3.6 | |
| 12-Mar | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0.7 | 1.6 | |
| 13-Mar | 1 | 2 | 2 | 1 | 1 | 1 | 3 | 1 | 1 | 2 | 66 | 20 | A | 3 | 4 | 3 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 5.4 | 66.1 | |
| 14-Mar | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 3 | A | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.4 | 3.0 | |
| 15-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.4 | |
| 16-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0.5 | 0.9 | |
| 17-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0.6 | 1.0 | |
| 18-Mar | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1.5 | |
| 19-Mar | 0 | 0 | 0 | 0 | 1 | 1 | A | A | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 2.6 | |
| 20-Mar | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 0 | 1 | 0 | 1 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0.5 | 2.0 | |
| 21-Mar | 1 | 1 | 1 | 1 | A | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 0.7 | 1.5 | |
| 22-Mar | 0 | 0 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0.6 | 1.0 | |
| 23-Mar | 0 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 4 | 1 | 1 | 1 | 0 | 1.3 | 3.7 | |
| 24-Mar | 0 | A | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 4 | 4 | 1 | 1 | 1 | 1 | 1 | 1.2 | 4.4 | |
| 25-Mar | A | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | A | 1.1 | 2.6 | |
| 26-Mar | 1 | 0 | 0 | 4 | 7 | 3 | 2 | 4 | 4 | 3 | 3 | 1 | 1 | 1 | 0 | 1 | 4 | 5 | 5 | 1 | 1 | 0 | A | 0 | 2.4 | 7.0 | |
| 27-Mar | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1.1 | 1.9 | |
| 28-Mar | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | A | 19 | 0 | 0 | 1.6 | 19.3 | |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0.6 | 1.8 | |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.4 | 0.9 | |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 0 | 0 | 0.4 | 0.7 | |
| | | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 0.7 | 0.7 | 0.8 | 0.9 | 0.9 | 3.3 | 1.6 | 1.0 | 0.9 | 1.0 | 1.0 | 1.0 | 1.1 | 1.0 | 0.8 | 0.7 | 1.3 | 0.6 | 0.5 | Diurnal Average | |
| | | 3.0 | 3.0 | 2.5 | 4.2 | 7.0 | 3.4 | 2.9 | 3.9 | 3.9 | 3.4 | 66.1 | 19.6 | 2.4 | 2.9 | 4.4 | 3.9 | 4.4 | 4.9 | 4.9 | 3.7 | 2.3 | 19.3 | 1.4 | 1.5 | Diurnal Maximum | |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | | |

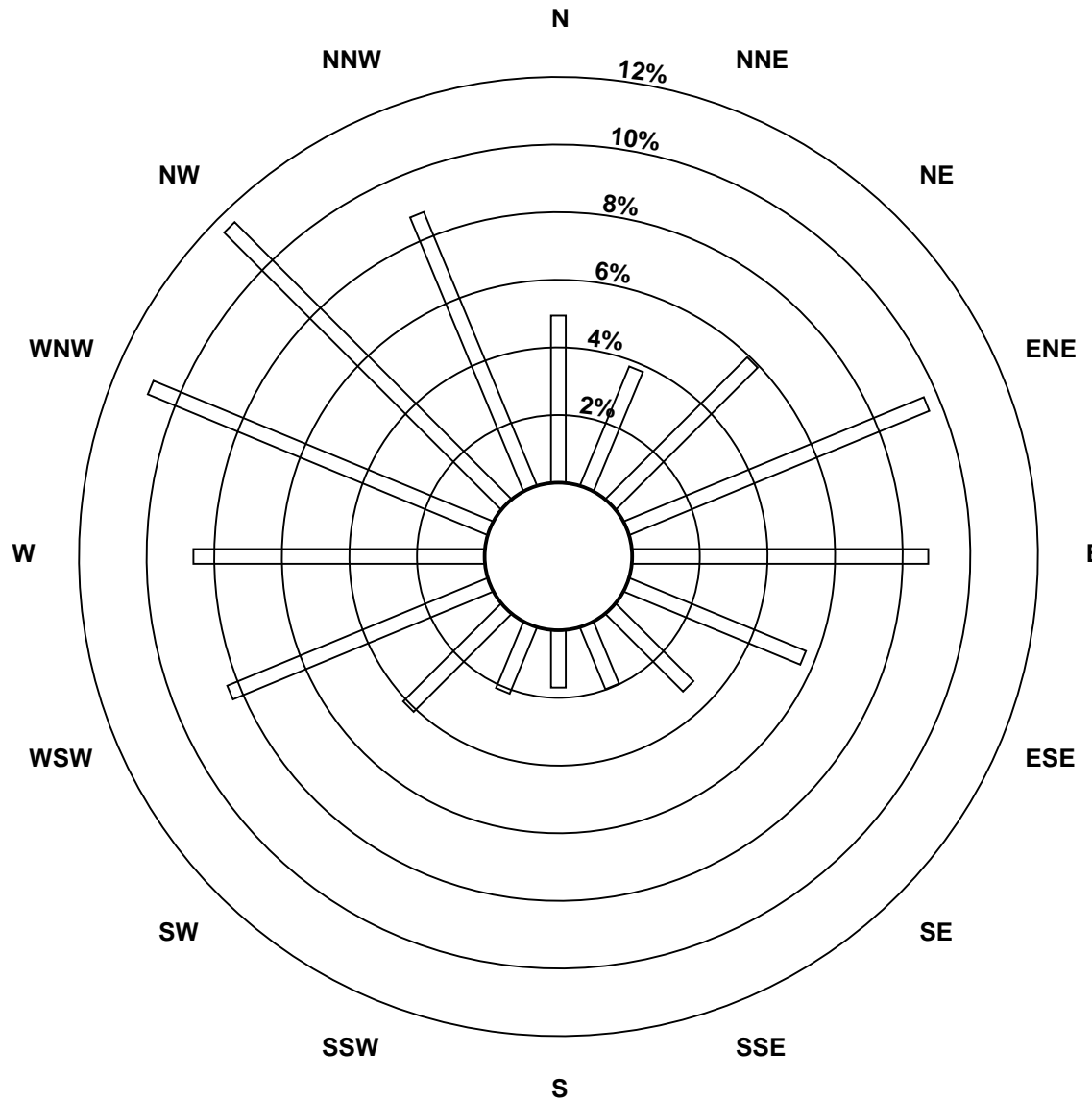
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Henry Pirker - March 2012

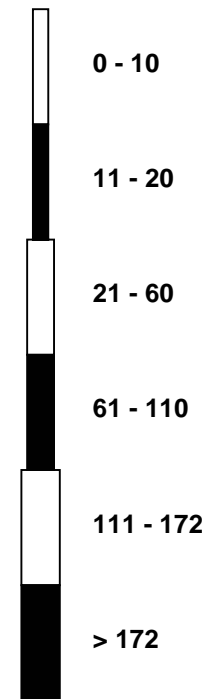


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Henry Pirker - March 2012

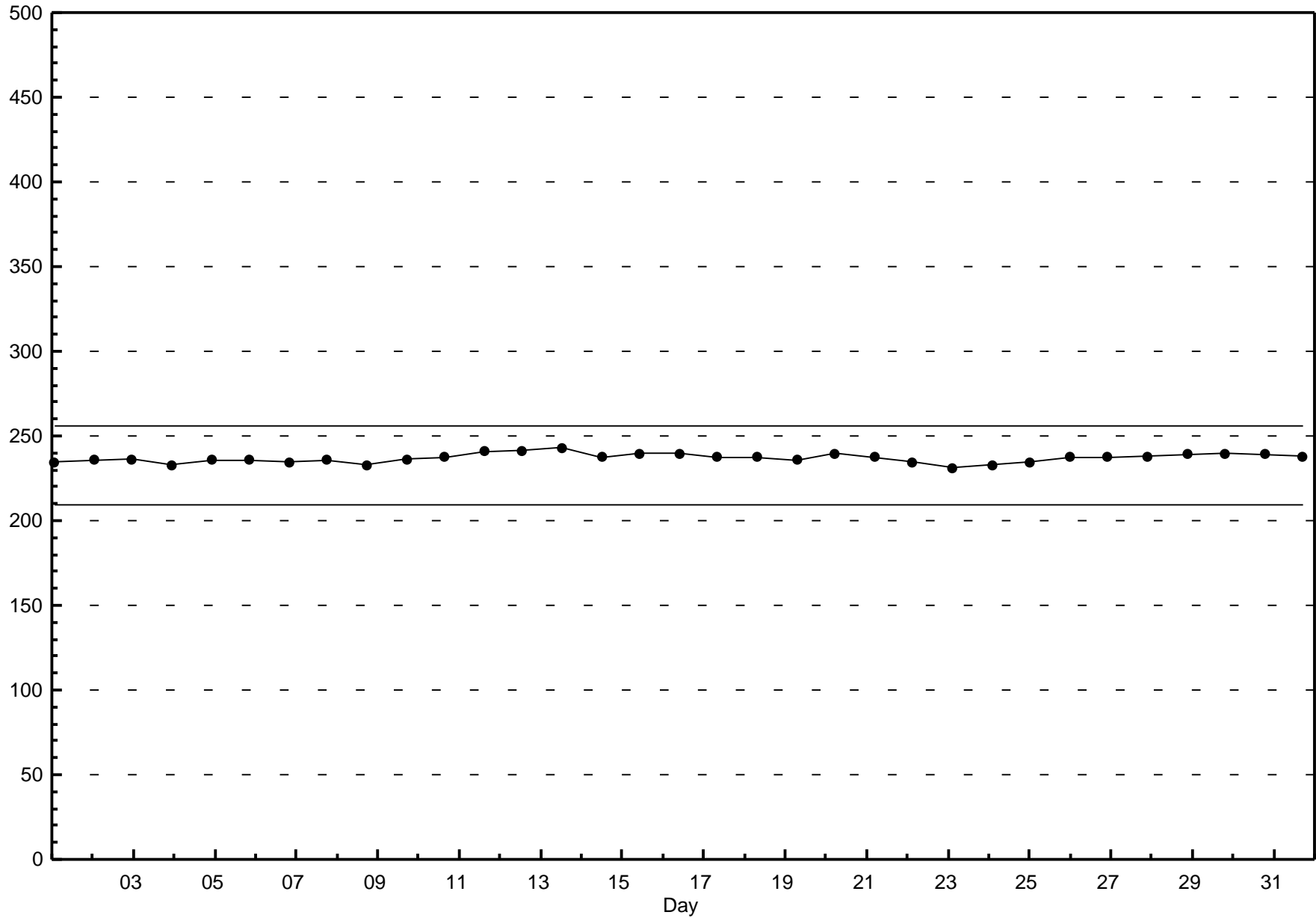


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Henry Pirker - March 2012



Hourly Averages

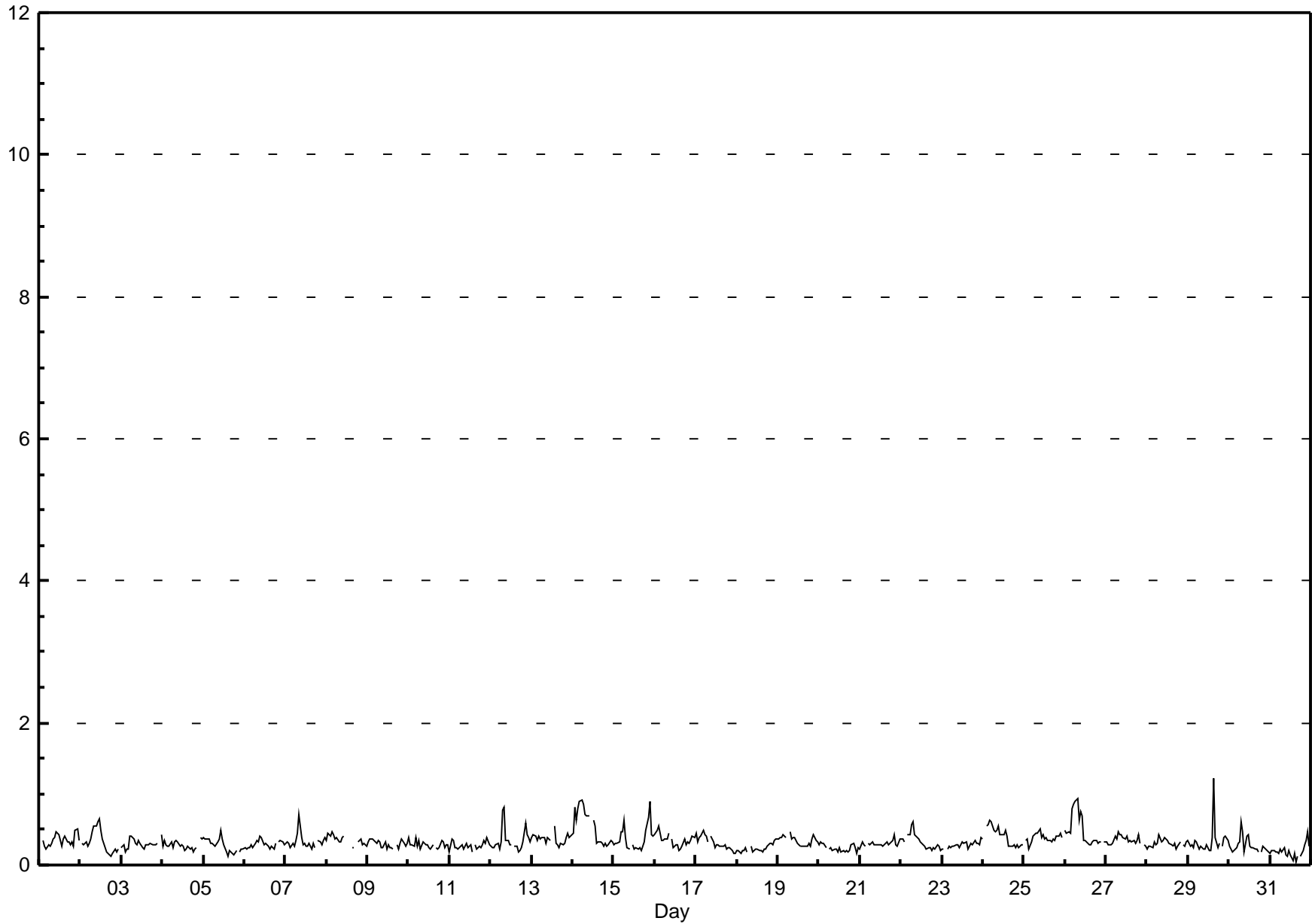
Total Reduced Sulphur (TRS) - ppb

Henry Pirker - March 2012

| | |
|--|--|
| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 | Hours in Service: 744 |
| Maximum Value: 1.2 ppb on Mar 29 16:00 | Maximum Daily Average: 0.5 ppb on Mar 14 |
| Minimum Value: 0 ppb on Mar 31 16:00 | Hours of Data: 707 |
| Maximum Diurnal Average: 0.4 ppb at hour 8 | Hours of Missing Data: 37 |
| Monthly Average: 0.32 ppb | Hours of Calibration: 37 |
| Minimum Daily Average: 0.2 ppb on Mar 31 | Percent Operational Time: 100.0 |
| Minimum Diurnal Average: 0.3 ppb at hour 17 | |
| Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.3 Q ₃ = 0.4 P ₉₀ = 0.4 P ₉₉ = 0.8 | |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
|--------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|---------------|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.5 | |
| 2-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.6 |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.3 | 0.4 | |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.3 | 0.4 | |
| 5-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.3 | 0.5 | |
| 6-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.3 | 0.4 | |
| 7-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.7 | |
| 8-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | C | C | C | C | 0 | 0 | A | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.5 | |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 10-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 11-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 12-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0.3 | 0.8 | |
| 13-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.5 | |
| 14-Mar | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.9 | |
| 15-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0.4 | 0.9 | |
| 16-Mar | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.6 | |
| 17-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.5 | |
| 18-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.4 | |
| 19-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.5 | |
| 20-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 21-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 22-Mar | 0 | 0 | 0 | A | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.6 | |
| 23-Mar | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 24-Mar | 0 | A | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.6 | |
| 25-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.5 | |
| 26-Mar | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.5 | 0.9 | |
| 27-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.5 | |
| 28-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.3 | 0.4 | |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.3 | 1.2 | |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.3 | 0.6 | |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.5 | |
| | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Diurnal Average | | |
| | 0.5 | 0.8 | 0.6 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.4 | 1.2 | 0.4 | 0.4 | 0.3 | 0.5 | 0.7 | 0.9 | 0.5 | 0.4 | Diurnal Maximum | | |

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

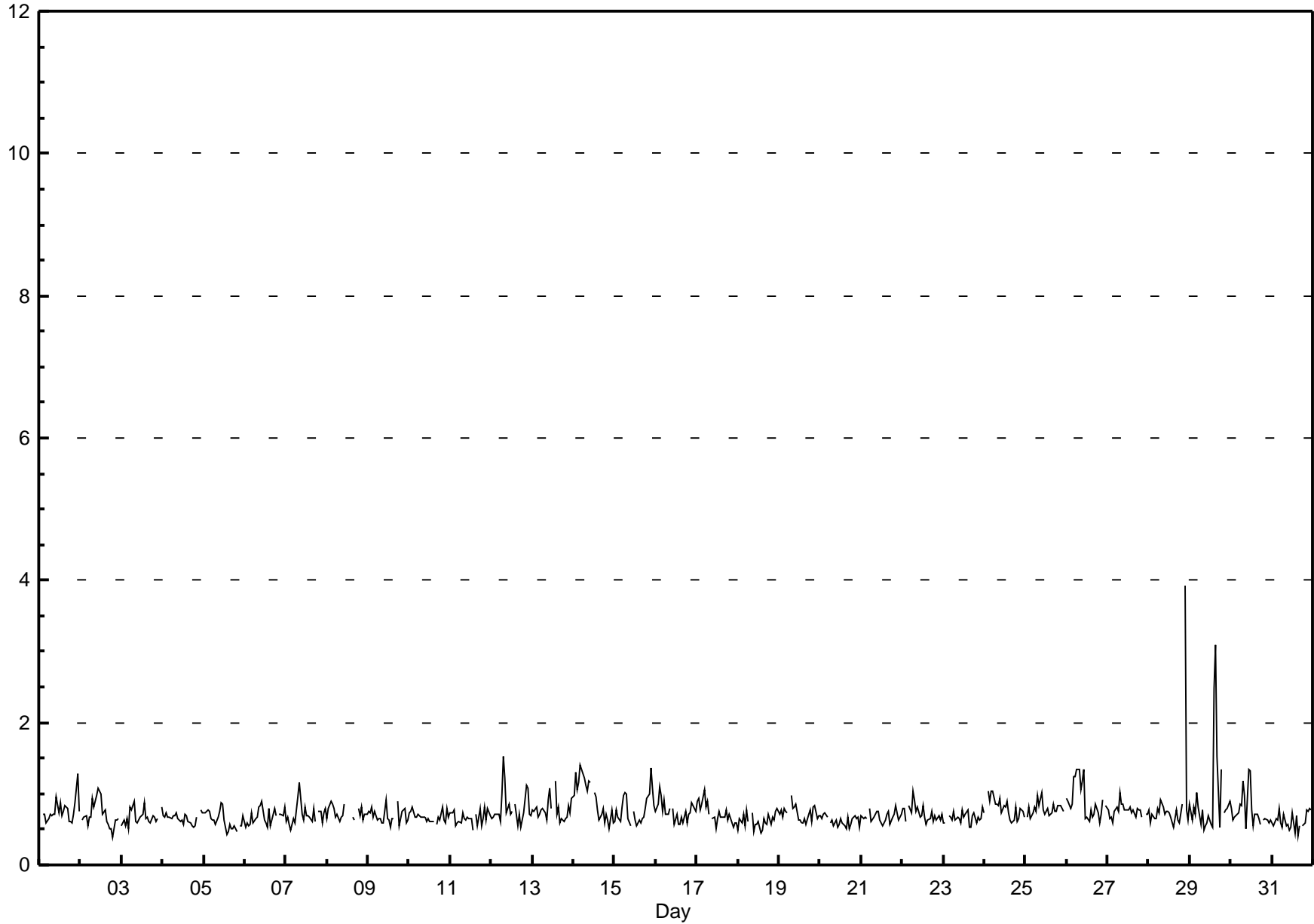


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

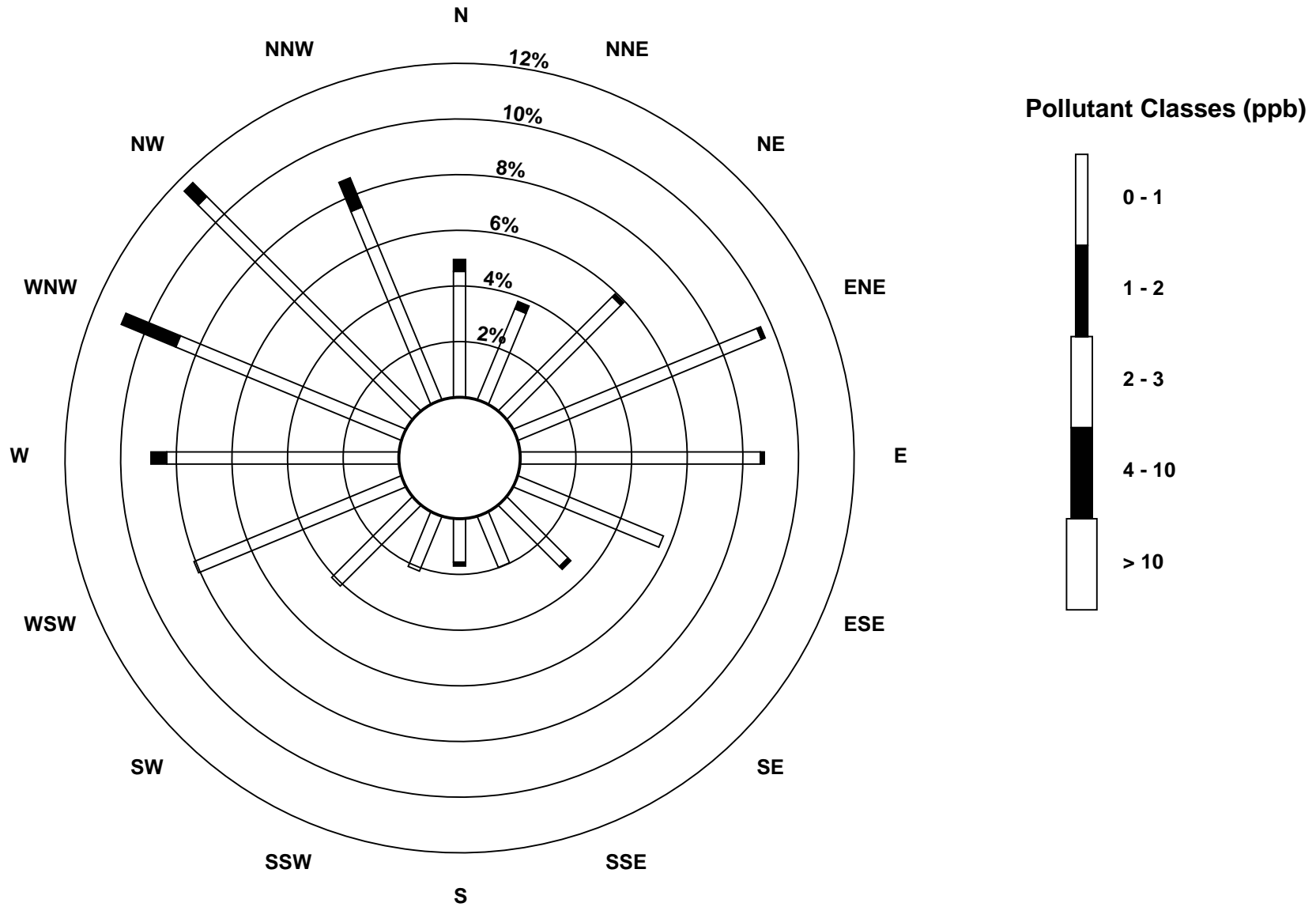
Henry Pirker - March 2012

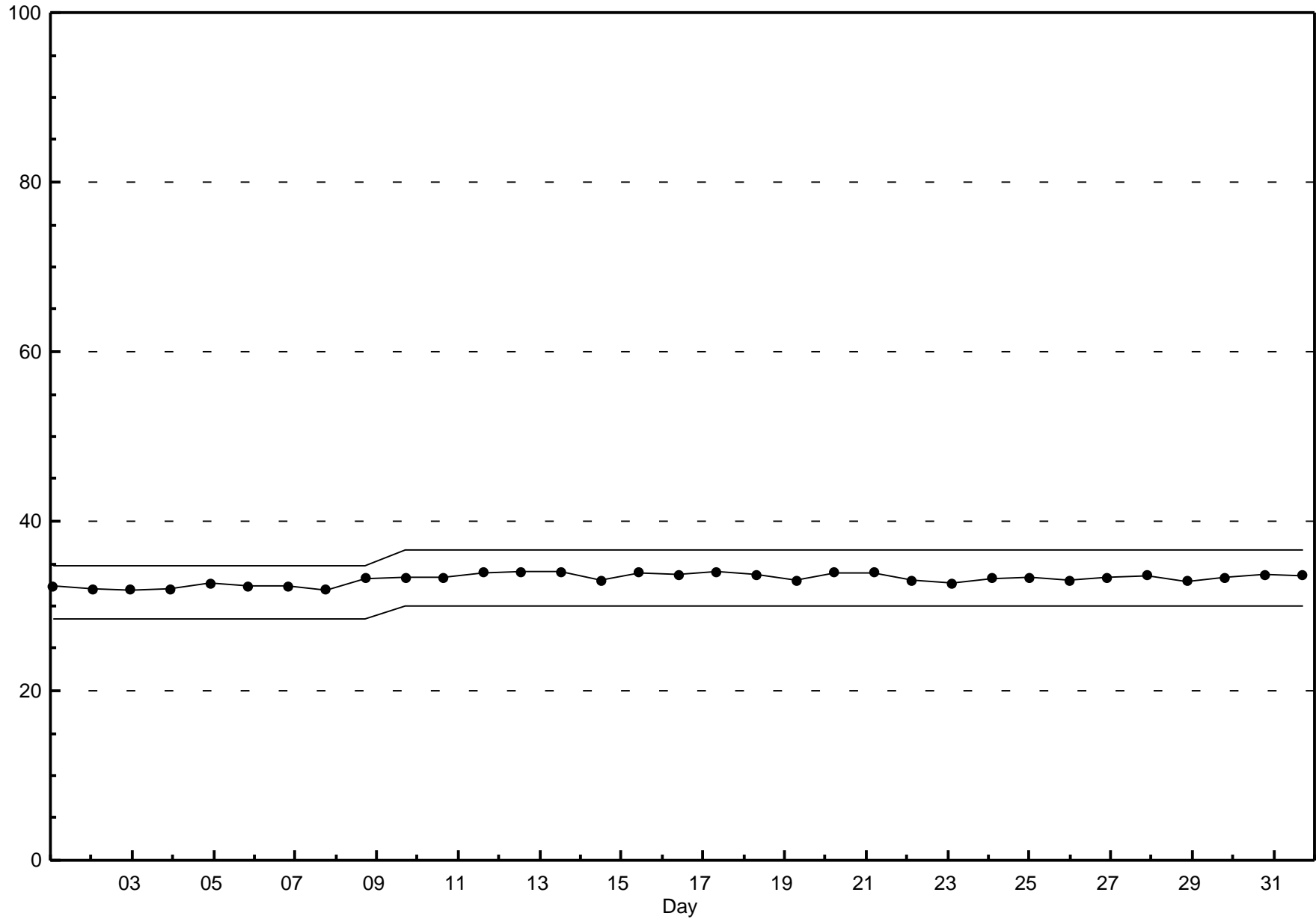
| Maximum Value: 3.9 ppb on Mar 28 22:00 | | Maximum Daily Average: 0.9 ppb on Mar 29 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|--|-----|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|-----------------|-----|
| Minimum Value: 0 ppb on Mar 2 20:00 | | Minimum Daily Average: 0.6 ppb on Mar 20 | | Hours of Data: 707 | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 0.8 ppb at hour 8 | | Minimum Diurnal Average: 0.7 ppb at hour 14 | | Hours of Missing Data: 37 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 0.74 ppb | | Percentiles: P ₁ = 0.5 P ₁₀ = 0.6 Q ₁ = 0.6 Median = 0.7 Q ₃ = 0.8 P ₉₀ = 0.9 P ₉₉ = 1.3 | | Hours of Calibration: 37 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.3 | |
| 2-Mar | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | A | 0.7 | 1.1 |
| 3-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0.7 | 0.9 | |
| 4-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 0.7 | 0.8 | |
| 5-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | A | 1 | 1 | 1 | 0.6 | 0.9 | |
| 6-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0.7 | 0.9 | |
| 7-Mar | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.2 | |
| 8-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | C | C | C | C | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 | |
| 9-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 | |
| 10-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.8 | |
| 11-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.8 | |
| 12-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.5 | |
| 13-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.2 | |
| 14-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.4 | |
| 15-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.4 | |
| 16-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.1 | |
| 17-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.1 | |
| 18-Mar | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.8 | |
| 19-Mar | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.0 | |
| 20-Mar | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.7 | |
| 21-Mar | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.8 | |
| 22-Mar | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.0 | |
| 23-Mar | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.8 | |
| 24-Mar | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.0 | |
| 25-Mar | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 0.8 | 1.0 | |
| 26-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0.9 | 1.3 | |
| 27-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 0.8 | 1.0 | |
| 28-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 0.9 | 3.9 | |
| 29-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0.9 | 3.1 | |
| 30-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.3 | |
| 31-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.8 | |
| | | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | 0.7 | 0.7 | Diurnal Average | |
| | | 1.0 | 1.3 | 1.1 | 1.2 | 1.4 | 1.3 | 1.3 | 1.5 | 1.2 | 1.2 | 1.3 | 1.3 | 1.0 | 1.2 | 2.5 | 3.1 | 1.5 | 0.9 | 1.3 | 0.9 | 1.1 | 3.9 | 1.3 | 0.9 | Diurnal Maximum | |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | | |



Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Henry Pirker - March 2012





Hourly Averages

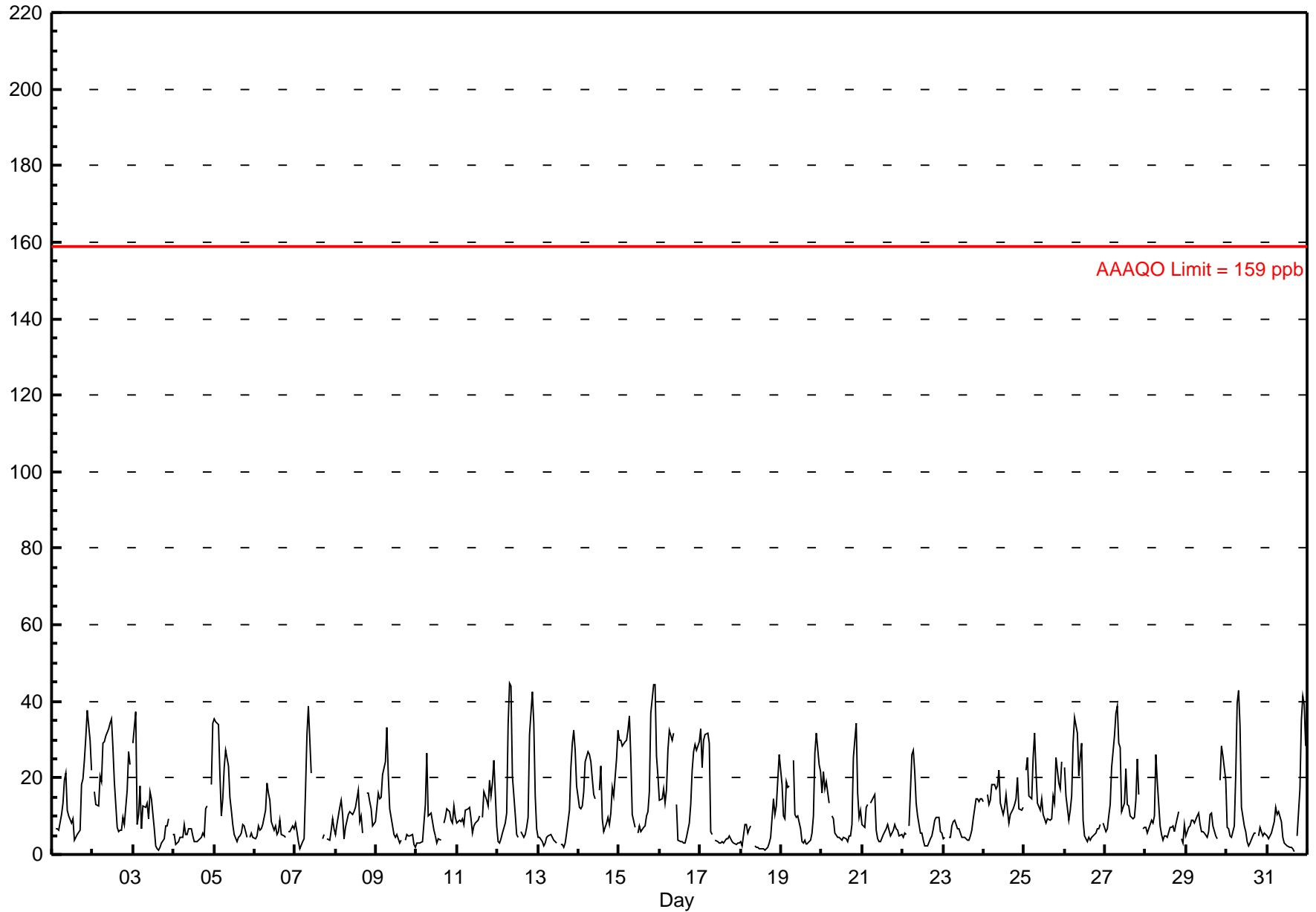
Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - March 2012

| | | | | |
|---|---|----------|---------------------------|-------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 44.7 ppb on Mar 12 08:00 | Maximum Daily Average: 21.8 ppb on Mar 15 | | Hours of Data: | 705 |
| Minimum Value: 1 ppb on Mar 31 17:00 | Minimum Daily Average: 6.4 ppb on Mar 18 | | Hours of Missing Data: | 39 |
| Maximum Diurnal Average: 20.3 ppb at hour 7 | Minimum Diurnal Average: 5.3 ppb at hour 15 | | Hours of Calibration: | 39 |
| Monthly Average: 11.93 ppb | Percentiles: P ₁ = 1.5 P ₁₀ = 3.4 Q ₁ = 5.0 Median = 8.6 Q ₃ = 15.7 P ₉₀ = 27.2 P ₉₉ = 40.6 | | Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|-----------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 4 | A | 7 | 7 | 7 | 10 | 14 | 19 | 21 | 11 | 10 | 8 | 9 | 4 | 4 | 5 | 6 | 18 | 20 | 25 | 31 | 38 | 30 | 22 | 14.3 | 37.8 |
| 2-Mar | A | 16 | 13 | 13 | 20 | 19 | 29 | 29 | 31 | 33 | 34 | 36 | 28 | 19 | 7 | 6 | 6 | 6 | 10 | 8 | 17 | 27 | 24 | A | 19.6 | 35.6 |
| 3-Mar | 29 | 37 | 8 | 10 | 18 | 7 | 13 | 12 | 13 | 9 | 16 | 15 | 7 | 2 | 1 | 1 | 2 | 3 | 4 | 7 | 7 | 9 | A | 5 | 10.3 | 37.3 |
| 4-Mar | 5 | 3 | 3 | 3 | 5 | 5 | 8 | 5 | 5 | 7 | 7 | 5 | 3 | 3 | 3 | 4 | 5 | 6 | 5 | 12 | 13 | A | 18 | 34 | 7.2 | 34.5 |
| 5-Mar | 36 | 35 | 34 | 21 | 10 | 15 | 23 | 27 | 23 | 15 | 12 | 8 | 5 | 3 | 4 | 5 | 6 | 8 | 7 | 4 | A | 5 | 6 | 4 | 13.7 | 35.6 |
| 6-Mar | 4 | 5 | 8 | 6 | 7 | 8 | 12 | 19 | 16 | 14 | 9 | 6 | 7 | 5 | 6 | 9 | 5 | 5 | 5 | A | 6 | 6 | 7 | 7 | 7.9 | 18.6 |
| 7-Mar | 8 | 6 | 3 | 2 | 3 | 4 | 17 | 31 | 39 | 21 | C | C | C | C | C | C | 4 | 5 | A | 4 | 4 | 6 | 9 | 7 | -- | 38.9 |
| 8-Mar | 5 | 8 | 12 | 14 | 10 | 4 | 7 | 10 | 11 | 11 | 10 | 11 | 12 | 17 | 9 | 10 | 6 | A | 16 | 16 | 14 | 12 | 8 | 8 | 10.5 | 16.8 |
| 9-Mar | 12 | 16 | 14 | 15 | 21 | 24 | 33 | 21 | 12 | 10 | 5 | 5 | 5 | 4 | 3 | 4 | A | 4 | 5 | 5 | 5 | 5 | 3 | 2 | 10.1 | 33.3 |
| 10-Mar | 3 | 3 | 3 | 3 | 8 | 13 | 27 | 10 | 11 | 8 | 6 | 5 | 3 | 4 | 4 | A | 8 | 10 | 12 | 11 | 9 | 8 | 13 | 10 | 8.4 | 26.7 |
| 11-Mar | 8 | 9 | 9 | 9 | 8 | 12 | 12 | 12 | 9 | 6 | 7 | 8 | 9 | 10 | A | 10 | 16 | 14 | 13 | 19 | 15 | 19 | 25 | 7 | 11.6 | 24.7 |
| 12-Mar | 4 | 3 | 4 | 5 | 8 | 11 | 34 | 45 | 44 | 21 | 10 | 5 | 4 | A | 6 | 4 | 5 | 7 | 10 | 31 | 43 | 34 | 15 | 7 | 15.7 | 44.7 |
| 13-Mar | 4 | 4 | 3 | 2 | 3 | 4 | 5 | 5 | 4 | 4 | 3 | 3 | A | 3 | 3 | 2 | 3 | 5 | 11 | 23 | 29 | 33 | 27 | 18 | 8.8 | 32.6 |
| 14-Mar | 12 | 12 | 13 | 16 | 24 | 27 | 26 | 24 | 20 | 16 | 15 | A | 17 | 23 | 9 | 6 | 8 | 10 | 8 | 11 | 18 | 15 | 25 | 32 | 16.8 | 32.5 |
| 15-Mar | 30 | 30 | 28 | 30 | 30 | 33 | 36 | 25 | 10 | 7 | A | 6 | 8 | 6 | 7 | 8 | 10 | 11 | 16 | 37 | 44 | 44 | 26 | 21 | 21.8 | 44.3 |
| 16-Mar | 14 | 14 | 17 | 13 | 17 | 27 | 32 | 30 | 32 | A | 13 | 4 | 3 | 3 | 3 | 3 | 4 | 8 | 13 | 22 | 27 | 29 | 27 | 30 | 16.8 | 32.3 |
| 17-Mar | 33 | 23 | 30 | 31 | 32 | 29 | 6 | 5 | A | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 10.4 | 32.7 |
| 18-Mar | 3 | 2 | 8 | 8 | 6 | 7 | 7 | A | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 3 | 4 | 15 | 11 | 13 | 19 | 26 | 6.4 | 26.2 |
| 19-Mar | 18 | 10 | 9 | 19 | 17 | 18 | A | 25 | 10 | 10 | 10 | 7 | 3 | 3 | 4 | 3 | 3 | 4 | 5 | 10 | 27 | 32 | 23 | 22 | 12.7 | 31.5 |
| 20-Mar | 16 | 22 | 17 | 19 | 13 | A | 10 | 9 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 5 | 5 | 8 | 25 | 34 | 16 | 10 | 12 | 11.1 | 34.3 |
| 21-Mar | 8 | 7 | 12 | 13 | A | 13 | 14 | 16 | 6 | 4 | 3 | 3 | 5 | 6 | 7 | 8 | 6 | 5 | 6 | 8 | 7 | 6 | 5 | 5 | 7.6 | 15.6 |
| 22-Mar | 4 | 5 | 5 | A | 7 | 26 | 27 | 21 | 13 | 10 | 6 | 6 | 4 | 2 | 2 | 2 | 4 | 5 | 7 | 9 | 10 | 10 | 6 | 6 | 8.6 | 27.2 |
| 23-Mar | 4 | 4 | A | 5 | 5 | 8 | 9 | 9 | 7 | 7 | 6 | 5 | 4 | 5 | 4 | 4 | 5 | 6 | 9 | 15 | 14 | 14 | 15 | 15 | 7.6 | 14.6 |
| 24-Mar | 14 | A | 16 | 13 | 14 | 18 | 18 | 17 | 18 | 22 | 14 | 10 | 12 | 16 | 12 | 8 | 10 | 12 | 13 | 15 | 20 | 12 | 11 | 12 | 14.2 | 22.1 |
| 25-Mar | A | 22 | 25 | 15 | 15 | 26 | 32 | 22 | 13 | 12 | 14 | 11 | 9 | 8 | 9 | 9 | 9 | 15 | 13 | 25 | 18 | 17 | 24 | A | 16.6 | 31.7 |
| 26-Mar | 23 | 15 | 9 | 12 | 15 | 29 | 36 | 32 | 20 | 25 | 29 | 9 | 5 | 3 | 5 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | A | 8 | 13.7 | 35.7 |
| 27-Mar | 6 | 7 | 10 | 13 | 23 | 31 | 37 | 39 | 29 | 28 | 11 | 13 | 22 | 13 | 13 | 10 | 9 | 10 | 14 | 25 | 16 | A | 7 | 7 | 17.1 | 38.7 |
| 28-Mar | 7 | 6 | 7 | 9 | 8 | 10 | 26 | 19 | 8 | 5 | 4 | 5 | 5 | 5 | 7 | 7 | 7 | 6 | 8 | 11 | A | 4 | 3 | 8 | 8.0 | 26.1 |
| 29-Mar | 5 | 7 | 8 | 9 | 9 | 8 | 10 | 11 | 8 | 6 | 6 | 6 | 4 | 6 | 10 | 11 | 8 | 5 | 4 | A | 20 | 28 | 26 | 19 | 10.2 | 28.5 |
| 30-Mar | 7 | 7 | 5 | 5 | 8 | 21 | 39 | 43 | 34 | 12 | 8 | 6 | 3 | 2 | 3 | 5 | 6 | 6 | A | 5 | 7 | 5 | 6 | 5 | 10.7 | 42.7 |
| 31-Mar | 5 | 4 | 5 | 7 | 9 | 12 | 10 | 11 | 9 | 4 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | A | 5 | 17 | 35 | 41 | 39 | 29 | 11.1 | 41.3 |
| | 11.5 | 11.8 | 11.5 | 11.6 | 12.6 | 15.9 | 20.3 | 20.2 | 16.2 | 11.6 | 9.7 | 7.4 | 7.2 | 6.5 | 5.3 | 5.4 | 6.0 | 7.3 | 9.1 | 14.7 | 17.5 | 17.2 | 15.8 | 13.5 | | Diurnal Average |
| | 35.6 | 37.3 | 34.0 | 31.4 | 31.9 | 32.5 | 39.4 | 44.7 | 44.0 | 32.7 | 34.3 | 35.6 | 27.8 | 23.1 | 12.6 | 10.9 | 16.4 | 18.1 | 19.9 | 37.0 | 44.2 | 44.3 | 39.1 | 34.5 | | Diurnal Maximum |

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb



Hourly Maximums

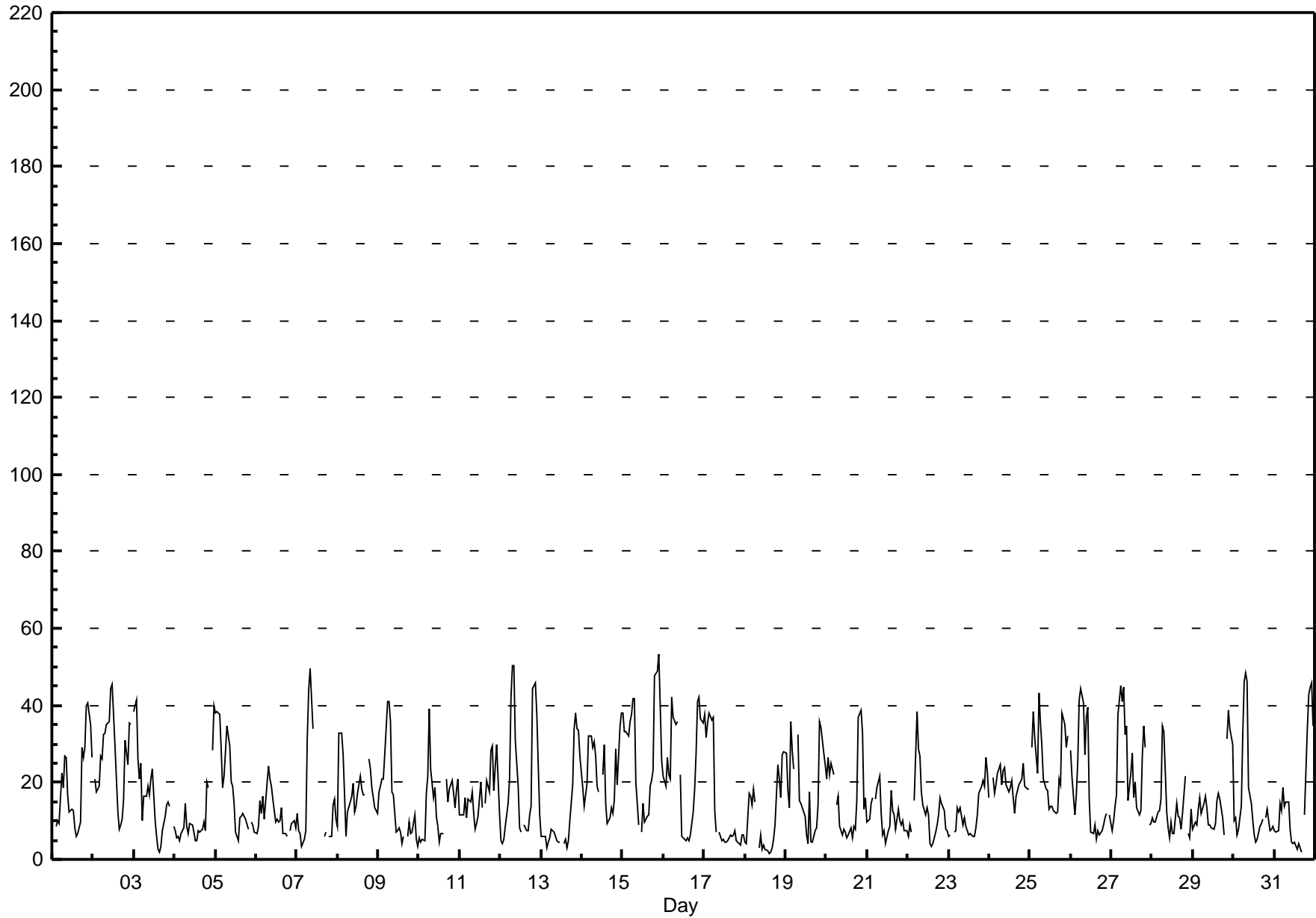
Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - March 2012

| Maximum Value: 53.3 ppb on Mar 15 22:00 | | Maximum Daily Average: 28.4 ppb on Mar 15 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|-----------------|--|
| Minimum Value: 2 ppb on Mar 18 15:00 | | Minimum Daily Average: 10.7 ppb on Mar 18 | | Hours of Data: 705 | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 27.0 ppb at hour 8 | | Minimum Diurnal Average: 8.5 ppb at hour 16 | | Hours of Missing Data: 39 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 17.09 ppb | | Percentiles: P ₁ = 2.4 P ₁₀ = 5.5 Q ₁ = 7.8 Median = 13.9 Q ₃ = 22.6 P ₉₀ = 35.5 P ₉₉ = 47.4 | | Hours of Calibration: 39 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 5 | A | 8 | 10 | 9 | 22 | 18 | 27 | 27 | 17 | 12 | 13 | 13 | 8 | 6 | 7 | 10 | 29 | 26 | 29 | 40 | 40 | 35 | 27 | 19.1 | 40.5 | |
| 2-Mar | A | 21 | 17 | 19 | 27 | 26 | 33 | 33 | 35 | 36 | 44 | 45 | 37 | 29 | 12 | 8 | 9 | 10 | 16 | 31 | 25 | 35 | 35 | A | 26.6 | 45.5 | |
| 3-Mar | 38 | 41 | 26 | 21 | 25 | 10 | 16 | 17 | 19 | 17 | 21 | 23 | 10 | 6 | 3 | 2 | 4 | 7 | 11 | 14 | 15 | 14 | A | 9 | 16.0 | 41.2 | |
| 4-Mar | 8 | 6 | 6 | 5 | 7 | 8 | 15 | 9 | 7 | 9 | 9 | 7 | 5 | 5 | 7 | 7 | 8 | 10 | 8 | 20 | 19 | A | 28 | 40 | 10.8 | 39.9 | |
| 5-Mar | 38 | 38 | 38 | 29 | 19 | 22 | 28 | 35 | 30 | 20 | 19 | 14 | 7 | 5 | 11 | 11 | 12 | 11 | 11 | 8 | A | 10 | 9 | 7 | 18.6 | 38.4 | |
| 6-Mar | 7 | 9 | 15 | 12 | 17 | 10 | 20 | 24 | 21 | 19 | 16 | 10 | 11 | 10 | 10 | 14 | 7 | 7 | 6 | A | 7 | 9 | 10 | 8 | 12.0 | 24.2 | |
| 7-Mar | 12 | 7 | 7 | 3 | 5 | 8 | 31 | 44 | 49 | 34 | C | C | C | C | C | C | 6 | 7 | A | 6 | 6 | 14 | 16 | 10 | -- | 49.5 | |
| 8-Mar | 8 | 33 | 33 | 27 | 17 | 6 | 12 | 15 | 16 | 20 | 12 | 14 | 17 | 22 | 18 | 17 | 17 | A | 26 | 24 | 19 | 16 | 14 | 12 | 18.0 | 33.0 | |
| 9-Mar | 18 | 19 | 21 | 21 | 27 | 41 | 41 | 36 | 18 | 17 | 7 | 8 | 8 | 7 | 4 | 6 | A | 6 | 10 | 7 | 7 | 11 | 5 | 3 | 15.1 | 41.2 | |
| 10-Mar | 6 | 5 | 5 | 5 | 17 | 22 | 39 | 24 | 16 | 19 | 11 | 9 | 5 | 7 | 7 | A | 21 | 15 | 18 | 21 | 17 | 13 | 18 | 21 | 14.7 | 39.2 | |
| 11-Mar | 11 | 12 | 12 | 16 | 11 | 16 | 15 | 18 | 12 | 8 | 9 | 11 | 20 | 13 | A | 15 | 20 | 18 | 28 | 29 | 18 | 24 | 30 | 12 | 16.5 | 29.8 | |
| 12-Mar | 5 | 4 | 5 | 9 | 15 | 21 | 42 | 50 | 50 | 31 | 19 | 8 | 7 | A | 9 | 8 | 8 | 11 | 14 | 45 | 46 | 38 | 24 | 12 | 20.8 | 50.4 | |
| 13-Mar | 6 | 6 | 6 | 3 | 5 | 6 | 8 | 7 | 6 | 5 | 5 | 5 | A | 4 | 5 | 3 | 5 | 10 | 20 | 34 | 38 | 34 | 33 | 27 | 12.1 | 38.1 | |
| 14-Mar | 19 | 14 | 17 | 20 | 32 | 32 | 29 | 31 | 27 | 19 | 18 | A | 22 | 30 | 15 | 9 | 11 | 13 | 12 | 15 | 29 | 19 | 35 | 38 | 21.9 | 37.9 | |
| 15-Mar | 38 | 33 | 33 | 32 | 36 | 38 | 42 | 42 | 20 | 9 | A | 7 | 15 | 10 | 11 | 11 | 19 | 21 | 23 | 48 | 49 | 53 | 40 | 26 | 28.4 | 53.3 | |
| 16-Mar | 21 | 19 | 26 | 22 | 21 | 42 | 37 | 35 | 36 | A | 22 | 6 | 5 | 5 | 5 | 5 | 6 | 12 | 18 | 28 | 41 | 42 | 36 | 35 | 23.0 | 42.3 | |
| 17-Mar | 38 | 32 | 35 | 38 | 36 | 37 | 13 | 7 | A | 7 | 5 | 5 | 4 | 4 | 5 | 6 | 6 | 7 | 7 | 5 | 5 | 4 | 7 | 6 | 13.9 | 37.9 | |
| 18-Mar | 5 | 4 | 17 | 16 | 14 | 18 | 15 | A | 3 | 6 | 3 | 4 | 2 | 2 | 2 | 2 | 3 | 5 | 9 | 25 | 21 | 16 | 27 | 28 | 10.7 | 28.0 | |
| 19-Mar | 28 | 18 | 14 | 36 | 28 | 24 | A | 33 | 15 | 14 | 14 | 11 | 7 | 4 | 18 | 5 | 5 | 8 | 8 | 14 | 36 | 34 | 27 | 25 | 18.4 | 35.8 | |
| 20-Mar | 21 | 27 | 22 | 25 | 22 | A | 14 | 16 | 8 | 6 | 8 | 7 | 6 | 6 | 8 | 6 | 8 | 8 | 15 | 37 | 39 | 33 | 13 | 16 | 16.2 | 38.7 | |
| 21-Mar | 10 | 10 | 15 | 16 | A | 16 | 19 | 22 | 12 | 6 | 7 | 4 | 8 | 9 | 18 | 13 | 11 | 8 | 13 | 10 | 9 | 10 | 8 | 7 | 11.3 | 21.7 | |
| 22-Mar | 6 | 9 | 7 | A | 15 | 39 | 29 | 27 | 18 | 14 | 12 | 14 | 12 | 4 | 4 | 4 | 7 | 9 | 12 | 16 | 15 | 12 | 8 | 7 | 12.9 | 38.5 | |
| 23-Mar | 6 | 6 | A | 7 | 7 | 13 | 12 | 13 | 9 | 11 | 8 | 7 | 6 | 7 | 6 | 6 | 8 | 11 | 17 | 19 | 20 | 19 | 26 | 23 | 11.8 | 26.5 | |
| 24-Mar | 16 | A | 21 | 17 | 19 | 22 | 25 | 19 | 23 | 24 | 19 | 18 | 19 | 20 | 16 | 12 | 16 | 19 | 20 | 21 | 25 | 19 | 18 | 18 | 19.5 | 25.0 | |
| 25-Mar | A | 29 | 38 | 32 | 22 | 43 | 35 | 29 | 21 | 18 | 18 | 13 | 14 | 14 | 13 | 12 | 12 | 21 | 19 | 38 | 35 | 29 | 32 | A | 24.4 | 43.3 | |
| 26-Mar | 28 | 21 | 12 | 17 | 25 | 41 | 45 | 41 | 27 | 37 | 39 | 16 | 7 | 7 | 9 | 5 | 7 | 6 | 8 | 9 | 11 | 12 | A | 12 | 19.2 | 44.5 | |
| 27-Mar | 7 | 10 | 14 | 17 | 38 | 45 | 41 | 45 | 32 | 35 | 15 | 22 | 28 | 16 | 20 | 13 | 12 | 13 | 27 | 35 | 29 | A | 9 | 9 | 23.1 | 45.2 | |
| 28-Mar | 11 | 10 | 10 | 12 | 13 | 16 | 35 | 33 | 12 | 8 | 6 | 10 | 7 | 7 | 15 | 11 | 11 | 8 | 12 | 22 | A | 7 | 6 | 13 | 12.7 | 34.6 | |
| 29-Mar | 8 | 10 | 9 | 13 | 16 | 12 | 15 | 16 | 13 | 9 | 9 | 8 | 8 | 9 | 15 | 17 | 16 | 11 | 6 | A | 31 | 39 | 34 | 30 | 15.4 | 38.9 | |
| 30-Mar | 10 | 11 | 6 | 8 | 14 | 32 | 46 | 48 | 46 | 18 | 15 | 10 | 6 | 4 | 5 | 8 | 9 | 10 | A | 11 | 13 | 7 | 8 | 8 | 15.6 | 48.5 | |
| 31-Mar | 8 | 7 | 8 | 15 | 13 | 19 | 14 | 15 | 15 | 8 | 5 | 4 | 4 | 3 | 4 | 3 | 2 | A | 12 | 34 | 43 | 45 | 46 | 35 | 15.6 | 46.0 | |
| | | 15.2 | 16.2 | 16.8 | 17.4 | 19.0 | 23.5 | 26.1 | 27.0 | 21.5 | 16.7 | 14.0 | 11.5 | 11.0 | 9.6 | 9.7 | 8.5 | 9.8 | 11.4 | 14.9 | 22.5 | 24.4 | 22.8 | 22.0 | 18.1 | Diurnal Average | |
| | | 38.2 | 41.2 | 38.3 | 37.9 | 37.6 | 45.2 | 46.3 | 50.4 | 50.3 | 36.8 | 44.5 | 45.5 | 37.5 | 29.7 | 20.3 | 17.3 | 20.9 | 29.0 | 28.5 | 47.8 | 48.7 | 53.3 | 46.0 | 39.9 | Diurnal Maximum | |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | | |

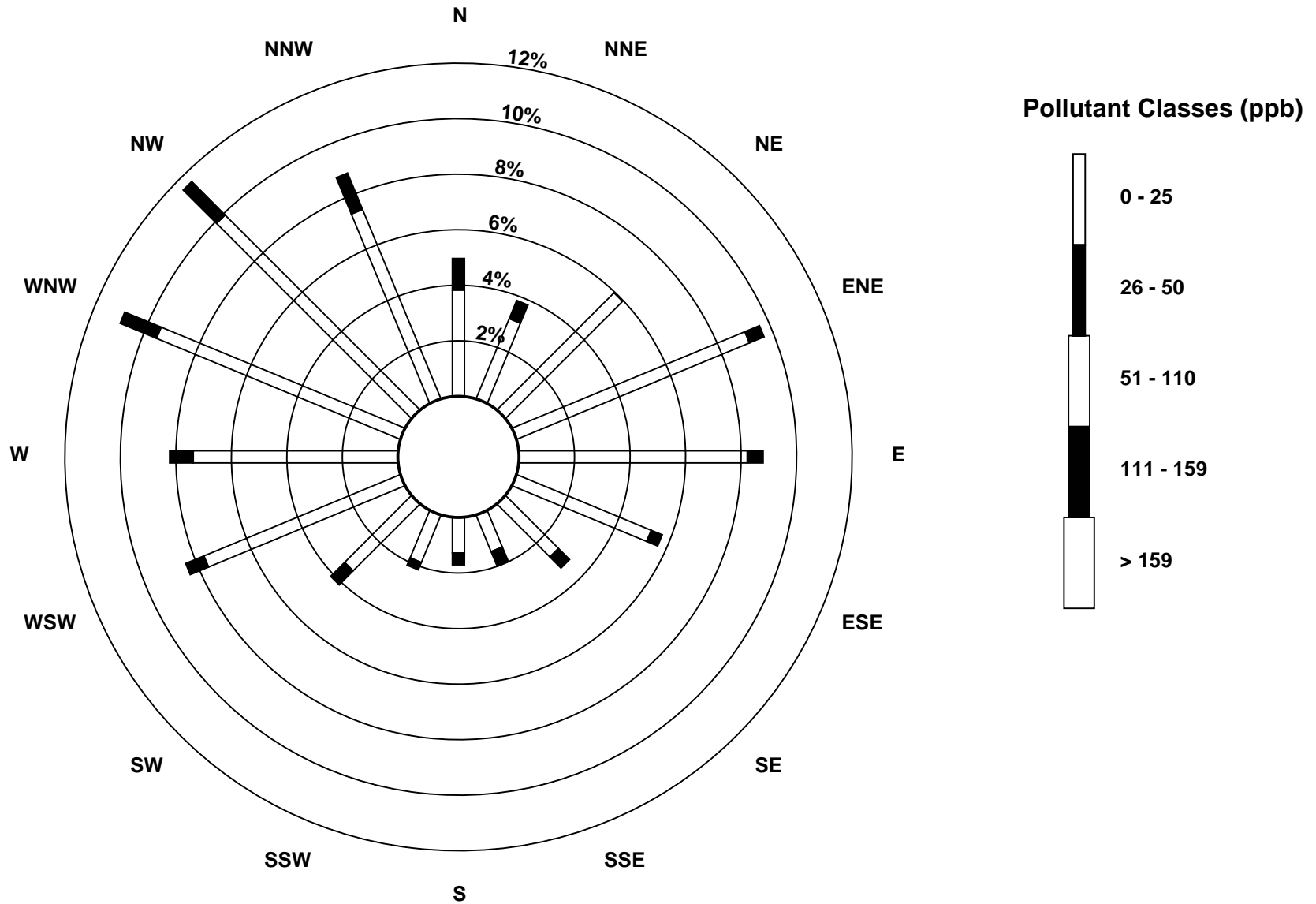
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Henry Pirker - March 2012



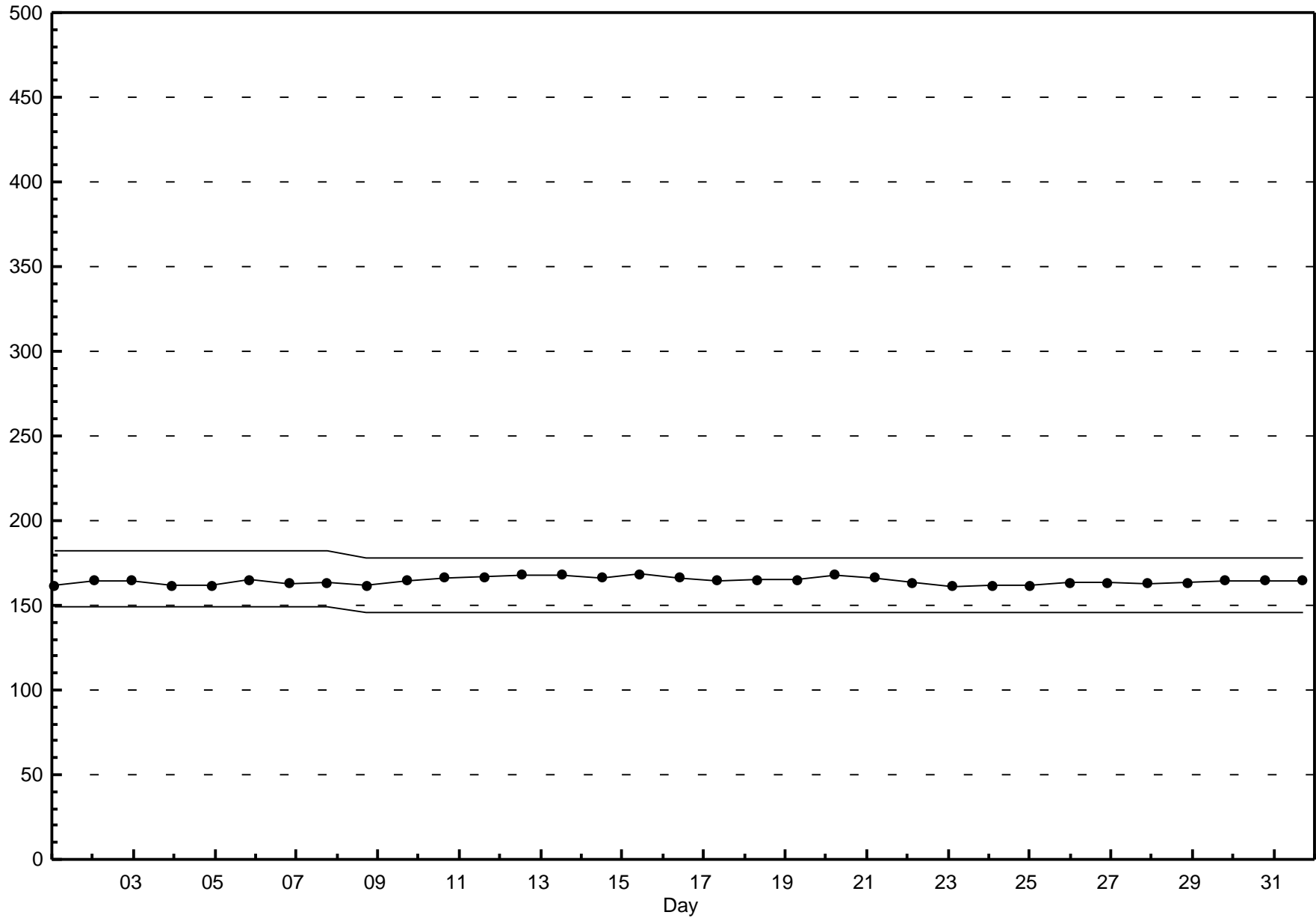
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Henry Pirker - March 2012



Span Responses

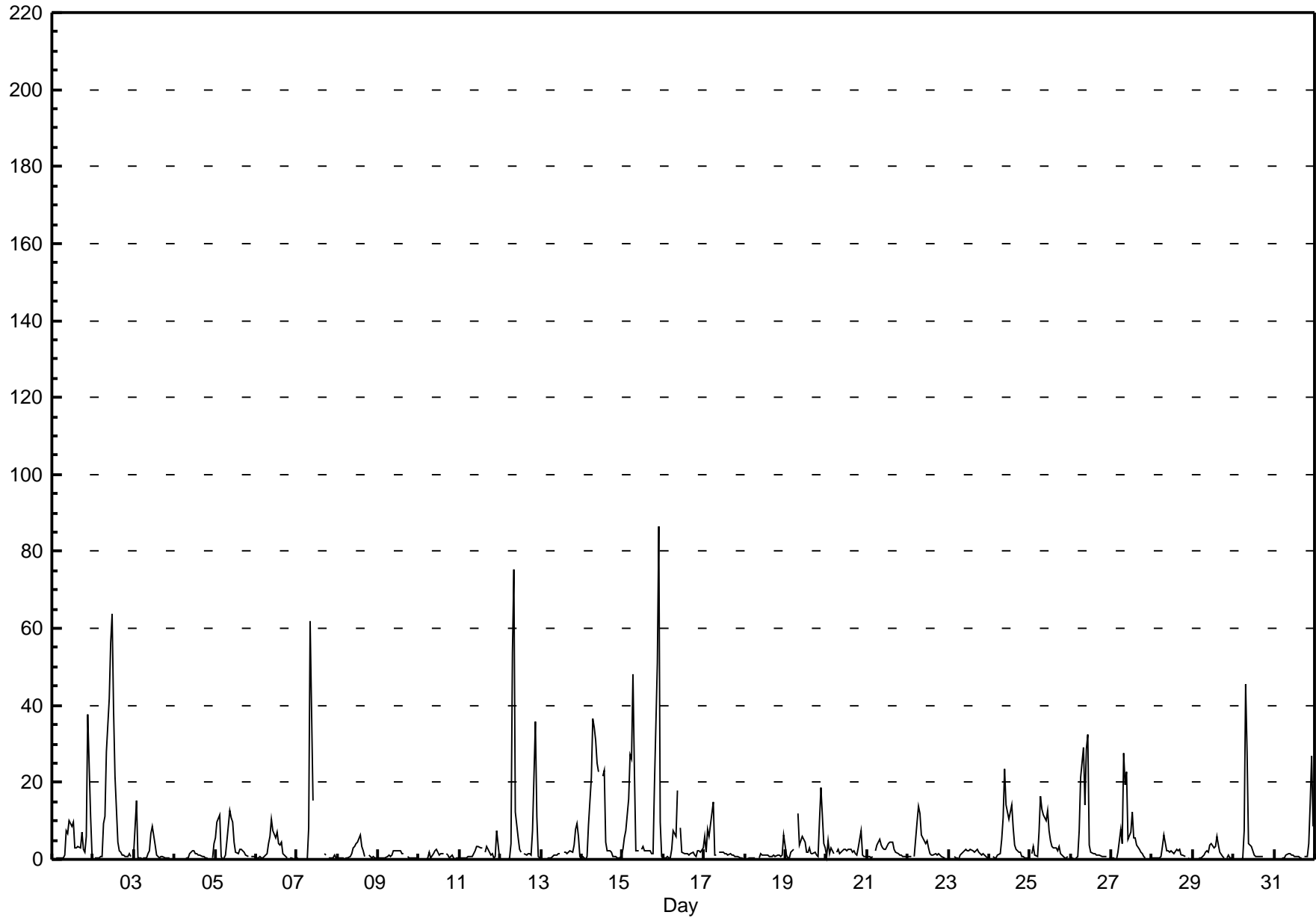
Nitrogen Dioxide (NO₂)
Henry Pirker - March 2012



Hourly Averages

Nitrogen Oxide (NO) - ppb
Henry Pirker - March 2012

| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 86.4 ppb on Mar 15 22:00 Maximum Daily Average: 15.0 ppb on Mar 15 | | Hours in Service: 744 Hours of Data: 705 Hours of Missing Data: 39 Hours of Calibration: 39 Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------------------------------|---------------|---------------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|------|------|------|------|-----|-----------------|
| Minimum Value: 0 ppb on Mar 4 04:00 Maximum Diurnal Average: 12.0 ppb at hour 9 Monthly Average: 4.10 ppb | | Minimum Daily Average: 0.9 ppb on Mar 4 Minimum Diurnal Average: 0.8 ppb at hour 1 Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.5 Median = 1.3 Q ₃ = 3.1 P ₉₀ = 9.8 P ₉₉ = 49.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 7 | 7 | 10 | 9 | 10 | 3 | 3 | 4 | 3 | 7 | 3 | 2 | 6 | 38 | 11 | 1 | 5.5 | 37.8 | | | | | | | | | | | | | | | | | | | | | | |
| 2-Mar | A | 0 | 0 | 0 | 1 | 1 | 9 | 11 | 28 | 42 | 56 | 64 | 39 | 22 | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 13.1 | 63.7 | | | | | | | | | | | | | | | | | | | | | | |
| 3-Mar | 2 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 7 | 8 | 4 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | A | 0 | 2.0 | 15.2 | | | | | | | | | | | | | | | | | | | | | | |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | A | 0 | 4 | 0.9 | 4.1 | | | | | | | | | | | | | | | | | | | | | | |
| 5-Mar | 5 | 10 | 11 | 1 | 0 | 1 | 1 | 5 | 13 | 11 | 10 | 4 | 2 | 1 | 3 | 3 | 2 | 2 | 1 | 1 | A | 1 | 1 | 1 | 3.8 | 12.7 | | | | | | | | | | | | | | | | | | | | | | |
| 6-Mar | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 4 | 6 | 10 | 8 | 6 | 7 | 4 | 4 | 5 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 2.7 | 10.5 | | | | | | | | | | | | | | | | | | | | | | |
| 7-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 62 | 15 | C | C | C | C | C | C | 1 | 1 | A | 0 | 0 | 0 | 1 | 0 | -- | 62.0 | | | | | | | | | | | | | | | | | | | | | | |
| 8-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 4 | 4 | 6 | 3 | 2 | 1 | A | 1 | 1 | 0 | 1 | 0 | 0 | 1.6 | 6.4 | | | | | | | | | | | | | | | | | | | | | | |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.9 | 2.3 | | | | | | | | | | | | | | | | | | | | | | |
| 10-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 2 | 3 | 2 | 1 | 2 | 1 | A | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0.9 | 2.6 | | | | | | | | | | | | | | | | | | | | | | |
| 11-Mar | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | A | 2 | 3 | 2 | 1 | 1 | 0 | 1 | 7 | 0 | 1.7 | 7.4 | | | | | | | | | | | | | | | | | | | | | | |
| 12-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 54 | 75 | 12 | 5 | 3 | 2 | A | 2 | 1 | 1 | 2 | 1 | 7 | 36 | 11 | 1 | 0 | 9.5 | 75.3 | | | | | | | | | | | | | | | | | | | | | | |
| 13-Mar | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 2 | 2 | 1 | 2 | 2 | 2 | 4 | 8 | 9 | 6 | 1 | 2.0 | 9.2 | | | | | | | | | | | | | | | | | | | | | | |
| 14-Mar | 1 | 1 | 0 | 1 | 9 | 21 | 37 | 34 | 31 | 25 | 23 | A | 22 | 23 | 5 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 1 | 10.5 | 36.6 | | | | | | | | | | | | | | | | | | | | | | |
| 15-Mar | 3 | 6 | 7 | 15 | 27 | 26 | 48 | 23 | 2 | 2 | A | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 20 | 51 | 86 | 10 | 1 | 15.0 | 86.4 | | | | | | | | | | | | | | | | | | | | | | |
| 16-Mar | 0 | 0 | 1 | 0 | 0 | 2 | 7 | 6 | 18 | A | 8 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 2.9 | 17.8 | | | | | | | | | | | | | | | | | | | | | | |
| 17-Mar | 6 | 2 | 8 | 6 | 12 | 15 | 1 | 1 | A | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 2.9 | 14.9 | | | | | | | | | | | | | | | | | | | | | | |
| 18-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 1.0 | 6.2 | | | | | | | | | | | | | | | | | | | | | | |
| 19-Mar | 1 | 1 | 0 | 2 | 2 | 3 | A | 12 | 4 | 5 | 6 | 4 | 2 | 2 | 3 | 2 | 1 | 2 | 1 | 1 | 10 | 19 | 4 | 3 | 3.9 | 18.8 | | | | | | | | | | | | | | | | | | | | | | |
| 20-Mar | 1 | 5 | 2 | 3 | 2 | A | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 3 | 8 | 1 | 1 | 1 | 2.3 | 7.6 | | | | | | | | | | | | | | | | | | | | | | |
| 21-Mar | 1 | 1 | 0 | 1 | A | 2 | 4 | 5 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2.3 | 5.1 | | | | | | | | | | | | | | | | | | | | | | |
| 22-Mar | 1 | 1 | 1 | A | 1 | 10 | 14 | 12 | 6 | 6 | 4 | 5 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 3.1 | 13.8 | | | | | | | | | | | | | | | | | | | | | | |
| 23-Mar | 0 | 0 | A | 1 | 0 | 1 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1.4 | 2.6 | | | | | | | | | | | | | | | | | | | | | | |
| 24-Mar | 0 | A | 1 | 0 | 0 | 1 | 2 | 5 | 11 | 24 | 14 | 10 | 12 | 14 | 8 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 5.0 | 23.6 | | | | | | | | | | | | | | | | | | | | | | |
| 25-Mar | A | 1 | 3 | 1 | 1 | 7 | 16 | 13 | 12 | 10 | 13 | 7 | 5 | 3 | 3 | 3 | 2 | 3 | 1 | 1 | 0 | 0 | 1 | A | 4.9 | 16.4 | | | | | | | | | | | | | | | | | | | | | | |
| 26-Mar | 1 | 0 | 0 | 0 | 1 | 7 | 21 | 29 | 14 | 29 | 32 | 4 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 0 | 6.5 | 32.3 | | | | | | | | | | | | | | | | | | | | | | |
| 27-Mar | 0 | 0 | 0 | 0 | 2 | 8 | 4 | 28 | 20 | 23 | 5 | 7 | 12 | 6 | 6 | 4 | 3 | 2 | 1 | 1 | 0 | A | 0 | 0 | 5.7 | 27.6 | | | | | | | | | | | | | | | | | | | | | | |
| 28-Mar | 1 | 0 | 0 | 1 | 0 | 1 | 4 | 6 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 1 | 1 | 1 | A | 0 | 0 | 0 | 1.6 | 6.4 | | | | | | | | | | | | | | | | | | | | | | |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 4 | 4 | 3 | 3 | 6 | 4 | 2 | 1 | 0 | A | 0 | 1 | 0 | 0 | 1.6 | 5.8 | | | | | | | | | | | | | | | | | | | | | | |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 45 | 28 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 4.2 | 45.3 | | | | | | | | | | | | | | | | | | | | | | |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | A | 1 | 1 | 4 | 15 | 27 | 9 | 2.8 | 26.7 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 0.8 | 1.6 | 1.3 | 1.2 | 2.1 | 3.7 | 6.4 | 10.5 | 12.0 | 8.5 | 8.2 | 5.9 | 5.4 | 4.2 | 2.7 | 2.1 | 1.7 | 1.7 | 1.1 | 1.9 | 4.7 | 6.7 | 2.7 | 1.2 | Diurnal Average |
| | | | | | | | | | | | | | | | | | | | | | | | | 5.8 | 15.2 | 11.4 | 15.5 | 27.1 | 26.0 | 48.1 | 53.5 | 75.3 | 41.9 | 56.2 | 63.7 | 38.7 | 23.3 | 8.3 | 4.6 | 3.3 | 7.2 | 2.7 | 19.9 | 50.9 | 86.4 | 26.7 | 8.8 | Diurnal Maximum |
| C - Calibration | | | | | | | | | | | | | | | | | | | | | | | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | |



Hourly Maximums

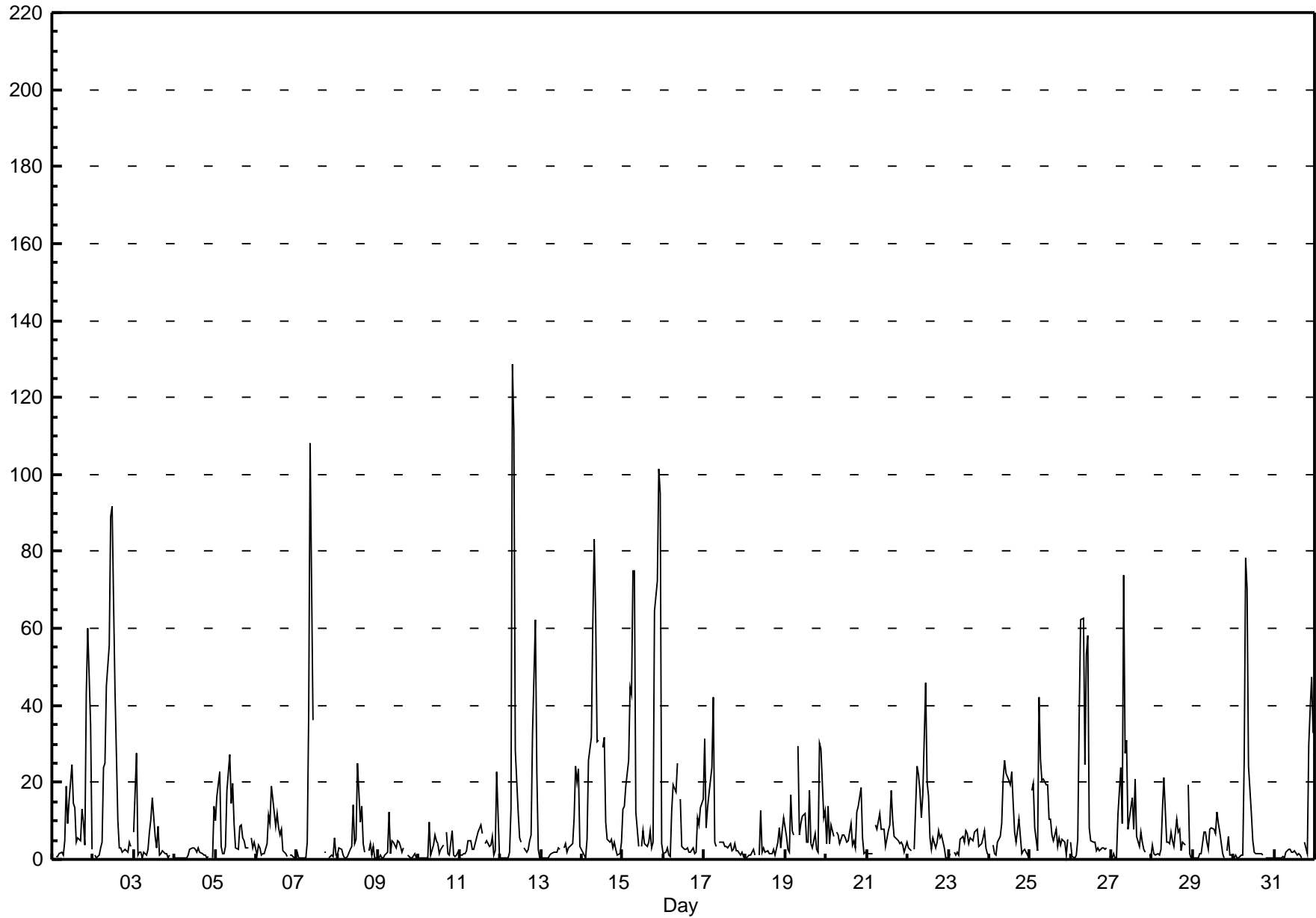
Nitrogen Oxide (NO) - ppb

Henry Pirker - March 2012

| Maximum Value: 128.5 ppb on Mar 12 08:00 | | Maximum Daily Average: 30.5 ppb on Mar 15 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|------|---------------------------------|------|------|------|------|-------|-------|------|------|------|------|------|------|------|-----|------|------|------|------|-------|------|---------------|-----------------|
| Minimum Value: 0 ppb on Mar 7 06:00 | | Minimum Daily Average: 1.8 ppb on Mar 4 | | Hours of Data: 705 | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 25.4 ppb at hour 8 | | Minimum Diurnal Average: 3.4 ppb at hour 1 | | Hours of Missing Data: 39 | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 9.22 ppb | | Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 1.5 Median = 3.7 Q ₃ = 8.9 P ₉₀ = 24.0 P ₉₉ = 87.6 | | Hours of Calibration: 39 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 0 | A | 1 | 1 | 1 | 2 | 1 | 5 | 19 | 9 | 15 | 25 | 15 | 14 | 4 | 6 | 5 | 13 | 10 | 4 | 43 | 60 | 35 | 3 | 12.6 | 60.2 |
| 2-Mar | A | 1 | 0 | 1 | 3 | 4 | 24 | 25 | 45 | 56 | 89 | 92 | 67 | 44 | 10 | 3 | 3 | 2 | 2 | 2 | 2 | 4 | 4 | A | 22.0 | 91.9 |
| 3-Mar | 7 | 28 | 1 | 2 | 2 | 0 | 2 | 1 | 2 | 7 | 11 | 16 | 6 | 3 | 8 | 1 | 1 | 2 | 1 | 1 | 0 | 1 | A | 0 | 4.6 | 27.6 |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 0 | 1 | A | 0 | 14 | 1.8 | 13.9 |
| 5-Mar | 10 | 17 | 23 | 3 | 1 | 1 | 3 | 18 | 27 | 15 | 20 | 9 | 3 | 3 | 9 | 9 | 6 | 5 | 3 | 3 | A | 6 | 3 | 4 | 8.7 | 27.4 |
| 6-Mar | 1 | 4 | 3 | 1 | 1 | 1 | 4 | 11 | 9 | 19 | 16 | 9 | 12 | 8 | 7 | 8 | 2 | 1 | 1 | A | 1 | 1 | 0 | 0 | 5.3 | 18.9 |
| 7-Mar | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 38 | 108 | 36 | C | C | C | C | C | C | 2 | 2 | A | 0 | 1 | 1 | 5 | 1 | -- | 108.3 |
| 8-Mar | 1 | 3 | 3 | 1 | 0 | 0 | 1 | 3 | 3 | 14 | 4 | 5 | 25 | 10 | 14 | 4 | 2 | A | 2 | 4 | 1 | 3 | 0 | 0 | 4.5 | 24.9 |
| 9-Mar | 0 | 1 | 0 | 0 | 1 | 2 | 12 | 1 | 5 | 4 | 3 | 5 | 4 | 3 | 2 | 3 | A | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 2.4 | 12.2 |
| 10-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 4 | 6 | 5 | 4 | 1 | 2 | 4 | A | 7 | 2 | 1 | 7 | 1 | 1 | 1 | 2 | 2.7 | 9.8 |
| 11-Mar | 1 | 1 | 1 | 1 | 2 | 5 | 5 | 2 | 2 | 4 | 5 | 7 | 9 | 7 | A | 4 | 5 | 3 | 4 | 6 | 1 | 2 | 23 | 0 | 4.5 | 22.9 |
| 12-Mar | 0 | 0 | 0 | 0 | 0 | 2 | 13 | 129 | 111 | 28 | 12 | 6 | 4 | A | 3 | 2 | 2 | 5 | 6 | 33 | 62 | 23 | 3 | 0 | 19.4 | 128.5 |
| 13-Mar | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | A | 3 | 4 | 2 | 3 | 3 | 4 | 11 | 24 | 20 | 23 | 3 | 5.1 | 24.3 |
| 14-Mar | 2 | 1 | 0 | 5 | 26 | 32 | 61 | 83 | 63 | 30 | 31 | A | 29 | 32 | 10 | 5 | 4 | 5 | 3 | 5 | 2 | 1 | 1 | 5 | 19.0 | 83.0 |
| 15-Mar | 13 | 14 | 19 | 26 | 45 | 43 | 75 | 75 | 12 | 3 | A | 3 | 7 | 4 | 3 | 4 | 7 | 3 | 4 | 65 | 72 | 102 | 95 | 4 | 30.5 | 101.5 |
| 16-Mar | 1 | 2 | 3 | 1 | 1 | 13 | 19 | 17 | 25 | A | 16 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 1 | 2 | 11 | 9 | 13 | 16 | 7.4 | 25.0 |
| 17-Mar | 31 | 8 | 13 | 17 | 24 | 42 | 4 | 3 | A | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 2 | 3 | 4 | 2 | 2 | 1 | 2 | 1 | 8.2 | 42.3 |
| 18-Mar | 0 | 0 | 1 | 1 | 2 | 2 | 1 | A | 1 | 13 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 4 | 8 | 3 | 7 | 11 | 3.2 | 12.7 |
| 19-Mar | 6 | 2 | 2 | 17 | 7 | 6 | A | 29 | 6 | 9 | 11 | 12 | 4 | 4 | 18 | 4 | 3 | 7 | 2 | 2 | 30 | 29 | 11 | 12 | 10.3 | 30.2 |
| 20-Mar | 4 | 14 | 4 | 9 | 6 | A | 7 | 6 | 4 | 6 | 6 | 5 | 4 | 5 | 9 | 4 | 5 | 3 | 12 | 14 | 18 | 5 | 1 | 2 | 6.8 | 18.5 |
| 21-Mar | 1 | 1 | 1 | 1 | A | 9 | 8 | 12 | 8 | 8 | 8 | 3 | 8 | 9 | 18 | 10 | 6 | 6 | 5 | 4 | 4 | 4 | 2 | 4 | 6.2 | 18.1 |
| 22-Mar | 3 | 3 | 2 | A | 2 | 24 | 22 | 18 | 11 | 17 | 46 | 20 | 16 | 6 | 2 | 6 | 3 | 4 | 7 | 6 | 6 | 3 | 0 | 0 | 9.9 | 45.9 |
| 23-Mar | 0 | 1 | A | 2 | 1 | 2 | 1 | 5 | 6 | 5 | 7 | 7 | 4 | 6 | 5 | 7 | 7 | 8 | 3 | 4 | 5 | 7 | 3 | 1 | 4.3 | 7.9 |
| 24-Mar | 1 | A | 4 | 1 | 1 | 4 | 6 | 9 | 21 | 26 | 22 | 20 | 19 | 23 | 14 | 7 | 4 | 10 | 6 | 1 | 2 | 2 | 1 | 2 | 9.2 | 25.8 |
| 25-Mar | A | 18 | 20 | 8 | 2 | 42 | 26 | 20 | 21 | 19 | 20 | 10 | 10 | 6 | 5 | 8 | 3 | 5 | 4 | 5 | 5 | 1 | 5 | A | 12.1 | 42.2 |
| 26-Mar | 4 | 1 | 0 | 1 | 5 | 37 | 62 | 63 | 25 | 53 | 58 | 8 | 5 | 4 | 4 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | A | 1 | 15.3 | 62.7 |
| 27-Mar | 0 | 1 | 0 | 0 | 11 | 24 | 9 | 74 | 28 | 31 | 8 | 13 | 16 | 8 | 21 | 6 | 3 | 7 | 5 | 3 | 2 | A | 1 | 1 | 11.9 | 73.8 |
| 28-Mar | 4 | 1 | 1 | 1 | 1 | 2 | 13 | 21 | 4 | 4 | 4 | 7 | 5 | 3 | 11 | 7 | 8 | 2 | 5 | 4 | A | 19 | 1 | 0 | 5.7 | 21.4 |
| 29-Mar | 0 | 0 | 0 | 0 | 1 | 1 | 7 | 7 | 4 | 3 | 8 | 8 | 8 | 7 | 12 | 9 | 7 | 1 | 0 | A | 2 | 6 | 1 | 1 | 4.2 | 12.3 |
| 30-Mar | 0 | 1 | 0 | 0 | 1 | 1 | 26 | 78 | 70 | 24 | 12 | 5 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 10.0 | 78.3 |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 0 | A | 4 | 1 | 30 | 39 | 47 | 33 | 7.6 | 47.2 |
| | | 3.4 | 4.4 | 3.6 | 3.6 | 5.1 | 10.3 | 14.3 | 25.4 | 21.8 | 15.4 | 15.6 | 11.0 | 10.3 | 7.8 | 7.3 | 4.6 | 3.8 | 4.0 | 3.7 | 6.8 | 11.8 | 12.4 | 10.1 | 4.4 | Diurnal Average |
| | | 31.5 | 27.6 | 22.7 | 25.8 | 44.8 | 43.1 | 74.9 | 128.5 | 111.4 | 55.6 | 89.1 | 91.9 | 67.2 | 44.0 | 20.7 | 10.3 | 7.8 | 13.0 | 12.2 | 64.6 | 72.4 | 101.5 | 95.2 | 33.0 | Diurnal Maximum |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | |

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Henry Pirker - March 2012

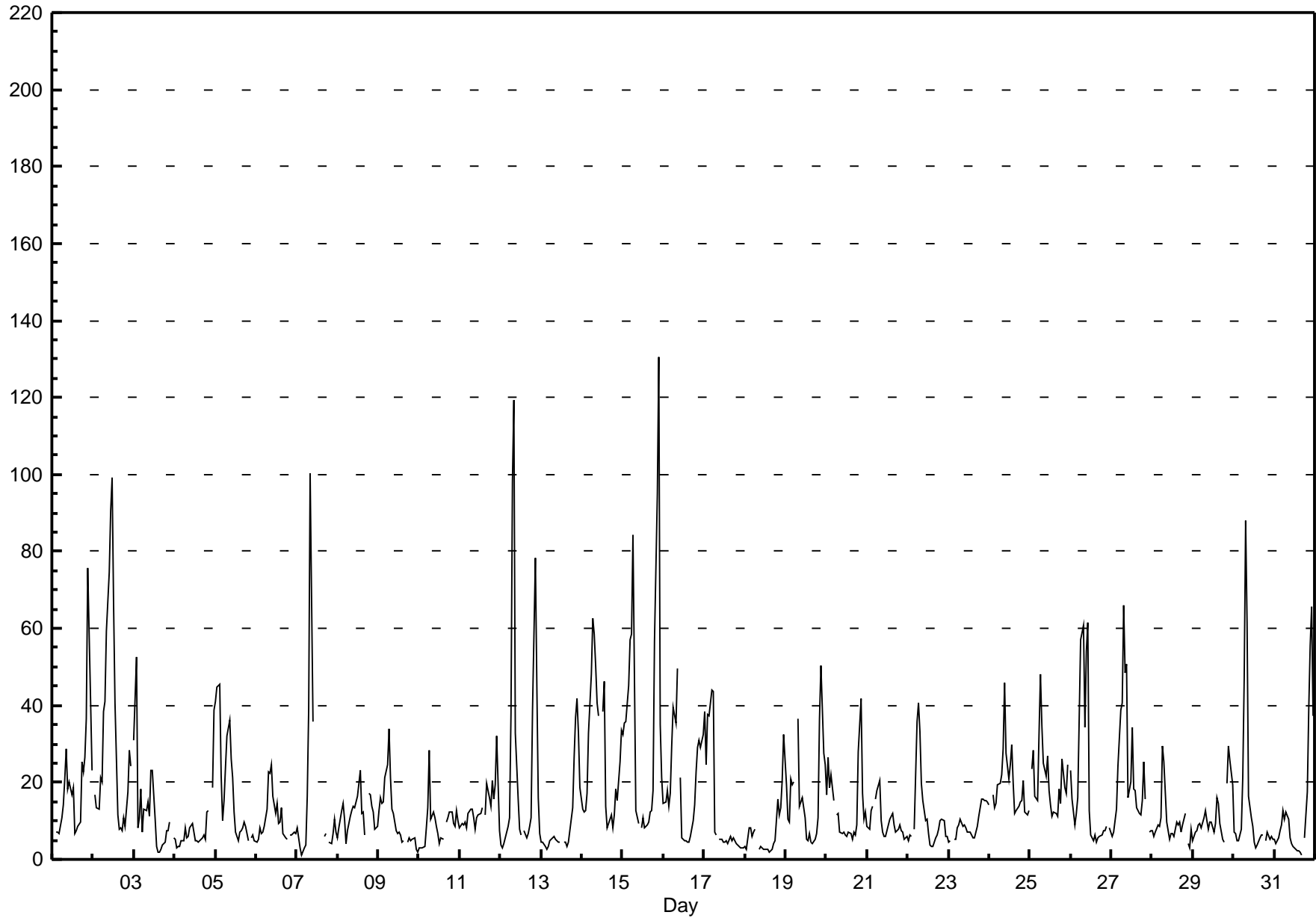


Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - March 2012

| Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|---|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|-----|----|-------------------------------|---------------|---------------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|-----------------|--|
| Maximum Value: 130.7 ppb on Mar 15 22:00 | | Maximum Daily Average: 36.8 ppb on Mar 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Minimum Value: 1 ppb on Mar 31 17:00 | | Hours of Data: 705 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 30.6 ppb at hour 8 | | Hours of Missing Data: 39 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 15.98 ppb | | Hours of Calibration: 39 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Minimum Daily Average: 7.4 ppb on Mar 18 | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Minimum Diurnal Average: 7.4 ppb at hour 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Percentiles: P ₁ = 2.0 P ₁₀ = 4.4 Q ₁ = 6.2 Median = 10.3 Q ₃ = 18.8 P ₉₀ = 36.6 P ₉₉ = 88.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Mar | 4 | A | 7 | 7 | 7 | 11 | 14 | 21 | 29 | 18 | 20 | 17 | 19 | 7 | 7 | 9 | 10 | 25 | 23 | 27 | 37 | 76 | 41 | 23 | 19.9 | 75.7 | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Mar | A | 17 | 13 | 13 | 21 | 20 | 39 | 41 | 59 | 75 | 91 | 99 | 67 | 41 | 11 | 8 | 8 | 7 | 11 | 8 | 17 | 28 | 24 | A | 32.7 | 99.3 | | | | | | | | | | | | | | | | | | | | | | | |
| 3-Mar | 31 | 53 | 8 | 11 | 18 | 7 | 13 | 13 | 15 | 11 | 23 | 23 | 10 | 3 | 2 | 2 | 2 | 4 | 4 | 8 | 8 | 10 | A | 6 | 12.4 | 52.6 | | | | | | | | | | | | | | | | | | | | | | | |
| 4-Mar | 5 | 3 | 3 | 3 | 5 | 5 | 8 | 5 | 6 | 8 | 9 | 7 | 5 | 5 | 4 | 5 | 5 | 6 | 5 | 12 | 13 | A | 19 | 39 | 8.1 | 38.6 | | | | | | | | | | | | | | | | | | | | | | | |
| 5-Mar | 41 | 45 | 45 | 22 | 10 | 15 | 24 | 32 | 36 | 26 | 21 | 12 | 7 | 5 | 7 | 8 | 8 | 10 | 9 | 5 | A | 5 | 6 | 5 | 17.6 | 45.4 | | | | | | | | | | | | | | | | | | | | | | | |
| 6-Mar | 4 | 5 | 8 | 7 | 7 | 8 | 13 | 23 | 22 | 25 | 16 | 12 | 14 | 9 | 10 | 13 | 7 | 6 | 5 | A | 6 | 6 | 7 | 7 | 10.5 | 24.6 | | | | | | | | | | | | | | | | | | | | | | | |
| 7-Mar | 8 | 6 | 3 | 1 | 3 | 4 | 17 | 39 | 100 | 36 | C | C | C | C | C | C | 6 | 7 | A | 5 | 4 | 7 | 11 | 7 | -- | 100.4 | | | | | | | | | | | | | | | | | | | | | | | |
| 8-Mar | 5 | 8 | 13 | 15 | 10 | 4 | 8 | 11 | 13 | 14 | 14 | 15 | 17 | 23 | 12 | 12 | 6 | A | 17 | 17 | 14 | 12 | 8 | 9 | 12.0 | 23.2 | | | | | | | | | | | | | | | | | | | | | | | |
| 9-Mar | 13 | 16 | 15 | 15 | 21 | 25 | 34 | 21 | 13 | 12 | 7 | 7 | 7 | 6 | 4 | 5 | A | 4 | 5 | 5 | 5 | 5 | 3 | 2 | 10.9 | 34.1 | | | | | | | | | | | | | | | | | | | | | | | |
| 10-Mar | 3 | 3 | 3 | 3 | 8 | 13 | 29 | 11 | 12 | 11 | 9 | 7 | 4 | 6 | 5 | A | 10 | 11 | 12 | 12 | 9 | 8 | 13 | 10 | 9.2 | 28.5 | | | | | | | | | | | | | | | | | | | | | | | |
| 11-Mar | 8 | 9 | 9 | 10 | 8 | 12 | 13 | 13 | 11 | 8 | 11 | 12 | 12 | 13 | A | 11 | 20 | 16 | 14 | 21 | 16 | 19 | 32 | 8 | 13.3 | 31.9 | | | | | | | | | | | | | | | | | | | | | | | |
| 12-Mar | 4 | 3 | 4 | 6 | 8 | 11 | 38 | 98 | 119 | 33 | 16 | 8 | 6 | A | 8 | 6 | 7 | 8 | 11 | 39 | 78 | 45 | 16 | 7 | 25.2 | 119.3 | | | | | | | | | | | | | | | | | | | | | | | |
| 13-Mar | 5 | 5 | 4 | 3 | 3 | 5 | 5 | 6 | 5 | 5 | 5 | 4 | A | 4 | 5 | 3 | 5 | 8 | 13 | 26 | 37 | 42 | 33 | 19 | 10.8 | 41.7 | | | | | | | | | | | | | | | | | | | | | | | |
| 14-Mar | 13 | 12 | 13 | 17 | 33 | 48 | 63 | 59 | 51 | 40 | 37 | A | 38 | 46 | 14 | 8 | 10 | 11 | 8 | 11 | 18 | 15 | 25 | 34 | 27.2 | 62.8 | | | | | | | | | | | | | | | | | | | | | | | |
| 15-Mar | 32 | 36 | 36 | 45 | 57 | 59 | 84 | 49 | 13 | 9 | A | 8 | 11 | 8 | 9 | 10 | 12 | 13 | 18 | 57 | 95 | 131 | 35 | 21 | 36.8 | 130.7 | | | | | | | | | | | | | | | | | | | | | | | |
| 16-Mar | 15 | 15 | 18 | 14 | 17 | 29 | 39 | 36 | 49 | A | 21 | 6 | 5 | 5 | 4 | 4 | 6 | 10 | 14 | 23 | 29 | 31 | 29 | 32 | 19.7 | 49.5 | | | | | | | | | | | | | | | | | | | | | | | |
| 17-Mar | 38 | 25 | 38 | 37 | 44 | 44 | 7 | 6 | A | 5 | 5 | 5 | 4 | 5 | 4 | 6 | 5 | 6 | 5 | 4 | 4 | 3 | 3 | 3 | 13.3 | 43.8 | | | | | | | | | | | | | | | | | | | | | | | |
| 18-Mar | 3 | 2 | 8 | 8 | 6 | 7 | 8 | A | 3 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 4 | 5 | 16 | 12 | 13 | 21 | 32 | 7.4 | 32.3 | | | | | | | | | | | | | | | | | | | | | | | |
| 19-Mar | 19 | 10 | 10 | 21 | 20 | 20 | A | 36 | 14 | 15 | 16 | 11 | 5 | 5 | 7 | 4 | 4 | 5 | 7 | 11 | 37 | 50 | 27 | 25 | 16.5 | 50.2 | | | | | | | | | | | | | | | | | | | | | | | |
| 20-Mar | 17 | 26 | 19 | 22 | 15 | A | 12 | 12 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 6 | 9 | 28 | 42 | 17 | 10 | 12 | 13.3 | 41.8 | | | | | | | | | | | | | | | | | | | | | | | |
| 21-Mar | 9 | 8 | 13 | 14 | A | 16 | 18 | 21 | 10 | 7 | 6 | 6 | 9 | 10 | 11 | 12 | 9 | 7 | 8 | 9 | 8 | 7 | 5 | 6 | 9.8 | 20.7 | | | | | | | | | | | | | | | | | | | | | | | |
| 22-Mar | 5 | 6 | 6 | A | 8 | 36 | 41 | 33 | 20 | 15 | 10 | 10 | 7 | 4 | 3 | 3 | 6 | 6 | 8 | 10 | 11 | 10 | 6 | 6 | 11.7 | 40.8 | | | | | | | | | | | | | | | | | | | | | | | |
| 23-Mar | 4 | 5 | A | 5 | 5 | 8 | 9 | 10 | 9 | 9 | 8 | 7 | 7 | 7 | 6 | 5 | 7 | 9 | 11 | 16 | 16 | 15 | 15 | 15 | 9.1 | 15.7 | | | | | | | | | | | | | | | | | | | | | | | |
| 24-Mar | 14 | A | 17 | 14 | 15 | 19 | 20 | 22 | 29 | 46 | 28 | 21 | 25 | 30 | 20 | 12 | 13 | 14 | 15 | 15 | 21 | 12 | 12 | 13 | 19.2 | 45.7 | | | | | | | | | | | | | | | | | | | | | | | |
| 25-Mar | A | 23 | 29 | 16 | 15 | 33 | 48 | 35 | 25 | 22 | 27 | 18 | 14 | 11 | 12 | 12 | 11 | 18 | 15 | 26 | 19 | 17 | 25 | A | 21.4 | 48.0 | | | | | | | | | | | | | | | | | | | | | | | |
| 26-Mar | 23 | 16 | 9 | 12 | 16 | 36 | 57 | 61 | 34 | 54 | 62 | 13 | 6 | 5 | 6 | 5 | 6 | 6 | 6 | 7 | 7 | 8 | A | 8 | 20.2 | 61.5 | | | | | | | | | | | | | | | | | | | | | | | |
| 27-Mar | 6 | 7 | 10 | 13 | 24 | 39 | 41 | 66 | 48 | 51 | 16 | 20 | 34 | 18 | 18 | 14 | 12 | 11 | 15 | 25 | 16 | A | 7 | 7 | 22.6 | 66.1 | | | | | | | | | | | | | | | | | | | | | | | |
| 28-Mar | 7 | 6 | 7 | 9 | 9 | 11 | 29 | 25 | 10 | 7 | 5 | 7 | 7 | 6 | 10 | 9 | 10 | 7 | 9 | 12 | A | 4 | 3 | 8 | 9.4 | 29.4 | | | | | | | | | | | | | | | | | | | | | | | |
| 29-Mar | 5 | 7 | 8 | 9 | 9 | 8 | 11 | 13 | 10 | 8 | 10 | 10 | 7 | 9 | 16 | 15 | 9 | 5 | 4 | A | 20 | 29 | 26 | 20 | 11.7 | 29.3 | | | | | | | | | | | | | | | | | | | | | | | |
| 30-Mar | 7 | 7 | 5 | 5 | 8 | 21 | 47 | 88 | 61 | 17 | 11 | 9 | 5 | 3 | 4 | 6 | 6 | 6 | A | 5 | 7 | 5 | 6 | 5 | 14.9 | 87.9 | | | | | | | | | | | | | | | | | | | | | | | |
| 31-Mar | 5 | 4 | 6 | 7 | 9 | 13 | 11 | 12 | 10 | 6 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | A | 6 | 17 | 39 | 56 | 66 | 37 | 14.0 | 65.7 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 12.3 | 13.4 | 12.8 | 12.8 | 14.7 | 19.5 | 26.6 | 30.6 | 28.1 | 20.1 | 17.8 | 13.3 | 12.6 | 10.6 | 7.9 | 7.4 | 7.6 | 8.9 | 10.1 | 16.5 | 22.2 | 23.8 | 18.4 | 14.6 | Diurnal Average | |
| | | | | | | | | | | | | | | | | | | | | | | | | 41.1 | 52.6 | 45.4 | 45.0 | 56.9 | 58.5 | 84.2 | 98.1 | 119.3 | 74.7 | 90.7 | 99.3 | 66.6 | 46.3 | 19.7 | 14.7 | 19.6 | 25.4 | 22.7 | 56.8 | 95.1 | 130.7 | 65.7 | 38.6 | Diurnal Maximum | |
| C - Calibration | | | | | | | | | | | | | | | | | | | | | | | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | | |



Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

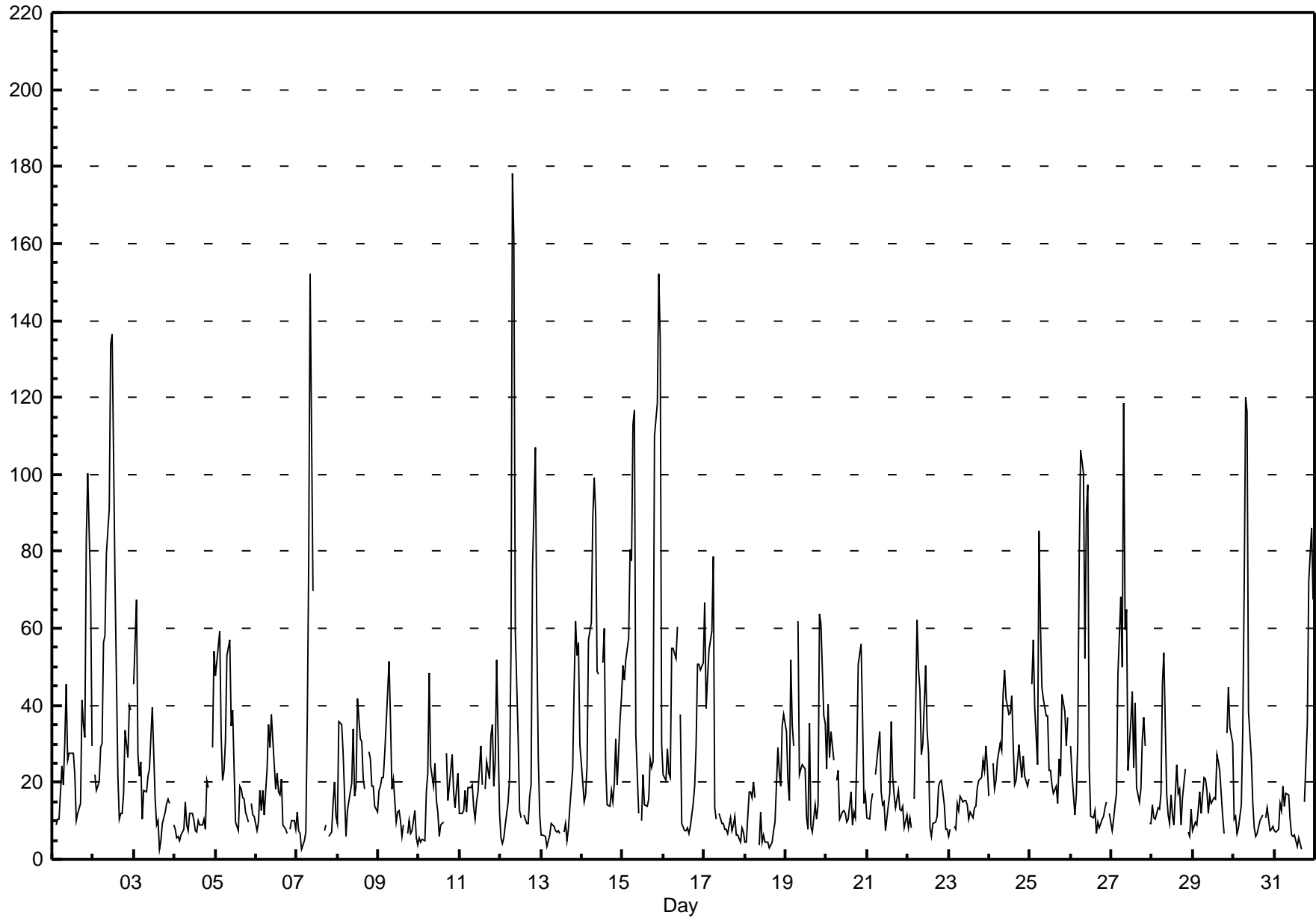
Henry Pirker - March 2012

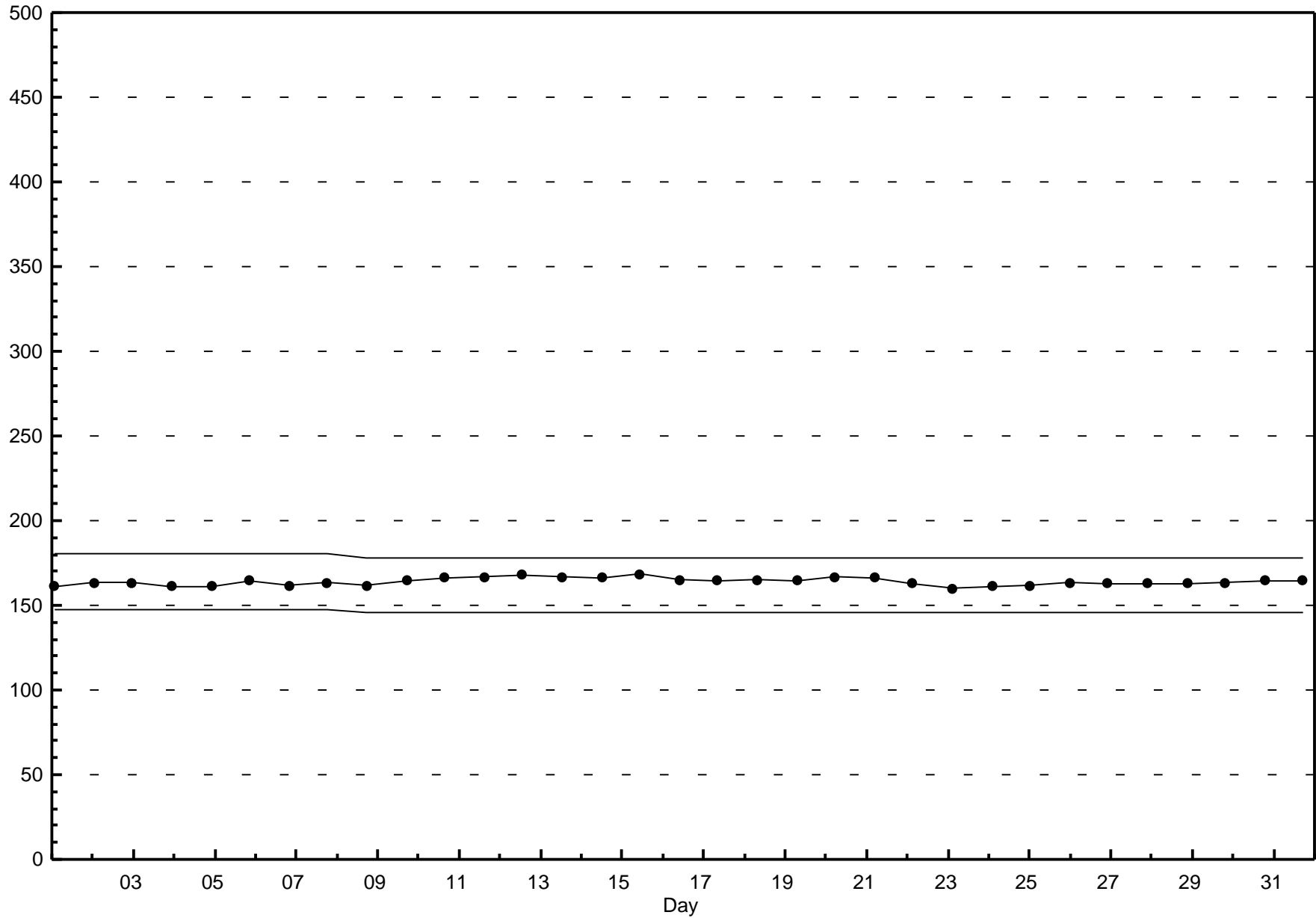
| Maximum Value: 178.2 ppb on Mar 12 08:00 | | Maximum Daily Average: 58.0 ppb on Mar 15 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|------|---------------------------------|------|------|------|-------|-------|-------|------|-------|-------|-------|------|------|------|------|------|------|-------|-------|-------|-------|---------------|-----------------|
| Minimum Value: 2 ppb on Mar 3 16:00 | | Minimum Daily Average: 12.5 ppb on Mar 4 | | Hours of Data: 705 | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 50.8 ppb at hour 8 | | Minimum Diurnal Average: 12.7 ppb at hour 16 | | Hours of Missing Data: 39 | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 25.70 ppb | | Percentiles: P ₁ = 3.8 P ₁₀ = 7.1 Q ₁ = 10.4 Median = 17.7 Q ₃ = 30.8 P ₉₀ = 54.6 P ₉₉ = 133.2 | | Hours of Calibration: 39 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 6 | A | 9 | 10 | 11 | 24 | 19 | 30 | 45 | 26 | 28 | 28 | 28 | 22 | 10 | 12 | 14 | 41 | 35 | 32 | 83 | 100 | 70 | 29 | 31.0 | 100.3 |
| 2-Mar | A | 22 | 18 | 20 | 29 | 30 | 56 | 58 | 79 | 91 | 134 | 137 | 105 | 73 | 22 | 10 | 12 | 12 | 17 | 33 | 26 | 40 | 39 | A | 48.4 | 136.5 |
| 3-Mar | 45 | 68 | 27 | 21 | 25 | 10 | 18 | 17 | 21 | 23 | 32 | 39 | 16 | 9 | 10 | 2 | 5 | 9 | 12 | 15 | 16 | 15 | A | 9 | 20.3 | 67.6 |
| 4-Mar | 8 | 6 | 6 | 5 | 7 | 8 | 15 | 9 | 8 | 12 | 12 | 10 | 7 | 7 | 10 | 9 | 9 | 11 | 8 | 21 | 19 | A | 29 | 54 | 12.5 | 53.9 |
| 5-Mar | 48 | 51 | 59 | 32 | 20 | 23 | 31 | 53 | 57 | 35 | 39 | 24 | 10 | 8 | 19 | 18 | 16 | 16 | 12 | 10 | A | 15 | 12 | 11 | 26.9 | 59.2 |
| 6-Mar | 8 | 10 | 18 | 13 | 18 | 12 | 24 | 35 | 29 | 38 | 31 | 18 | 22 | 18 | 17 | 21 | 9 | 8 | 7 | A | 8 | 10 | 10 | 8 | 16.9 | 37.8 |
| 7-Mar | 12 | 7 | 7 | 3 | 5 | 7 | 35 | 77 | 152 | 70 | C | C | C | C | C | C | 8 | 9 | A | 6 | 7 | 14 | 20 | 11 | -- | 152.3 |
| 8-Mar | 9 | 36 | 35 | 28 | 17 | 6 | 13 | 18 | 20 | 34 | 16 | 19 | 42 | 31 | 31 | 21 | 18 | A | 28 | 26 | 19 | 19 | 14 | 12 | 22.2 | 41.8 |
| 9-Mar | 18 | 19 | 21 | 21 | 27 | 43 | 52 | 37 | 18 | 21 | 10 | 12 | 13 | 10 | 6 | 9 | A | 7 | 10 | 7 | 7 | 13 | 5 | 4 | 17.0 | 51.6 |
| 10-Mar | 5 | 5 | 5 | 5 | 17 | 22 | 49 | 24 | 19 | 25 | 15 | 12 | 6 | 9 | 10 | A | 28 | 15 | 19 | 27 | 17 | 14 | 18 | 22 | 17.0 | 48.6 |
| 11-Mar | 12 | 12 | 13 | 18 | 12 | 19 | 19 | 19 | 13 | 10 | 15 | 18 | 29 | 19 | A | 18 | 25 | 21 | 32 | 35 | 19 | 26 | 52 | 12 | 20.4 | 51.8 |
| 12-Mar | 5 | 4 | 5 | 9 | 15 | 21 | 55 | 178 | 161 | 59 | 31 | 13 | 11 | A | 12 | 9 | 9 | 17 | 19 | 76 | 107 | 59 | 27 | 12 | 39.8 | 178.2 |
| 13-Mar | 6 | 6 | 6 | 3 | 5 | 6 | 9 | 8 | 7 | 7 | 7 | 7 | A | 7 | 9 | 5 | 8 | 13 | 24 | 45 | 62 | 53 | 56 | 30 | 17.0 | 61.8 |
| 14-Mar | 20 | 15 | 17 | 24 | 57 | 62 | 89 | 99 | 90 | 49 | 48 | A | 51 | 60 | 24 | 14 | 14 | 18 | 15 | 20 | 31 | 20 | 36 | 42 | 39.7 | 99.1 |
| 15-Mar | 51 | 47 | 52 | 58 | 80 | 78 | 113 | 117 | 32 | 12 | A | 10 | 22 | 14 | 14 | 16 | 26 | 24 | 25 | 110 | 119 | 152 | 135 | 30 | 58.0 | 152.1 |
| 16-Mar | 22 | 20 | 29 | 23 | 21 | 55 | 55 | 52 | 60 | A | 38 | 9 | 8 | 8 | 8 | 7 | 9 | 15 | 19 | 30 | 51 | 51 | 49 | 51 | 29.9 | 60.5 |
| 17-Mar | 67 | 39 | 47 | 54 | 59 | 79 | 13 | 10 | A | 12 | 9 | 9 | 8 | 8 | 7 | 11 | 8 | 9 | 11 | 6 | 6 | 4 | 8 | 7 | 21.5 | 78.6 |
| 18-Mar | 5 | 4 | 17 | 17 | 16 | 20 | 16 | A | 4 | 12 | 4 | 6 | 4 | 4 | 3 | 4 | 4 | 7 | 10 | 29 | 23 | 19 | 35 | 38 | 13.2 | 37.8 |
| 19-Mar | 33 | 20 | 15 | 52 | 35 | 29 | A | 62 | 22 | 24 | 25 | 23 | 11 | 8 | 36 | 8 | 7 | 14 | 10 | 14 | 64 | 61 | 37 | 35 | 28.1 | 63.9 |
| 20-Mar | 23 | 40 | 26 | 33 | 26 | A | 21 | 23 | 11 | 12 | 13 | 12 | 10 | 11 | 18 | 9 | 12 | 11 | 27 | 51 | 56 | 37 | 14 | 17 | 22.3 | 56.0 |
| 21-Mar | 11 | 10 | 15 | 17 | A | 22 | 26 | 33 | 18 | 14 | 15 | 7 | 14 | 17 | 36 | 22 | 17 | 14 | 18 | 13 | 13 | 14 | 8 | 12 | 16.8 | 35.9 |
| 22-Mar | 8 | 11 | 8 | A | 16 | 62 | 50 | 44 | 27 | 30 | 50 | 34 | 28 | 8 | 6 | 9 | 10 | 11 | 19 | 20 | 20 | 14 | 8 | 8 | 21.8 | 62.2 |
| 23-Mar | 6 | 8 | A | 8 | 8 | 14 | 13 | 17 | 15 | 15 | 15 | 14 | 10 | 12 | 11 | 13 | 14 | 19 | 20 | 21 | 26 | 23 | 29 | 24 | 15.5 | 29.4 |
| 24-Mar | 16 | A | 25 | 18 | 20 | 26 | 30 | 28 | 43 | 49 | 42 | 38 | 38 | 43 | 30 | 19 | 20 | 30 | 25 | 21 | 27 | 22 | 19 | 21 | 28.3 | 49.3 |
| 25-Mar | A | 45 | 57 | 40 | 25 | 85 | 61 | 45 | 42 | 37 | 37 | 23 | 23 | 19 | 17 | 19 | 15 | 26 | 22 | 43 | 38 | 29 | 37 | A | 35.7 | 85.4 |
| 26-Mar | 29 | 22 | 12 | 17 | 31 | 78 | 106 | 100 | 52 | 90 | 97 | 24 | 11 | 11 | 13 | 7 | 10 | 8 | 10 | 11 | 13 | 15 | A | 12 | 33.9 | 106.3 |
| 27-Mar | 7 | 10 | 14 | 17 | 48 | 68 | 50 | 119 | 60 | 65 | 23 | 36 | 44 | 24 | 41 | 19 | 15 | 18 | 31 | 37 | 30 | A | 9 | 9 | 34.5 | 118.5 |
| 28-Mar | 14 | 11 | 10 | 13 | 13 | 17 | 45 | 54 | 17 | 11 | 9 | 17 | 11 | 9 | 25 | 17 | 18 | 9 | 16 | 24 | A | 7 | 6 | 13 | 16.8 | 53.6 |
| 29-Mar | 8 | 10 | 9 | 13 | 17 | 12 | 21 | 21 | 18 | 12 | 16 | 14 | 16 | 16 | 27 | 25 | 23 | 11 | 7 | A | 33 | 45 | 34 | 30 | 19.0 | 44.8 |
| 30-Mar | 10 | 11 | 7 | 8 | 14 | 33 | 71 | 120 | 116 | 39 | 26 | 15 | 8 | 6 | 7 | 10 | 11 | 11 | A | 11 | 13 | 7 | 8 | 8 | 24.9 | 120.2 |
| 31-Mar | 7 | 7 | 8 | 15 | 13 | 19 | 14 | 17 | 17 | 10 | 6 | 6 | 6 | 3 | 6 | 4 | 2 | A | 15 | 35 | 72 | 79 | 86 | 67 | 22.5 | 86.1 |
| | | 18.0 | 19.9 | 20.0 | 20.5 | 23.6 | 33.1 | 39.6 | 50.8 | 42.5 | 31.5 | 29.1 | 21.9 | 21.1 | 17.0 | 16.6 | 12.7 | 13.2 | 15.0 | 18.1 | 28.5 | 35.3 | 33.7 | 31.5 | 22.1 | Diurnal Average |
| | | 66.7 | 67.6 | 59.2 | 57.5 | 80.4 | 85.4 | 113.0 | 178.2 | 161.2 | 91.1 | 133.8 | 136.5 | 105.0 | 72.9 | 40.8 | 25.2 | 27.7 | 41.4 | 34.9 | 110.1 | 118.5 | 152.1 | 135.1 | 67.4 | Diurnal Maximum |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | |

Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - March 2012





Hourly Averages

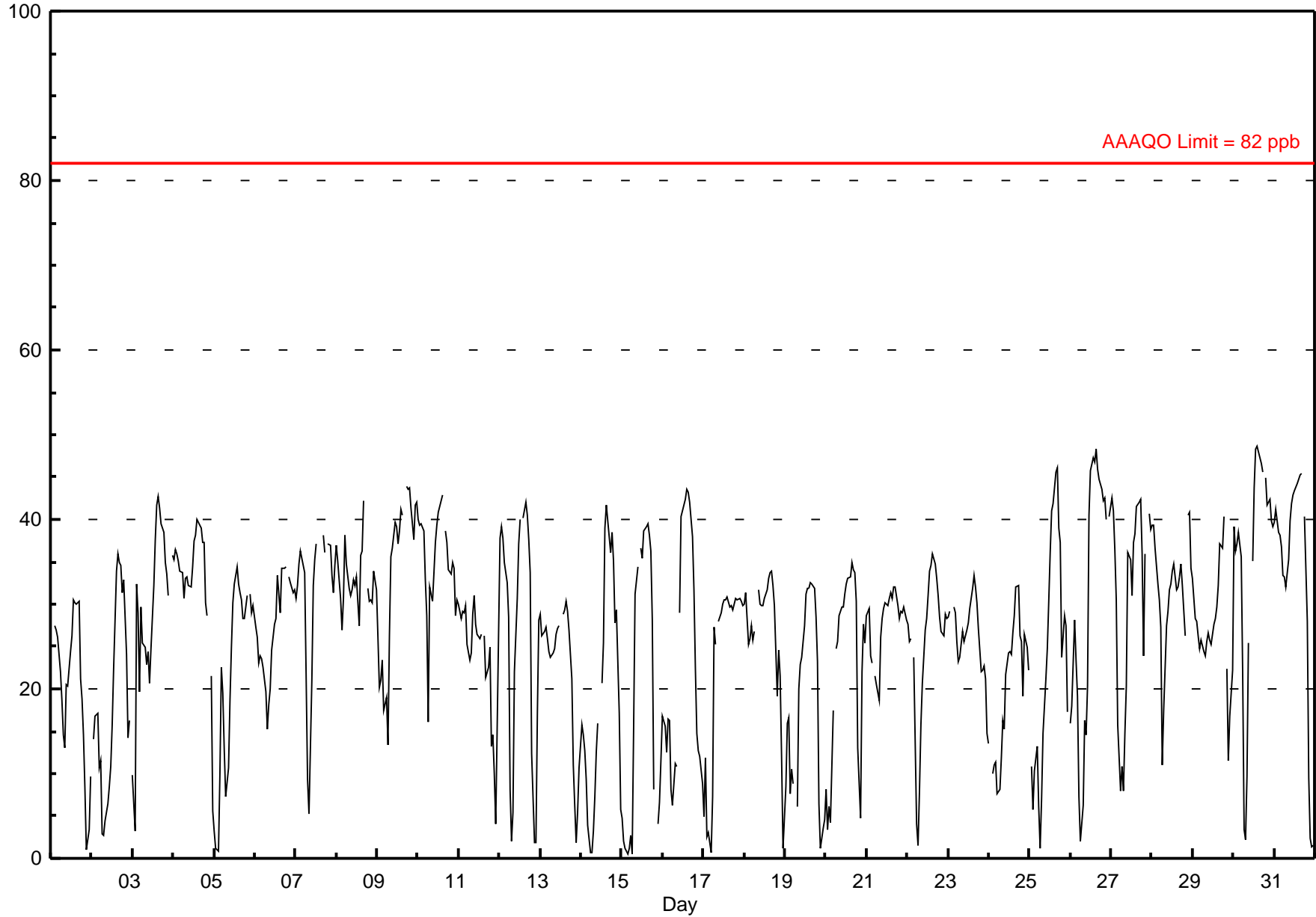
Ozone (O₃) - ppb

Henry Pirker - March 2012

| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 48.6 ppb on Mar 30 15:00 Maximum Daily Average: 35.1 ppb on Mar 30 | | Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 36 Percent Operational Time: 99.7 | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----------------|---------------|---------------|
| Minimum Value: 0 ppb on Mar 15 04:00 Maximum Diurnal Average: 36.6 ppb at hour 16 Monthly Average: 26.46 ppb | | Minimum Daily Average: 18.3 ppb on Mar 2 Minimum Diurnal Average: 15.9 ppb at hour 7 Percentiles: P ₁ = 1.1 P ₁₀ = 8.1 Q ₁ = 20.0 Median = 28.8 Q ₃ = 34.4 P ₉₀ = 40.0 P ₉₉ = 46.5 | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 30 | A | 27 | 27 | 26 | 22 | 19 | 15 | 13 | 20 | 20 | 24 | 26 | 31 | 30 | 30 | 30 | 21 | 19 | 15 | 8 | 1 | 3 | 10 | 20.4 | 30.6 |
| 2-Mar | A | 14 | 17 | 17 | 11 | 12 | 3 | 3 | 4 | 6 | 8 | 11 | 16 | 22 | 34 | 36 | 35 | 35 | 31 | 33 | 24 | 14 | 16 | A | 18.3 | 35.9 |
| 3-Mar | 10 | 3 | 32 | 29 | 20 | 30 | 25 | 25 | 23 | 24 | 21 | 25 | 32 | 38 | 42 | 43 | 41 | 40 | 39 | 35 | 33 | 31 | A | 36 | 29.4 | 42.7 |
| 4-Mar | 35 | 36 | 36 | 35 | 34 | 34 | 31 | 33 | 33 | 32 | 32 | 34 | 37 | 38 | 40 | 40 | 39 | 37 | 37 | 30 | 29 | A | 22 | 6 | 33.1 | 40.0 |
| 5-Mar | 3 | 1 | 1 | 10 | 22 | 20 | 13 | 7 | 11 | 19 | 25 | 30 | 32 | 34 | 32 | 31 | 31 | 28 | 28 | 31 | A | 31 | 29 | 30 | 21.7 | 34.3 |
| 6-Mar | 27 | 26 | 23 | 24 | 24 | 23 | 20 | 15 | 18 | 20 | 25 | 28 | 28 | 33 | 31 | 29 | 34 | 34 | 34 | A | 33 | 32 | 31 | 32 | 27.2 | 34.4 |
| 7-Mar | 31 | 32 | 35 | 36 | 35 | 34 | 22 | 9 | 5 | 21 | 32 | 35 | 37 | C | C | C | 38 | 36 | A | 37 | 37 | 33 | 31 | 35 | 30.6 | 38.1 |
| 8-Mar | 37 | 35 | 31 | 27 | 31 | 38 | 35 | 32 | 31 | 32 | 33 | 32 | 33 | 27 | 36 | 36 | 42 | A | 32 | 30 | 31 | 30 | 34 | 32 | 32.9 | 42.1 |
| 9-Mar | 26 | 20 | 21 | 23 | 17 | 19 | 13 | 26 | 36 | 37 | 40 | 39 | 37 | 39 | 41 | 40 | A | 44 | 44 | 44 | 41 | 38 | 42 | 42 | 33.4 | 44.0 |
| 10-Mar | 40 | 39 | 40 | 39 | 33 | 29 | 16 | 32 | 30 | 34 | 37 | 39 | 41 | 42 | 43 | A | 39 | 37 | 34 | 34 | 35 | 34 | 29 | 30 | 35.0 | 43.0 |
| 11-Mar | 30 | 28 | 29 | 29 | 30 | 25 | 23 | 24 | 29 | 31 | 28 | 26 | 26 | 26 | A | 26 | 21 | 23 | 25 | 13 | 15 | 10 | 4 | 27 | 23.9 | 30.9 |
| 12-Mar | 38 | 39 | 38 | 35 | 33 | 28 | 8 | 2 | 5 | 22 | 31 | 37 | 40 | A | 40 | 42 | 41 | 38 | 34 | 12 | 2 | 2 | 17 | 28 | 26.6 | 42.1 |
| 13-Mar | 29 | 26 | 27 | 27 | 26 | 24 | 24 | 24 | 25 | 26 | 27 | 27 | A | 29 | 29 | 30 | 29 | 27 | 21 | 11 | 6 | 2 | 5 | 11 | 22.3 | 30.3 |
| 14-Mar | 16 | 15 | 13 | 9 | 4 | 1 | 1 | 3 | 7 | 12 | 16 | A | 21 | 25 | 39 | 42 | 38 | 36 | 39 | 35 | 28 | 29 | 17 | 6 | 19.6 | 41.8 |
| 15-Mar | 5 | 2 | 1 | 0 | 1 | 3 | 1 | 15 | 31 | 34 | A | 37 | 35 | 39 | 39 | 40 | 38 | 36 | 28 | 8 | N | 4 | 7 | 12 | 18.9 | 39.5 |
| 16-Mar | 17 | 16 | 13 | 16 | 16 | 8 | 6 | 11 | 11 | A | 29 | 40 | 42 | 42 | 44 | 43 | 42 | 38 | 32 | 22 | 15 | 13 | 12 | 9 | 23.3 | 43.6 |
| 17-Mar | 5 | 12 | 3 | 3 | 1 | 7 | 27 | 25 | A | 28 | 29 | 30 | 31 | 30 | 31 | 30 | 30 | 29 | 30 | 31 | 30 | 31 | 30 | 30 | 23.2 | 30.8 |
| 18-Mar | 30 | 31 | 25 | 26 | 27 | 26 | 27 | A | 32 | 30 | 30 | 30 | 31 | 32 | 33 | 34 | 34 | 32 | 30 | 19 | 25 | 22 | 12 | 1 | 26.8 | 33.8 |
| 19-Mar | 8 | 16 | 17 | 8 | 10 | 9 | A | 6 | 20 | 23 | 24 | 27 | 31 | 32 | 32 | 33 | 32 | 32 | 29 | 23 | 6 | 1 | 3 | 5 | 18.6 | 32.6 |
| 20-Mar | 8 | 3 | 6 | 4 | 18 | A | 25 | 26 | 29 | 30 | 30 | 31 | 32 | 33 | 33 | 35 | 34 | 34 | 30 | 13 | 5 | 22 | 28 | 25 | 23.2 | 34.9 |
| 21-Mar | 29 | 29 | 24 | 23 | A | 21 | 20 | 19 | 26 | 28 | 30 | 30 | 30 | 31 | 31 | 31 | 32 | 32 | 30 | 28 | 29 | 29 | 30 | 28 | 27.8 | 32.0 |
| 22-Mar | 28 | 26 | 26 | A | 24 | 4 | 2 | 8 | 16 | 21 | 27 | 28 | 31 | 34 | 35 | 36 | 35 | 33 | 31 | 28 | 27 | 26 | 29 | 28 | 25.3 | 36.0 |
| 23-Mar | 28 | 29 | A | 30 | 29 | 26 | 23 | 24 | 27 | 26 | 26 | 27 | 28 | 30 | 32 | 33 | 32 | 30 | 27 | 22 | 22 | 23 | 21 | 15 | 26.5 | 33.4 |
| 24-Mar | 14 | A | 10 | 11 | 11 | 8 | 8 | 12 | 16 | 15 | 22 | 24 | 24 | 24 | 27 | 29 | 32 | 32 | 26 | 26 | 19 | 26 | 25 | 22 | 20.1 | 32.3 |
| 25-Mar | A | 11 | 6 | 10 | 13 | 6 | 1 | 7 | 15 | 21 | 25 | 30 | 36 | 41 | 42 | 46 | 46 | 39 | 37 | 24 | 29 | 27 | 17 | A | 24.1 | 46.2 |
| 26-Mar | 16 | 18 | 28 | 23 | 19 | 7 | 2 | 6 | 16 | 15 | 20 | 41 | 46 | 47 | 47 | 48 | 46 | 45 | 44 | 42 | 42 | 40 | A | 40 | 30.4 | 48.3 |
| 27-Mar | 42 | 41 | 36 | 31 | 16 | 8 | 11 | 8 | 15 | 20 | 36 | 35 | 31 | 37 | 38 | 42 | 42 | 42 | 36 | 24 | 36 | A | 41 | 39 | 30.7 | 42.5 |
| 28-Mar | 39 | 39 | 37 | 32 | 31 | 27 | 11 | 17 | 28 | 29 | 32 | 34 | 35 | 32 | 32 | 33 | 35 | 32 | 26 | A | 40 | 41 | 34 | 34 | 31.7 | 40.8 |
| 29-Mar | 33 | 28 | 28 | 26 | 25 | 26 | 24 | 24 | 26 | 27 | 26 | 25 | 28 | 28 | 30 | 32 | 37 | 37 | 40 | A | 22 | 12 | 17 | 22 | 27.1 | 40.3 |
| 30-Mar | 39 | 36 | 37 | 38 | 36 | 22 | 3 | 2 | 10 | 25 | M | 35 | 44 | 48 | 49 | 47 | 47 | 46 | A | 45 | 42 | 42 | 40 | 39 | 35.1 | 48.6 |
| 31-Mar | 40 | 41 | 38 | 38 | 37 | 33 | 33 | 32 | 35 | 40 | 42 | 43 | 43 | 44 | 45 | 45 | 46 | A | 40 | 28 | 10 | 2 | 1 | 1 | 33.0 | 45.5 |
| | | | | | | | | | | | | | | | | | | | | | | | | 25.3 | 42.5 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 24.0 | 41.2 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 23.4 | 39.5 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 23.0 | 38.6 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 21.9 | 36.8 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 19.3 | 38.2 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 15.9 | 34.8 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 16.4 | 33.1 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 20.7 | 35.6 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 25.0 | 39.9 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 27.6 | 41.8 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 31.2 | 42.9 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 32.8 | 45.8 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 34.2 | 48.2 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 36.4 | 48.6 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 36.6 | 48.3 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 36.5 | 46.6 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 34.8 | 45.6 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 32.4 | 43.6 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 26.5 | 45.0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 24.3 | 42.5 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 22.4 | 42.4 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 21.9 | 41.8 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 23.2 | 42.1 | |
| | | | | | | | | | | | | | | | | | | | | | | | | Diurnal Average | | |
| | | | | | | | | | | | | | | | | | | | | | | | | Diurnal Maximum | | |
| C - Calibration M - Maintenance N - Not Valid A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na | | | | | | | | | | | | | | | | | | | | | | | | | | |

Hourly Averages

Ozone (O₃) - ppb
Henry Pirker - March 2012



Hourly Maximums

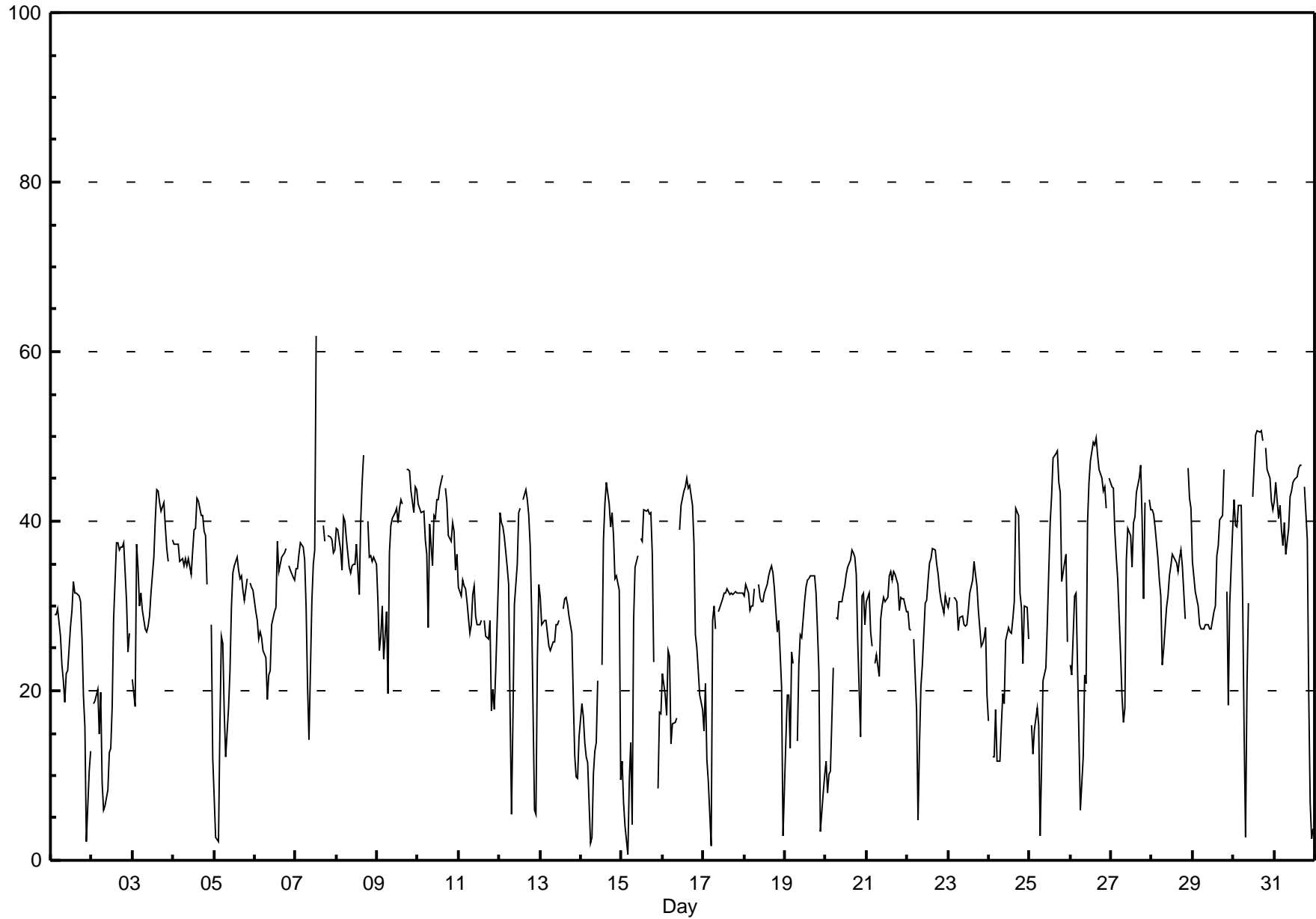
Ozone (O₃) - ppb

Henry Pirker - March 2012

| Maximum Value: 61.8 ppb on Mar 7 13:00 | | Maximum Daily Average: 39.5 ppb on Mar 30 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|--|------|--------------------------------|------|------|------|---------------|------|------|------|------|------|-------------------------------|------|------|------|------|------|------|------|------|------|------|---------------|-----------------|
| Minimum Value: 1 ppb on Mar 15 04:00 | | Minimum Daily Average: 22.7 ppb on Mar 2 | | Hours of Data: 706 | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 39.1 ppb at hour 17 | | Minimum Diurnal Average: 21.2 ppb at hour 7 | | Hours of Missing Data: 38 | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 30.40 ppb | | Percentiles: P ₁ = 2.7 P ₁₀ = 14.7 Q ₁ = 25.6 Median = 31.5 Q ₃ = 37.6 P ₉₀ = 42.5 P ₉₉ = 49.4 | | Hours of Calibration: 36 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 99.7 | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 31 | A | 29 | 29 | 30 | 27 | 23 | 21 | 19 | 22 | 22 | 28 | 30 | 33 | 32 | 32 | 31 | 31 | 26 | 19 | 16 | 2 | 11 | 13 | 24.1 | 32.9 |
| 2-Mar | A | 19 | 19 | 20 | 15 | 20 | 9 | 6 | 6 | 8 | 12 | 13 | 18 | 29 | 37 | 37 | 37 | 37 | 37 | 37 | 30 | 25 | 27 | A | 22.7 | 37.4 |
| 3-Mar | 21 | 18 | 37 | 34 | 30 | 32 | 29 | 27 | 27 | 28 | 29 | 32 | 36 | 40 | 44 | 44 | 42 | 41 | 42 | 39 | 37 | 35 | A | 38 | 34.0 | 43.7 |
| 4-Mar | 37 | 37 | 37 | 37 | 35 | 36 | 35 | 36 | 35 | 36 | 34 | 36 | 39 | 39 | 43 | 42 | 41 | 41 | 39 | 38 | 32 | A | 28 | 12 | 35.9 | 42.7 |
| 5-Mar | 7 | 3 | 2 | 16 | 26 | 26 | 18 | 12 | 18 | 22 | 30 | 34 | 35 | 36 | 34 | 33 | 34 | 32 | 31 | 33 | A | 33 | 32 | 32 | 25.1 | 35.8 |
| 6-Mar | 29 | 28 | 26 | 27 | 26 | 25 | 24 | 19 | 22 | 22 | 28 | 29 | 30 | 38 | 34 | 35 | 36 | 36 | 37 | A | 35 | 34 | 33 | 33 | 29.9 | 37.7 |
| 7-Mar | 34 | 34 | 36 | 37 | 37 | 35 | 30 | 21 | 14 | 30 | 35 | 37 | 62 | C | C | C | 40 | 38 | A | 38 | 38 | 38 | 36 | 37 | 35.4 | 61.8 |
| 8-Mar | 39 | 39 | 37 | 34 | 41 | 40 | 38 | 35 | 34 | 35 | 35 | 37 | 31 | 40 | 45 | 48 | A | A | 40 | 36 | 36 | 35 | 36 | 35 | 37.4 | 47.8 |
| 9-Mar | 31 | 25 | 26 | 30 | 24 | 29 | 20 | 36 | 40 | 40 | 41 | 40 | 41 | 43 | 42 | A | A | 46 | 46 | 44 | 41 | 44 | 44 | 44 | 37.4 | 46.2 |
| 10-Mar | 42 | 41 | 41 | 41 | 38 | 36 | 28 | 40 | 35 | 41 | 40 | 42 | 42 | 44 | 45 | A | 44 | 42 | 38 | 38 | 40 | 39 | 34 | 36 | 39.5 | 45.4 |
| 11-Mar | 32 | 31 | 33 | 32 | 32 | 30 | 27 | 28 | 31 | 32 | 29 | 28 | 28 | 28 | A | 28 | 27 | 26 | 28 | 18 | 20 | 18 | 22 | 34 | 28.0 | 33.7 |
| 12-Mar | 41 | 40 | 39 | 38 | 35 | 33 | 17 | 5 | 17 | 30 | 35 | 41 | 41 | A | 43 | 44 | 42 | 41 | 37 | 29 | 6 | 5 | 24 | 33 | 31.1 | 43.7 |
| 13-Mar | 31 | 28 | 28 | 28 | 27 | 25 | 25 | 26 | 26 | 28 | 28 | 28 | A | 30 | 31 | 31 | 30 | 29 | 27 | 19 | 12 | 10 | 10 | 15 | 24.8 | 31.0 |
| 14-Mar | 19 | 17 | 14 | 12 | 12 | 2 | 3 | 10 | 13 | 14 | 21 | A | 23 | 38 | 42 | 45 | 42 | 39 | 41 | 38 | 33 | 33 | 32 | 10 | 24.0 | 44.5 |
| 15-Mar | 12 | 7 | 4 | 1 | 10 | 14 | 4 | 28 | 35 | 36 | A | 38 | 38 | 41 | 41 | 41 | 41 | 41 | 36 | 23 | N | 8 | 18 | 17 | 24.3 | 41.4 |
| 16-Mar | 22 | 19 | 17 | 25 | 24 | 14 | 16 | 16 | 17 | A | 39 | 42 | 44 | 44 | 45 | 44 | 44 | 42 | 37 | 27 | 25 | 22 | 19 | 18 | 28.8 | 45.0 |
| 17-Mar | 15 | 21 | 12 | 9 | 2 | 28 | 30 | 27 | A | 29 | 30 | 31 | 31 | 31 | 32 | 31 | 31 | 31 | 31 | 32 | 31 | 32 | 32 | 32 | 26.7 | 32.0 |
| 18-Mar | 31 | 33 | 32 | 29 | 30 | 30 | 32 | A | 33 | 31 | 31 | 31 | 32 | 33 | 34 | 34 | 35 | 34 | 32 | 27 | 28 | 24 | 21 | 3 | 29.4 | 34.7 |
| 19-Mar | 14 | 19 | 20 | 13 | 25 | 23 | A | 14 | 23 | 27 | 26 | 31 | 32 | 33 | 33 | 34 | 34 | 34 | 32 | 27 | 22 | 3 | 8 | 10 | 23.3 | 33.6 |
| 20-Mar | 12 | 8 | 10 | 10 | 23 | A | 29 | 28 | 31 | 31 | 32 | 32 | 34 | 35 | 35 | 37 | 36 | 36 | 34 | 26 | 15 | 31 | 32 | 28 | 27.1 | 36.6 |
| 21-Mar | 31 | 32 | 27 | 25 | A | 23 | 24 | 22 | 28 | 30 | 31 | 31 | 31 | 34 | 34 | 33 | 34 | 34 | 33 | 30 | 31 | 31 | 31 | 29 | 29.9 | 34.1 |
| 22-Mar | 29 | 27 | 27 | A | 26 | 18 | 5 | 14 | 20 | 23 | 30 | 31 | 33 | 35 | 36 | 37 | 37 | 35 | 34 | 32 | 31 | 29 | 31 | 30 | 28.2 | 36.8 |
| 23-Mar | 30 | 31 | A | 31 | 31 | 30 | 27 | 29 | 29 | 28 | 28 | 28 | 29 | 32 | 33 | 35 | 34 | 32 | 29 | 25 | 26 | 26 | 27 | 20 | 29.1 | 35.2 |
| 24-Mar | 16 | A | 12 | 12 | 18 | 12 | 12 | 16 | 20 | 19 | 26 | 27 | 27 | 27 | 28 | 31 | 41 | 41 | 31 | 30 | 23 | 30 | 30 | 26 | 24.1 | 41.5 |
| 25-Mar | A | 16 | 13 | 15 | 18 | 16 | 3 | 11 | 21 | 23 | 28 | 34 | 40 | 43 | 47 | 48 | 48 | 45 | 43 | 33 | 35 | 36 | 26 | A | 29.2 | 48.2 |
| 26-Mar | 23 | 22 | 31 | 31 | 23 | 15 | 6 | 12 | 22 | 21 | 40 | 45 | 47 | 49 | 49 | 50 | 48 | 46 | 45 | 44 | 44 | 41 | A | 45 | 34.7 | 49.8 |
| 27-Mar | 44 | 44 | 39 | 36 | 33 | 24 | 19 | 16 | 18 | 35 | 39 | 38 | 35 | 40 | 40 | 43 | 45 | 47 | 40 | 31 | 42 | A | 43 | 41 | 36.2 | 46.6 |
| 28-Mar | 41 | 41 | 39 | 36 | 33 | 31 | 23 | 25 | 30 | 31 | 33 | 35 | 36 | 36 | 35 | 34 | 36 | 37 | 35 | 28 | A | 46 | 43 | 42 | 35.0 | 46.2 |
| 29-Mar | 35 | 32 | 31 | 30 | 28 | 27 | 27 | 28 | 28 | 27 | 27 | 29 | 30 | 36 | 37 | 40 | 41 | 46 | A | 32 | 18 | 30 | 39 | 31.6 | 46.0 | |
| 30-Mar | 43 | 40 | 39 | 42 | 42 | 31 | 15 | 3 | 20 | 30 | M | 43 | 47 | 50 | 51 | 50 | 51 | 50 | A | 49 | 46 | 45 | 42 | 41 | 39.5 | 50.7 |
| 31-Mar | 42 | 44 | 40 | 42 | 39 | 37 | 40 | 36 | 39 | 43 | 43 | 45 | 45 | 45 | 46 | 47 | 47 | A | 44 | 38 | 19 | 7 | 3 | 4 | 36.3 | 46.6 |
| | | 28.9 | 27.4 | 26.6 | 26.9 | 27.0 | 25.6 | 21.2 | 21.6 | 25.0 | 28.4 | 31.1 | 33.7 | 35.7 | 36.7 | 38.8 | 38.7 | 39.1 | 38.0 | 36.3 | 32.1 | 29.7 | 26.9 | 27.7 | 27.4 | Diurnal Average |
| | | 44.0 | 44.5 | 41.1 | 41.9 | 41.9 | 39.9 | 39.9 | 39.6 | 39.6 | 42.9 | 43.5 | 44.6 | 61.8 | 50.2 | 50.7 | 50.5 | 50.7 | 49.5 | 46.1 | 48.7 | 46.0 | 46.2 | 44.1 | 45.1 | Diurnal Maximum |
| C - Calibration | | M - Maintenance | | | | | | N - Not Valid | | | | | | A - Automated Daily Zero Span | | | | | | | | | | | | |

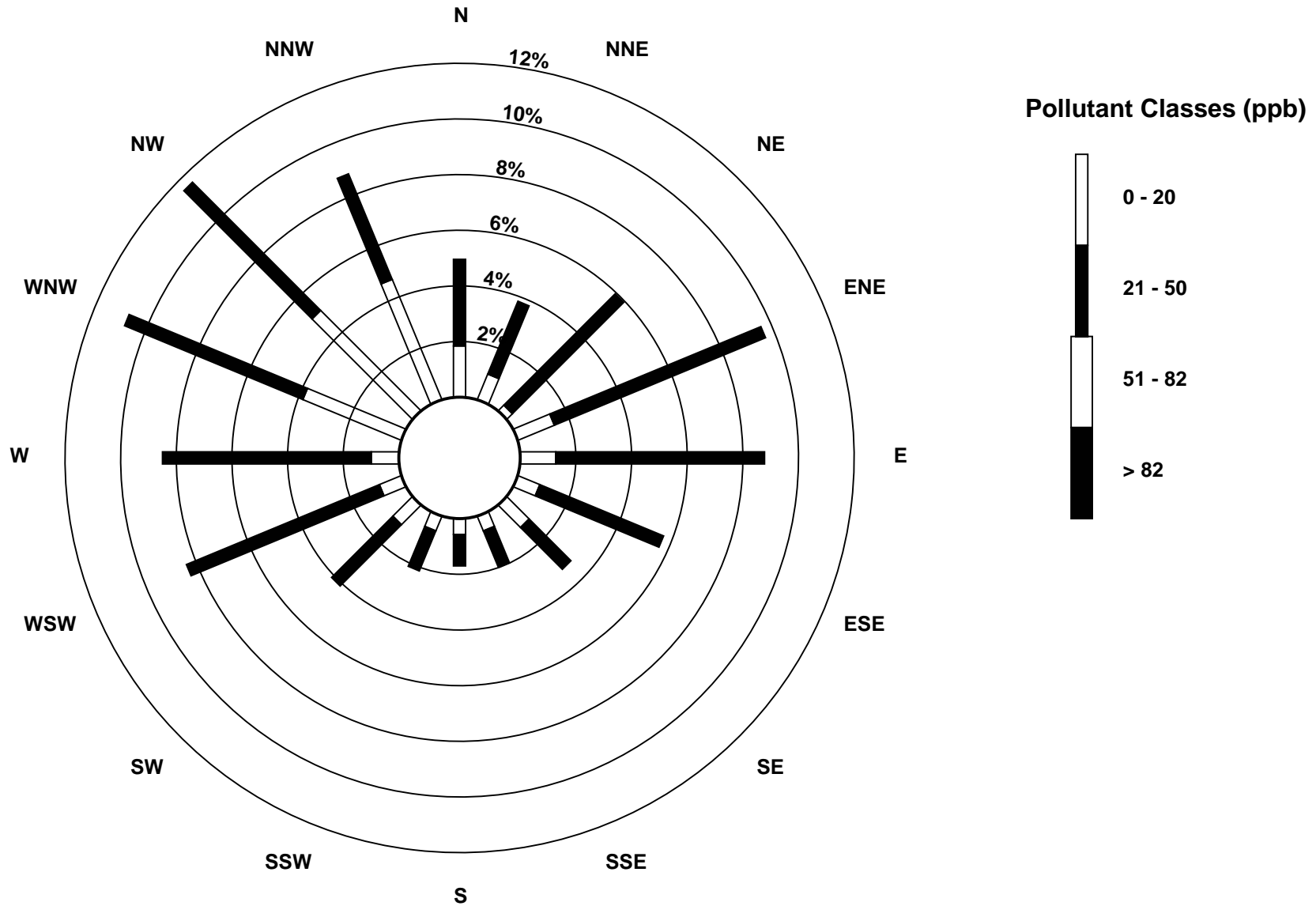
Hourly Maximums

Ozone (O₃) - ppb
Henry Pirker - March 2012



Pollutant Rose

Ozone (O₃) - ppb
Henry Pirker - March 2012



Eight Hour Running Averages

Ozone (O₃) - ppb

Henry Pirker - March 2012

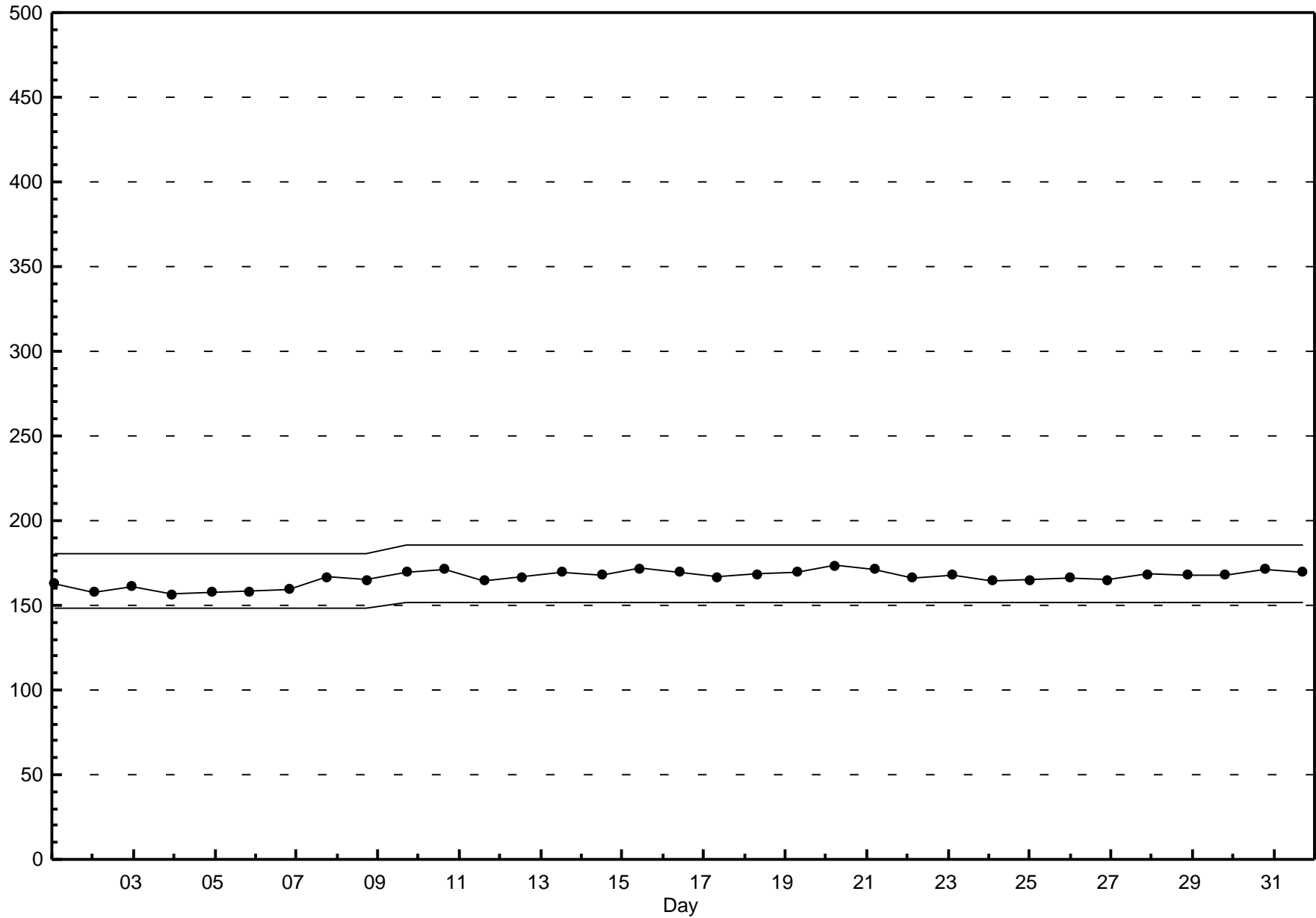
| | |
|--|---------------------------------|
| Maximum Value: 46.4 ppb on Mar 30 20:00 | Hours in Service: 744 |
| Minimum Value: 2.3 ppb on Mar 15 07:00 | Hours of Data: 737 |
| Percentiles: P ₁ = 6.4 P ₁₀ = 12.7 Q ₁ = 21.1 Median = 27.6 Q ₃ = 32.8 P ₉₀ = 37.5 P ₉₉ = 44.9 | Hours of Missing Data: 7 |
| | Hours of Calibration: 7 |
| | Percent Operational Time: 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum |
|---|-------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| 1-Mar | 28 | 28 | 29 | 29 | 29 | 27 | 26 | 24 | 21 | 21 | 20 | 20 | 21 | 22 | 24 | 27 | 27 | 26 | 25 | 23 | 19 | 16 | 13 | 28.6 | |
| 2-Mar | 11 | 10 | 10 | 10 | 10 | 12 | 12 | 11 | 10 | 9 | 8 | 7 | 8 | 9 | 13 | 17 | 21 | 25 | 27 | 30 | 31 | 30 | 28 | 27 | 31.3 |
| 3-Mar | 23 | 19 | 19 | 18 | 18 | 20 | 21 | 22 | 23 | 26 | 25 | 24 | 26 | 27 | 29 | 31 | 33 | 35 | 37 | 39 | 39 | 38 | 37 | 36 | 38.7 |
| 4-Mar | 36 | 35 | 35 | 35 | 35 | 35 | 35 | 34 | 34 | 33 | 33 | 33 | 33 | 34 | 35 | 36 | 37 | 37 | 38 | 37 | 36 | 36 | 33 | 29 | 37.9 |
| 5-Mar | 23 | 18 | 13 | 10 | 9 | 11 | 9 | 10 | 11 | 13 | 16 | 18 | 20 | 21 | 24 | 27 | 29 | 31 | 31 | 31 | 31 | 30 | 30 | 30 | 31.1 |
| 6-Mar | 29 | 29 | 28 | 27 | 27 | 26 | 25 | 23 | 22 | 21 | 21 | 21 | 22 | 23 | 25 | 27 | 29 | 30 | 32 | 32 | 33 | 33 | 33 | 33 | 33.1 |
| 7-Mar | 33 | 32 | 32 | 33 | 33 | 33 | 32 | 29 | 26 | 25 | 24 | 24 | 24 | 23 | 23 | N | N | N | N | N | N | N | 36 | 35 | 35.5 |
| 8-Mar | 35 | 35 | 35 | 33 | 32 | 33 | 34 | 33 | 32 | 32 | 33 | 33 | 32 | 32 | 33 | 34 | 34 | 34 | 34 | 33 | 34 | 34 | 34 | 33 | 35.2 |
| 9-Mar | 31 | 29 | 28 | 27 | 25 | 24 | 22 | 21 | 22 | 24 | 26 | 28 | 31 | 33 | 37 | 39 | 39 | 40 | 41 | 41 | 42 | 42 | 42 | 42 | 42.0 |
| 10-Mar | 42 | 41 | 41 | 40 | 39 | 38 | 35 | 33 | 32 | 31 | 31 | 31 | 32 | 34 | 37 | 38 | 39 | 40 | 39 | 38 | 38 | 37 | 35 | 34 | 41.8 |
| 11-Mar | 33 | 32 | 31 | 31 | 30 | 29 | 28 | 27 | 27 | 28 | 27 | 27 | 27 | 27 | 27 | 27 | 26 | 25 | 25 | 23 | 21 | 19 | 17 | 17 | 32.9 |
| 12-Mar | 19 | 21 | 23 | 26 | 28 | 30 | 31 | 28 | 24 | 21 | 21 | 21 | 22 | 21 | 25 | 31 | 36 | 38 | 39 | 35 | 30 | 26 | 23 | 22 | 38.7 |
| 13-Mar | 20 | 19 | 18 | 20 | 23 | 26 | 26 | 26 | 25 | 25 | 25 | 26 | 25 | 26 | 27 | 28 | 28 | 28 | 28 | 25 | 23 | 20 | 17 | 14 | 28.4 |
| 14-Mar | 12 | 11 | 10 | 10 | 9 | 9 | 9 | 8 | 7 | 6 | 7 | 6 | 9 | 12 | 18 | 23 | 28 | 31 | 34 | 34 | 35 | 36 | 33 | 28 | 35.7 |
| 15-Mar | 24 | 20 | 15 | 11 | 8 | 4 | 2 | 4 | 7 | 11 | 12 | 17 | 22 | 27 | 33 | 36 | 37 | 38 | 36 | 33 | 33 | 28 | 23 | 19 | 37.7 |
| 16-Mar | 16 | 13 | 11 | 12 | 12 | 13 | 13 | 13 | 12 | 12 | 14 | 17 | 21 | 26 | 31 | 36 | 40 | 40 | 40 | 38 | 35 | 31 | 27 | 23 | 40.4 |
| 17-Mar | 18 | 15 | 11 | 9 | 7 | 6 | 8 | 10 | 11 | 13 | 17 | 21 | 25 | 29 | 29 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30.2 |
| 18-Mar | 30 | 30 | 30 | 29 | 29 | 28 | 28 | 27 | 28 | 28 | 28 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 32 | 31 | 30 | 28 | 26 | 22 | 31.8 |
| 19-Mar | 19 | 17 | 15 | 13 | 12 | 10 | 10 | 11 | 12 | 13 | 14 | 17 | 20 | 23 | 24 | 28 | 29 | 30 | 31 | 30 | 27 | 24 | 20 | 16 | 31.0 |
| 20-Mar | 13 | 10 | 7 | 5 | 6 | 7 | 10 | 13 | 16 | 20 | 23 | 27 | 29 | 29 | 30 | 32 | 32 | 33 | 33 | 31 | 27 | 26 | 25 | 24 | 32.9 |
| 21-Mar | 23 | 23 | 22 | 23 | 26 | 26 | 25 | 24 | 23 | 23 | 24 | 25 | 26 | 27 | 28 | 30 | 30 | 31 | 31 | 31 | 30 | 30 | 30 | 30 | 30.8 |
| 22-Mar | 29 | 28 | 28 | 28 | 27 | 24 | 20 | 17 | 15 | 14 | 14 | 16 | 17 | 21 | 25 | 28 | 31 | 32 | 33 | 33 | 32 | 31 | 31 | 30 | 32.9 |
| 23-Mar | 29 | 28 | 28 | 28 | 29 | 28 | 28 | 27 | 27 | 26 | 26 | 26 | 26 | 26 | 27 | 29 | 29 | 30 | 30 | 29 | 29 | 28 | 26 | 24 | 29.9 |
| 24-Mar | 22 | 21 | 18 | 16 | 15 | 13 | 11 | 10 | 11 | 11 | 13 | 15 | 16 | 18 | 21 | 23 | 25 | 27 | 27 | 27 | 27 | 27 | 26 | 26 | 27.5 |
| 25-Mar | 25 | 22 | 19 | 17 | 16 | 13 | 10 | 8 | 9 | 10 | 12 | 15 | 18 | 22 | 27 | 32 | 36 | 38 | 40 | 39 | 38 | 36 | 33 | 31 | 39.7 |
| 26-Mar | 27 | 24 | 23 | 23 | 21 | 18 | 16 | 15 | 15 | 15 | 14 | 16 | 19 | 24 | 30 | 35 | 39 | 42 | 45 | 46 | 45 | 44 | 44 | 43 | 45.6 |
| 27-Mar | 42 | 42 | 41 | 39 | 35 | 31 | 28 | 24 | 21 | 18 | 18 | 19 | 21 | 24 | 28 | 32 | 35 | 38 | 38 | 37 | 37 | 37 | 37 | 37 | 42.2 |
| 28-Mar | 37 | 36 | 36 | 38 | 37 | 36 | 32 | 29 | 28 | 26 | 26 | 26 | 26 | 27 | 30 | 32 | 32 | 33 | 33 | 32 | 32 | 33 | 34 | 35 | 37.6 |
| 29-Mar | 35 | 34 | 33 | 33 | 32 | 30 | 28 | 27 | 26 | 26 | 25 | 25 | 26 | 26 | 27 | 28 | 29 | 30 | 32 | 33 | 32 | 30 | 28 | 27 | 34.5 |
| 30-Mar | 27 | 27 | 27 | 28 | 30 | 31 | 29 | 27 | 23 | 22 | 20 | 19 | 20 | 24 | 30 | 37 | 42 | 45 | 45 | 46 | 46 | 45 | 44 | 43 | 46.4 |
| 31-Mar | 42 | 41 | 41 | 40 | 39 | 38 | 37 | 37 | 36 | 36 | 36 | 37 | 38 | 39 | 41 | 42 | 43 | 44 | 44 | 42 | 37 | 31 | 25 | 18 | 44.0 |
| 42.2 41.7 40.9 40.1 39.5 38.3 37.5 36.6 36.1 35.9 36.3 36.9 37.7 39.1 40.5 42.2 43.5 45.0 45.4 46.4 46.2 45.3 44.1 42.9 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diurnal Maximums | | | | | | | | | | | | | | | | | | | | | | | | | |

N - Not Valid

Span Responses

Ozone (O₃)
Henry Pirker - March 2012



Hourly Averages

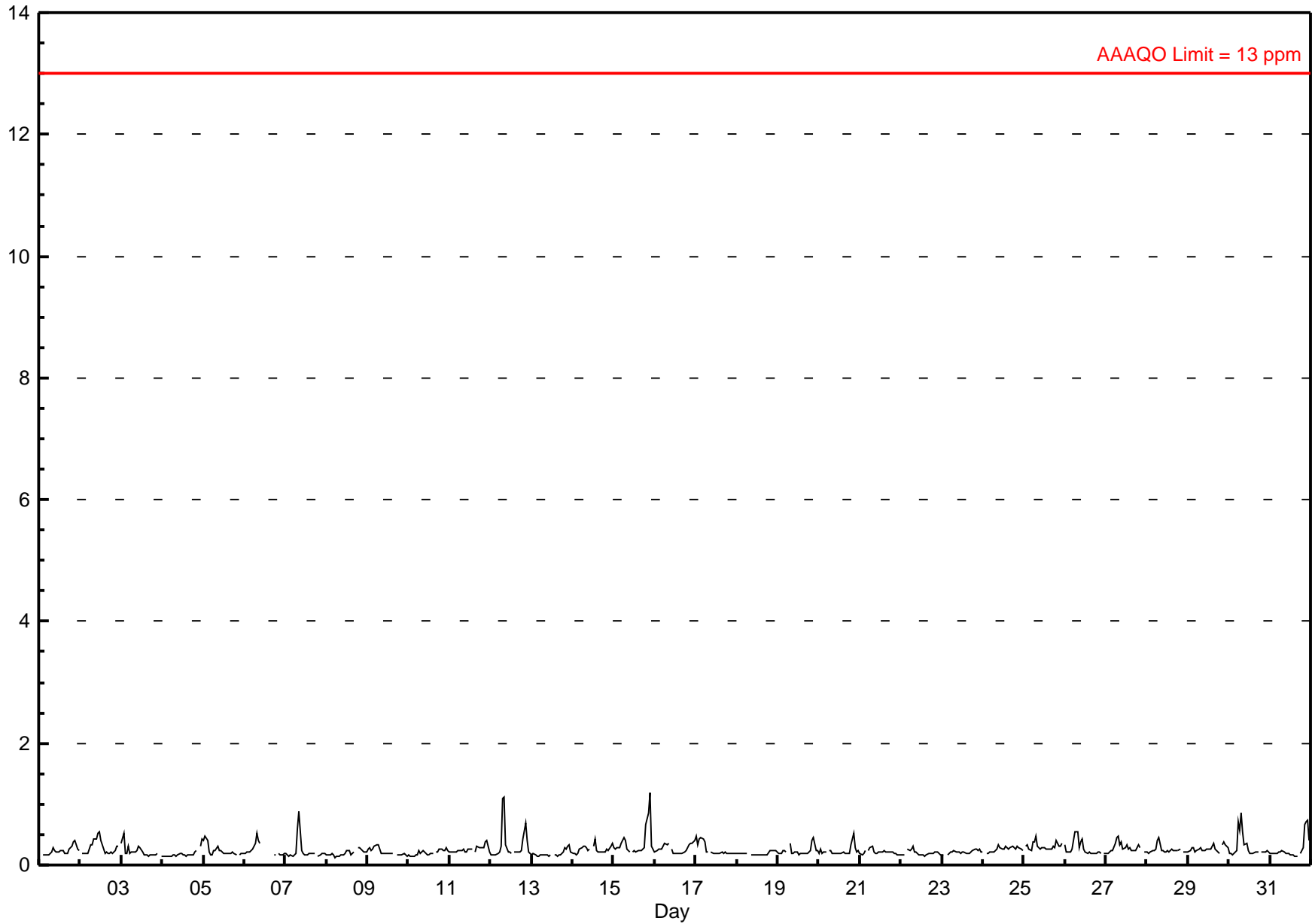
Carbon Monoxide (CO) - ppm

Henry Pirker - March 2012

| | | | | |
|---|---|----------|---------------------------|-------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 1.19 ppm on Mar 15 22:00 | Maximum Daily Average: 0.36 ppm on Mar 15 | | Hours of Data: | 704 |
| Minimum Value: 0.1 ppm on Mar 8 06:00 | Minimum Daily Average: 0.18 ppm on Mar 4 | | Hours of Missing Data: | 40 |
| Maximum Diurnal Average: 0.36 ppm at hour 8 | Minimum Diurnal Average: 0.20 ppm at hour 16 | | Hours of Calibration: | 40 |
| Monthly Average: 0.247 ppm | Percentiles: P ₁ = 0.15 P ₁₀ = 0.17 Q ₁ = 0.19 Median = 0.21 Q ₃ = 0.26 P ₉₀ = 0.35 P ₉₉ = 0.67 | | Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | | | | | | | | | | | | | | | | | | | | | | |
|--------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|---------------|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Mar | 0.2 | 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 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.24 | 0.39 | | | | | | | | | | | | | | | | | | | | | | |
| 2-Mar | A | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | A | 0.29 | 0.55 | | | | | | | | | | | | | | | | | | | | | | |
| 3-Mar | 0.3 | 0.5 | 0.2 | 0.2 | 0.3 | 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 | A | 0.2 | 0.22 | 0.52 | | | | | | | | | | | | | | | | | | | | | | |
| 4-Mar | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | A | 0.3 | 0.4 | 0.18 | 0.42 | | | | | | | | | | | | | | | | | | | | | | |
| 5-Mar | 0.4 | 0.5 | 0.4 | 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 | A | 0.2 | 0.2 | 0.2 | 0.23 | 0.48 | | | | | | | | | | | | | | | | | | | | | | |
| 6-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | C | C | C | C | C | C | C | 0.2 | 0.2 | A | 0.2 | 0.2 | 0.2 | 0.2 | -- | 0.52 | | | | | | | | | | | | | | | | | | | | | | |
| 7-Mar | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.6 | 0.9 | 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 | 0.23 | 0.88 | | | | | | | | | | | | | | | | | | | | | | |
| 8-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | A | A | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.19 | 0.28 | | | | | | | | | | | | | | | | | | | | | | |
| 9-Mar | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | A | A | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.21 | 0.33 | | | | | | | | | | | | | | | | | | | | | | |
| 10-Mar | 0.2 | 0.2 | 0.2 | 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 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.20 | 0.27 | | | | | | | | | | | | | | | | | | | | | | |
| 11-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | A | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.2 | 0.26 | 0.40 | | | | | | | | | | | | | | | | | | | | | | |
| 12-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 1.1 | 1.1 | 0.3 | 0.2 | 0.2 | 0.2 | A | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.7 | 0.4 | 0.2 | 0.2 | 0.33 | 1.11 | | | | | | | | | | | | | | | | | | | | | | |
| 13-Mar | 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 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.19 | 0.33 | | | | | | | | | | | | | | | | | | | | | | |
| 14-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | A | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.26 | 0.42 | | | | | | | | | | | | | | | | | | | | | | |
| 15-Mar | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | A | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.7 | 0.9 | 1.2 | 0.3 | 0.3 | 0.36 | 1.19 | | | | | | | | | | | | | | | | | | | | | | |
| 16-Mar | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | A | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.27 | 0.41 | | | | | | | | | | | | | | | | | | | | | | |
| 17-Mar | 0.5 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 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 | 0.26 | 0.46 | | | | | | | | | | | | | | | | | | | | | | |
| 18-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | A | 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 | 0.19 | 0.25 | | | | | | | | | | | | | | | | | | | | | | |
| 19-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | A | A | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.2 | 0.2 | 0.23 | 0.44 | | | | | | | | | | | | | | | | | | | | | | |
| 20-Mar | 0.2 | 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 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.23 | 0.52 | | | | | | | | | | | | | | | | | | | | | | |
| 21-Mar | 0.2 | 0.2 | 0.2 | 0.2 | A | 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 | 0.21 | 0.30 | | | | | | | | | | | | | | | | | | | | | | |
| 22-Mar | 0.2 | 0.2 | 0.2 | A | 0.3 | 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 | 0.19 | 0.31 | | | | | | | | | | | | | | | | | | | | | | |
| 23-Mar | 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 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.21 | 0.25 | | | | | | | | | | | | | | | | | | | | | | |
| 24-Mar | 0.2 | A | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.26 | 0.34 | | | | | | | | | | | | | | | | | | | | | | |
| 25-Mar | A | 0.3 | 0.3 | 0.3 | 0.2 | 0.4 | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | A | 0.31 | 0.47 | | | | | | | | | | | | | | | | | | | | | | |
| 26-Mar | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | A | 0.2 | 0.2 | 0.27 | 0.55 | | | | | | | | | | | | | | | | | | | | | | |
| 27-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | A | 0.2 | 0.2 | 0.28 | 0.48 | | | | | | | | | | | | | | | | | | | | | | |
| 28-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | A | 0.2 | 0.2 | 0.2 | 0.25 | 0.45 | | | | | | | | | | | | | | | | | | | | | | |
| 29-Mar | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | A | 0.3 | 0.4 | 0.3 | 0.3 | 0.27 | 0.39 | | | | | | | | | | | | | | | | | | | | | | |
| 30-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.7 | 0.6 | 0.9 | 0.5 | 0.3 | 0.4 | 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 | 0.30 | 0.87 | | | | | | | | | | | | | | | | | | | | | | |
| 31-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 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 | A | 0.2 | 0.3 | 0.7 | 0.7 | 0.7 | 0.4 | 0.27 | 0.74 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 0.22 | 0.23 | 0.21 | 0.21 | 0.23 | 0.26 | 0.29 | 0.36 | 0.31 | 0.25 | 0.24 | 0.22 | 0.22 | 0.22 | 0.21 | 0.20 | 0.21 | 0.21 | 0.22 | 0.26 | 0.31 | 0.31 | 0.27 | 0.24 | Diurnal Average |
| | | | | | | | | | | | | | | | | | | | | | | | | 0.46 | 0.52 | 0.42 | 0.44 | 0.42 | 0.71 | 0.56 | 1.10 | 1.11 | 0.42 | 0.52 | 0.55 | 0.39 | 0.42 | 0.31 | 0.34 | 0.31 | 0.32 | 0.29 | 0.65 | 0.86 | 1.19 | 0.74 | 0.42 | Diurnal Maximum |

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm 24-hr na



Hourly Maximums

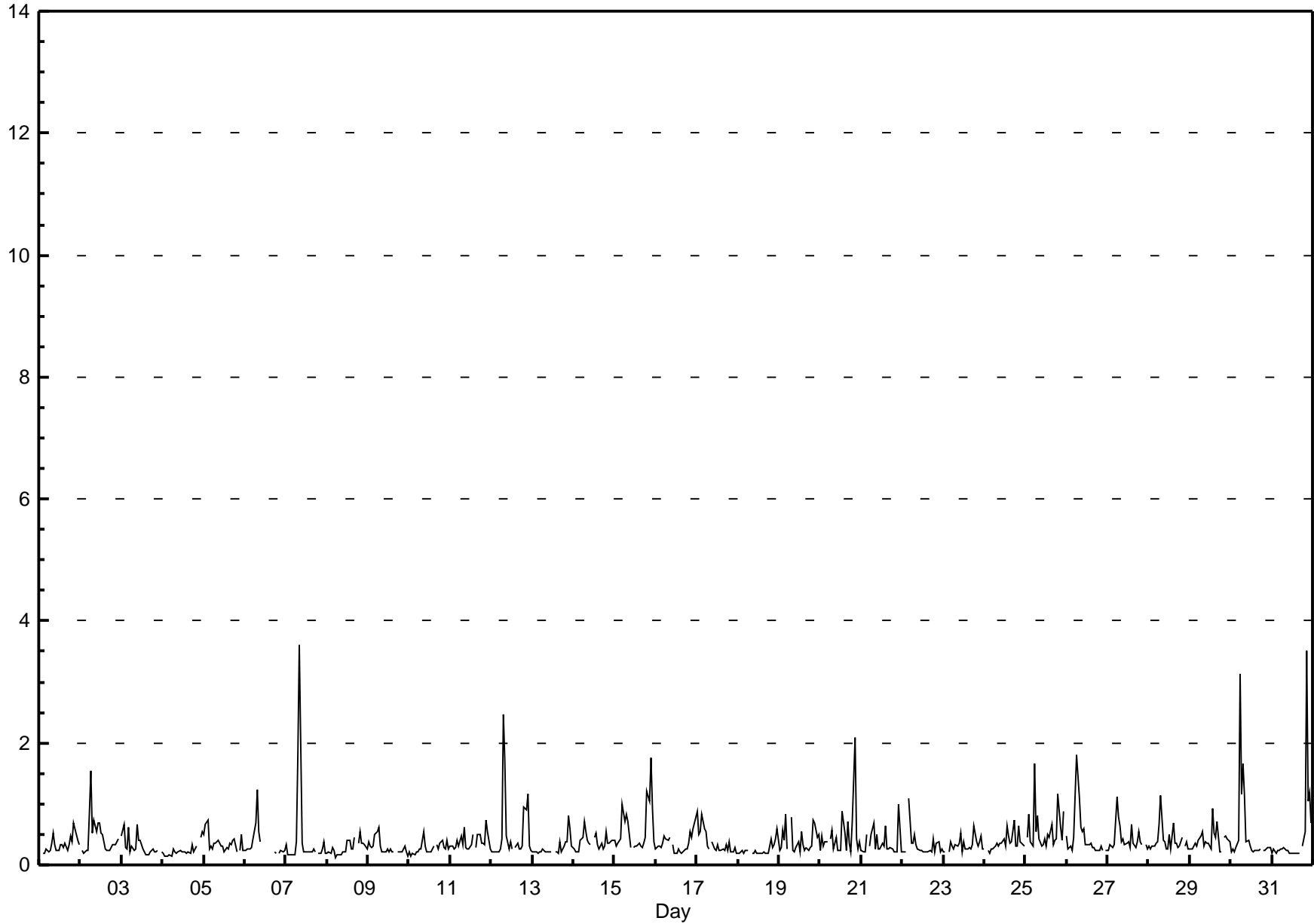
Carbon Monoxide (CO) - ppm

Henry Pirker - March 2012

| Maximum Value: 3.60 ppm on Mar 7 09:00 | | Maximum Daily Average: 0.60 ppm on Mar 15 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|---|------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|-----------------|
| Minimum Value: 0.1 ppm on Mar 8 06:00 | | Minimum Daily Average: 0.23 ppm on Mar 4 | | Hours of Data: 704 | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 0.66 ppm at hour 8 | | Minimum Diurnal Average: 0.28 ppm at hour 16 | | Hours of Missing Data: 40 | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 0.387 ppm | | Percentiles: P ₁ = 0.16 P ₁₀ = 0.20 Q ₁ = 0.23 Median = 0.30 Q ₃ = 0.41 P ₉₀ = 0.65 P ₉₉ = 1.77 | | Hours of Calibration: 40 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 0.2 | A | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.2 | 0.3 | 0.5 | 0.4 | 0.7 | 0.6 | 0.4 | 0.3 | 0.34 | 0.69 |
| 2-Mar | A | 0.2 | 0.2 | 0.2 | 0.2 | 0.9 | 1.5 | 0.5 | 0.7 | 0.6 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | A | 0.46 | 1.54 |
| 3-Mar | 0.5 | 0.7 | 0.3 | 0.3 | 0.6 | 0.2 | 0.3 | 0.2 | 0.3 | 0.7 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | A | 0.2 | 0.31 | 0.67 |
| 4-Mar | 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 | 0.3 | 0.2 | 0.3 | 0.3 | A | 0.5 | 0.6 | 0.23 | 0.55 |
| 5-Mar | 0.5 | 0.7 | 0.7 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.2 | A | 0.2 | 0.5 | 0.2 | 0.36 | 0.73 |
| 6-Mar | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.7 | 1.2 | 0.6 | 0.4 | C | C | C | C | C | C | C | 0.2 | 0.2 | A | 0.2 | 0.2 | 0.2 | 0.2 | -- | 1.22 |
| 7-Mar | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 1.8 | 3.6 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | A | 0.2 | 0.2 | 0.3 | 0.4 | 0.2 | 0.45 | 3.60 |
| 8-Mar | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | A | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.28 | 0.54 |
| 9-Mar | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.6 | 0.6 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | A | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.28 | 0.62 |
| 10-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | A | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.27 | 0.54 |
| 11-Mar | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.5 | 0.3 | 0.6 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | A | 0.3 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.7 | 0.6 | 0.3 | 0.38 | 0.73 |
| 12-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 2.5 | 1.7 | 0.5 | 0.3 | 0.4 | 0.3 | A | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 1.0 | 0.9 | 1.2 | 0.3 | 0.2 | 0.53 | 2.47 |
| 13-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | A | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.3 | 0.4 | 0.4 | 0.8 | 0.6 | 0.3 | 0.28 | 0.82 |
| 14-Mar | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.7 | 0.6 | 0.4 | 0.4 | 0.3 | A | 0.5 | 0.5 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.37 | 0.71 |
| 15-Mar | 0.4 | 0.3 | 0.4 | 0.4 | 1.0 | 0.8 | 0.7 | 0.8 | 0.7 | 0.3 | A | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 1.2 | 1.0 | 1.7 | 0.9 | 0.4 | 0.60 | 1.75 |
| 16-Mar | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | A | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.4 | 0.5 | 0.5 | 0.6 | 0.8 | 0.35 | 0.79 |
| 17-Mar | 0.9 | 0.5 | 0.6 | 0.8 | 0.6 | 0.6 | 0.3 | 0.3 | A | 0.4 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.4 | 0.2 | 0.2 | 0.3 | 0.2 | 0.37 | 0.89 |
| 18-Mar | 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 | 0.4 | 0.3 | 0.3 | 0.4 | 0.6 | 0.25 | 0.60 |
| 19-Mar | 0.2 | 0.3 | 0.6 | 0.4 | 0.8 | 0.3 | A | 0.8 | 0.2 | 0.2 | 0.3 | 0.4 | 0.2 | 0.5 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.7 | 0.7 | 0.4 | 0.5 | 0.40 | 0.83 |
| 20-Mar | 0.2 | 0.5 | 0.3 | 0.4 | 0.4 | A | 0.4 | 0.6 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | 0.9 | 0.5 | 0.2 | 0.7 | 0.4 | 0.2 | 0.7 | 2.1 | 0.4 | 0.3 | 0.4 | 0.47 | 2.09 |
| 21-Mar | 0.2 | 0.2 | 0.2 | 0.5 | A | 0.3 | 0.5 | 0.7 | 0.3 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 1.0 | 0.2 | 0.35 | 1.00 |
| 22-Mar | 0.2 | 0.2 | 0.2 | A | 1.1 | 0.4 | 0.4 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.4 | 0.4 | 0.2 | 0.3 | 0.31 | 1.08 |
| 23-Mar | 0.2 | 0.2 | A | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.2 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.6 | 0.4 | 0.3 | 0.4 | 0.5 | 0.3 | 0.32 | 0.64 |
| 24-Mar | 0.3 | A | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.6 | 0.5 | 0.4 | 0.4 | 0.7 | 0.3 | 0.3 | 0.6 | 0.4 | 0.3 | 0.3 | 0.37 | 0.74 |
| 25-Mar | A | 0.5 | 0.8 | 0.4 | 0.3 | 1.7 | 0.5 | 0.8 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.5 | 0.4 | 0.7 | 0.3 | 0.4 | 0.4 | 1.2 | 0.6 | 0.4 | 0.9 | A | 0.57 | 1.66 |
| 26-Mar | 0.5 | 0.2 | 0.3 | 0.2 | 0.4 | 1.1 | 1.8 | 1.1 | 0.6 | 0.5 | 0.6 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | A | 0.2 | 0.47 | 1.81 |
| 27-Mar | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 1.1 | 0.8 | 0.6 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.7 | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | 0.3 | A | 0.3 | 0.3 | 0.42 | 1.12 |
| 28-Mar | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.7 | 1.1 | 0.4 | 0.4 | 0.3 | 0.3 | 0.5 | 0.3 | 0.7 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | A | 0.3 | 0.4 | 0.3 | 0.40 | 1.14 |
| 29-Mar | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.9 | 0.5 | 0.5 | 0.7 | 0.2 | 0.2 | A | 0.5 | 0.5 | 0.4 | 0.4 | 0.40 | 0.92 |
| 30-Mar | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 3.1 | 1.2 | 1.7 | 1.1 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | A | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.54 | 3.12 |
| 31-Mar | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | A | 0.3 | 0.5 | 3.5 | 1.0 | 1.2 | 0.7 | 0.48 | 3.51 |
| | | 0.29 | 0.29 | 0.30 | 0.29 | 0.39 | 0.54 | 0.53 | 0.66 | 0.56 | 0.35 | 0.31 | 0.29 | 0.29 | 0.36 | 0.33 | 0.28 | 0.31 | 0.30 | 0.32 | 0.43 | 0.57 | 0.48 | 0.47 | 0.33 | Diurnal Average |
| | | 0.89 | 0.67 | 0.82 | 0.82 | 1.08 | 3.12 | 1.81 | 2.47 | 3.60 | 0.67 | 0.68 | 0.68 | 0.53 | 0.92 | 0.69 | 0.65 | 0.71 | 0.74 | 0.64 | 1.20 | 3.51 | 1.75 | 1.18 | 0.79 | Diurnal Maximum |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | |

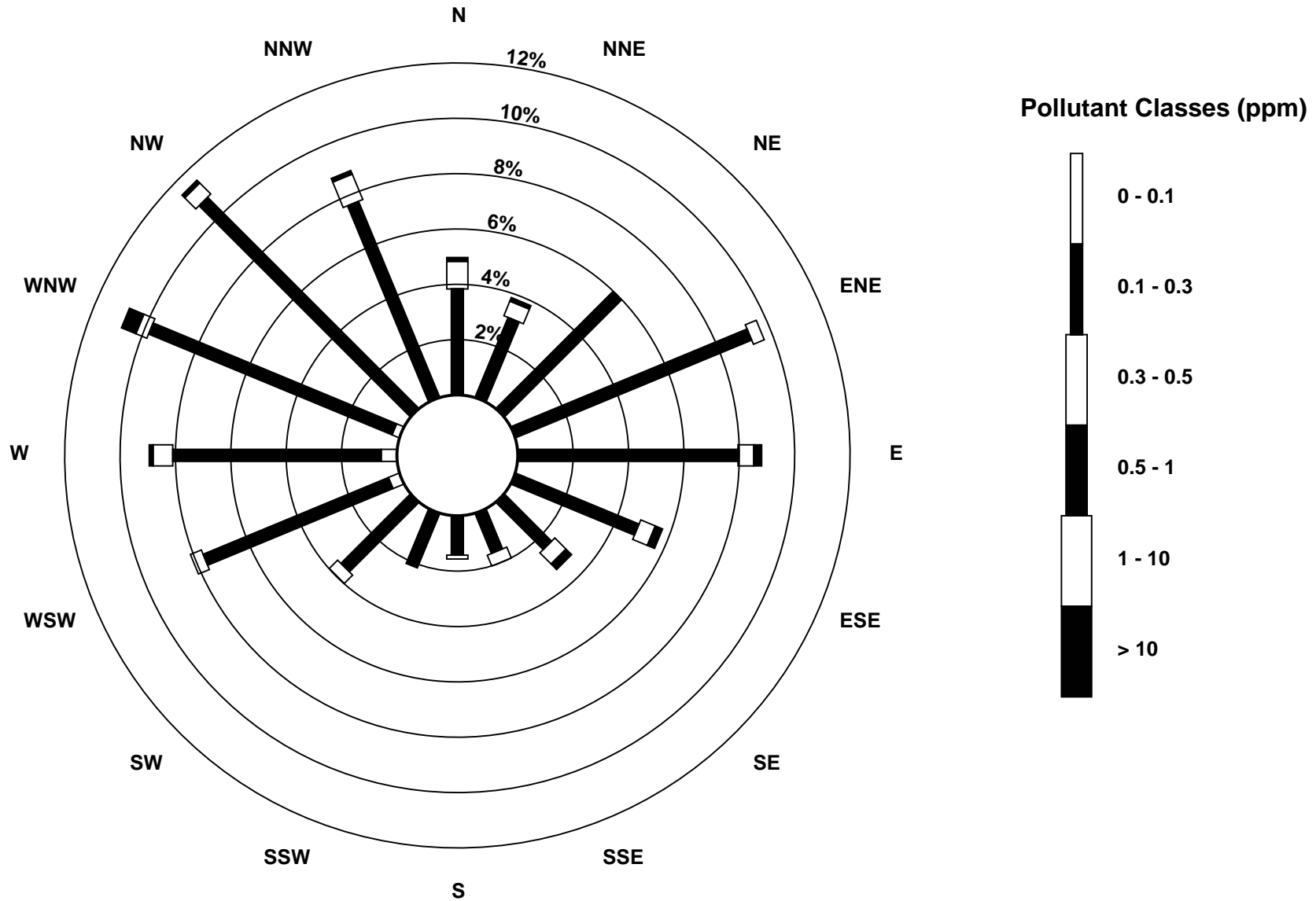
Hourly Maximums

Carbon Monoxide (CO) - ppm
Henry Pirker - March 2012



Pollutant Rose

Carbon Monoxide (CO) - ppm
Henry Pirker - March 2012



Eight Hour Running Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - March 2012

| | |
|---|---------------------------------|
| Number of Exceedences (AAAQO): 8-hr: 0 | Hours in Service: 744 |
| Maximum Value: 0.51 ppm on Mar 16 00:00 | Hours of Data: 733 |
| Minimum Value: 0.15 ppm on Mar 4 06:00 | Hours of Missing Data: 11 |
| | Hours of Calibration: 11 |
| | Percent Operational Time: 100.0 |
| Percentiles: P ₁ = 0.16 P ₁₀ = 0.17 Q ₁ = 0.20 Median = 0.23 Q ₃ = 0.28 P ₉₀ = 0.33 P ₉₉ = 0.49 | |

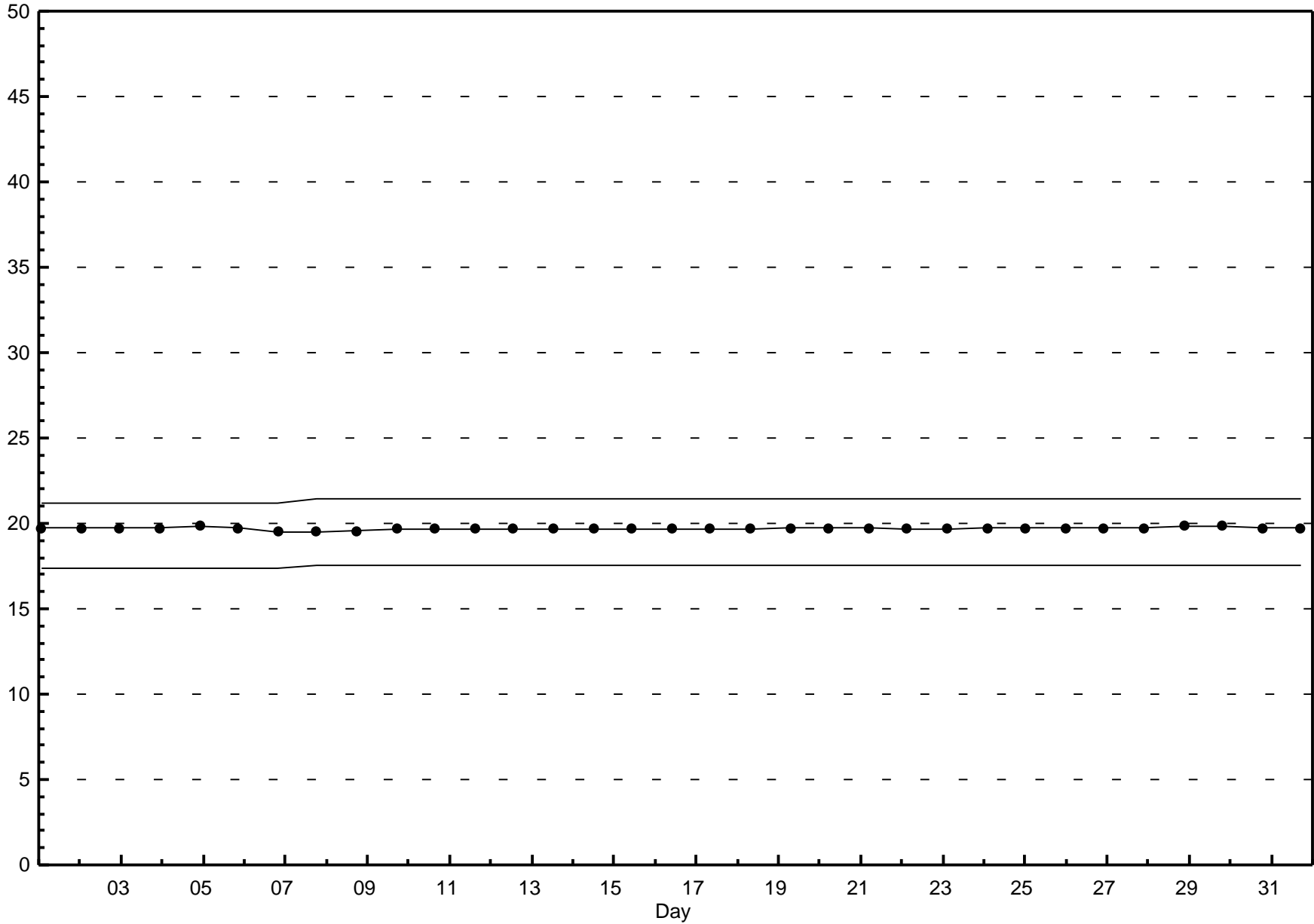
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum | |
|--------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.29 | |
| 2-Mar | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.41 | |
| 3-Mar | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.31 | |
| 4-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.24 | |
| 5-Mar | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.35 | |
| 6-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | N | N | N | N | N | N | N | N | N | N | N | N | 0.2 | 0.36 |
| 7-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.33 |
| 8-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.24 |
| 9-Mar | 0.2 | 0.3 | 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 | 0.2 | 0.2 | 0.2 | 0.28 |
| 10-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.24 |
| 11-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.31 |
| 12-Mar | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.50 |
| 13-Mar | 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 | 0.2 | 0.2 | 0.2 | 0.2 | 0.32 |
| 14-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.31 | |
| 15-Mar | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.51 | |
| 16-Mar | 0.5 | 0.5 | 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 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.50 |
| 17-Mar | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.40 |
| 18-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.22 |
| 19-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.27 |
| 20-Mar | 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 | 0.3 | 0.3 | 0.3 | 0.3 | 0.28 | |
| 21-Mar | 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 | 0.2 | 0.2 | 0.2 | 0.2 | 0.27 |
| 22-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.24 |
| 23-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.23 |
| 24-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.29 |
| 25-Mar | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.34 |
| 26-Mar | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.39 |
| 27-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.36 |
| 28-Mar | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.28 |
| 29-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.30 |
| 30-Mar | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.48 |
| 31-Mar | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.45 |
| | 0.50 | 0.50 | 0.50 | 0.45 | 0.40 | 0.40 | 0.39 | 0.39 | 0.44 | 0.45 | 0.48 | 0.48 | 0.48 | 0.50 | 0.48 | 0.38 | 0.35 | 0.32 | 0.28 | 0.30 | 0.37 | 0.49 | 0.50 | 0.51 | | |

Diurnal Maximums

N - Not Valid
 Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 5 ppm

Span Responses

Carbon Monoxide (CO)
Henry Pirker - March 2012



Hourly Averages

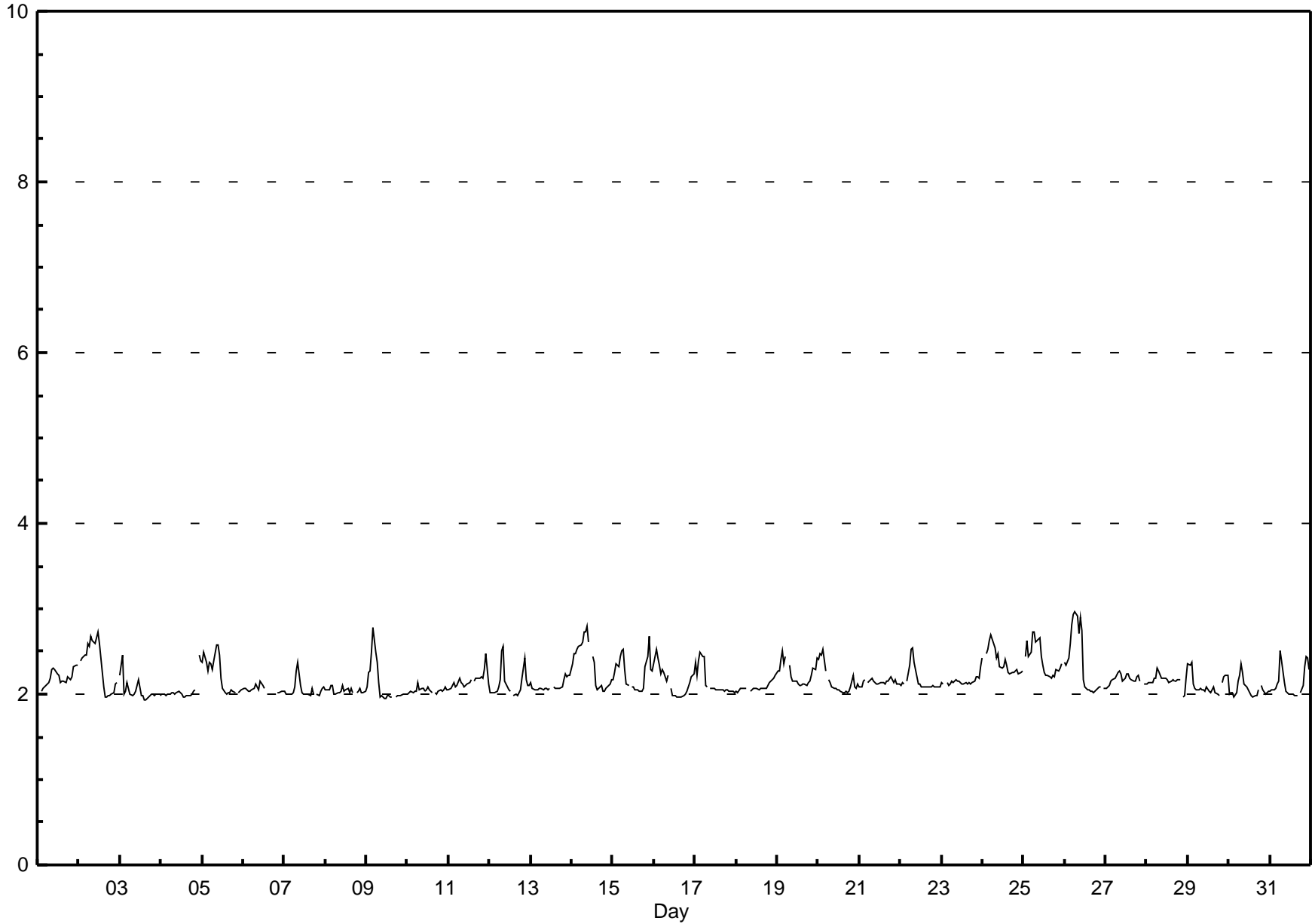
Total Hydrocarbons (THC) - ppm

Henry Pirker - March 2012

| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.96 ppm on Mar 26 07:00 Maximum Daily Average: 2.40 ppm on Mar 25 | | Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------------------------|---------------|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|
| Minimum Value: 1.9 ppm on Mar 3 16:00 Maximum Diurnal Average: 2.28 ppm at hour 8 Monthly Average: 2.165 ppm | | Minimum Daily Average: 2.04 ppm on Mar 4 Minimum Diurnal Average: 2.06 ppm at hour 15 Percentiles: P ₁ = 1.97 P ₁₀ = 2.00 Q ₁ = 2.04 Median = 2.11 Q ₃ = 2.23 P ₉₀ = 2.44 P ₉₉ = 2.78 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Mar | 2.0 | A | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.19 | 2.33 | | | | | | | | | | | | | | | | | | | | | | |
| 2-Mar | A | 2.4 | 2.4 | 2.5 | 2.5 | 2.6 | 2.6 | 2.7 | 2.6 | 2.6 | 2.7 | 2.7 | 2.6 | 2.4 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | A | 2.34 | 2.73 | | | | | | | | | | | | | | | | | | | | | | |
| 3-Mar | 2.2 | 2.5 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | A | 2.0 | 2.04 | 2.46 | | | | | | | | | | | | | | | | | | | | | | |
| 4-Mar | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | A | 2.5 | 2.4 | 2.04 | 2.46 | | | | | | | | | | | | | | | | | | | | | | |
| 5-Mar | 2.4 | 2.5 | 2.4 | 2.3 | 2.4 | 2.3 | 2.3 | 2.4 | 2.6 | 2.6 | 2.5 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | A | 2.0 | 2.0 | 2.1 | 2.22 | 2.58 | | | | | | | | | | | | | | | | | | | | | | |
| 6-Mar | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | C | C | C | C | C | 2.0 | A | 2.0 | 2.0 | 2.0 | 2.0 | 2.06 | 2.15 | | | | | | | | | | | | | | | | | | | | | | |
| 7-Mar | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.4 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | A | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.05 | 2.37 | | | | | | | | | | | | | | | | | | | | | | |
| 8-Mar | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.0 | A | A | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.04 | 2.11 | | | | | | | | | | | | | | | | | | | | | | |
| 9-Mar | 2.1 | 2.2 | 2.3 | 2.5 | 2.8 | 2.5 | 2.4 | 2.1 | 2.0 | 2.0 | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | A | A | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.11 | 2.78 | | | | | | | | | | | | | | | | | | | | | | |
| 10-Mar | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | A | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.04 | 2.13 | | | | | | | | | | | | | | | | | | | | | | |
| 11-Mar | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | A | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.5 | 2.1 | 2.15 | 2.47 | | | | | | | | | | | | | | | | | | | | | | |
| 12-Mar | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.5 | 2.6 | 2.1 | 2.1 | 2.1 | 2.0 | A | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.4 | 2.2 | 2.1 | 2.1 | 2.12 | 2.56 | | | | | | | | | | | | | | | | | | | | | | |
| 13-Mar | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | A | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.10 | 2.23 | | | | | | | | | | | | | | | | | | | | | | |
| 14-Mar | 2.4 | 2.5 | 2.5 | 2.5 | 2.6 | 2.6 | 2.6 | 2.7 | 2.7 | 2.8 | 2.6 | A | 2.4 | 2.4 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.35 | 2.80 | | | | | | | | | | | | | | | | | | | | | | |
| 15-Mar | 2.2 | 2.2 | 2.4 | 2.3 | 2.4 | 2.5 | 2.5 | 2.3 | 2.1 | 2.1 | A | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.4 | 2.7 | 2.3 | 2.3 | 2.24 | 2.67 | | | | | | | | | | | | | | | | | | | | | | |
| 16-Mar | 2.4 | 2.5 | 2.4 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | A | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.15 | 2.53 | | | | | | | | | | | | | | | | | | | | | | |
| 17-Mar | 2.4 | 2.2 | 2.4 | 2.5 | 2.4 | 2.4 | 2.1 | 2.1 | A | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.14 | 2.50 | | | | | | | | | | | | | | | | | | | | | | |
| 18-Mar | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | A | 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 | 2.2 | 2.2 | 2.2 | 2.09 | 2.23 | | | | | | | | | | | | | | | | | | | | | | |
| 19-Mar | 2.3 | 2.3 | 2.4 | 2.5 | 2.4 | 2.4 | A | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.24 | 2.51 | | | | | | | | | | | | | | | | | | | | | | |
| 20-Mar | 2.4 | 2.5 | 2.5 | 2.5 | 2.3 | A | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.15 | 2.52 | | | | | | | | | | | | | | | | | | | | | | |
| 21-Mar | 2.1 | 2.1 | 2.1 | 2.2 | A | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.14 | 2.20 | | | | | | | | | | | | | | | | | | | | | | |
| 22-Mar | 2.1 | 2.1 | 2.1 | A | 2.2 | 2.3 | 2.5 | 2.5 | 2.4 | 2.3 | 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 | 2.17 | 2.54 | | | | | | | | | | | | | | | | | | | | | | |
| 23-Mar | 2.1 | 2.1 | A | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.15 | 2.32 | | | | | | | | | | | | | | | | | | | | | | |
| 24-Mar | 2.4 | A | 2.5 | 2.5 | 2.6 | 2.7 | 2.6 | 2.5 | 2.4 | 2.5 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.38 | 2.69 | | | | | | | | | | | | | | | | | | | | | | |
| 25-Mar | A | 2.4 | 2.6 | 2.4 | 2.5 | 2.7 | 2.7 | 2.6 | 2.6 | 2.7 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | A | 2.40 | 2.73 | | | | | | | | | | | | | | | | | | | | | | |
| 26-Mar | 2.4 | 2.3 | 2.4 | 2.6 | 2.8 | 2.9 | 3.0 | 2.9 | 2.7 | 2.9 | 2.7 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | A | 2.1 | 2.37 | 2.96 | | | | | | | | | | | | | | | | | | | | | | |
| 27-Mar | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | A | 2.1 | 2.1 | 2.17 | 2.26 | | | | | | | | | | | | | | | | | | | | | | |
| 28-Mar | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | A | 2.0 | 2.0 | 2.2 | 2.16 | 2.31 | | | | | | | | | | | | | | | | | | | | | | |
| 29-Mar | 2.4 | 2.3 | 2.4 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | A | 2.1 | 2.2 | 2.2 | 2.2 | 2.12 | 2.37 | | | | | | | | | | | | | | | | | | | | | | |
| 30-Mar | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.2 | 2.4 | 2.3 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | A | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.06 | 2.36 | | | | | | | | | | | | | | | | | | | | | | |
| 31-Mar | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 | 2.4 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | A | 2.0 | 2.1 | 2.3 | 2.4 | 2.4 | 2.3 | 2.14 | 2.51 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 2.16 | 2.20 | 2.22 | 2.22 | 2.24 | 2.27 | 2.27 | 2.28 | 2.25 | 2.22 | 2.18 | 2.13 | 2.12 | 2.10 | 2.06 | 2.06 | 2.06 | 2.07 | 2.08 | 2.11 | 2.14 | 2.15 | 2.17 | 2.16 | Diurnal Average |
| | | | | | | | | | | | | | | | | | | | | | | | | 2.42 | 2.53 | 2.62 | 2.59 | 2.81 | 2.93 | 2.96 | 2.91 | 2.73 | 2.90 | 2.74 | 2.73 | 2.59 | 2.42 | 2.34 | 2.26 | 2.23 | 2.26 | 2.26 | 2.32 | 2.45 | 2.67 | 2.47 | 2.42 | Diurnal Maximum |
| C - Calibration | | | | | | | | | | | | | | | | | | | | | | | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | |

Hourly Averages

Total Hydrocarbons (THC) - ppm
Henry Pirker - March 2012



Hourly Maximums

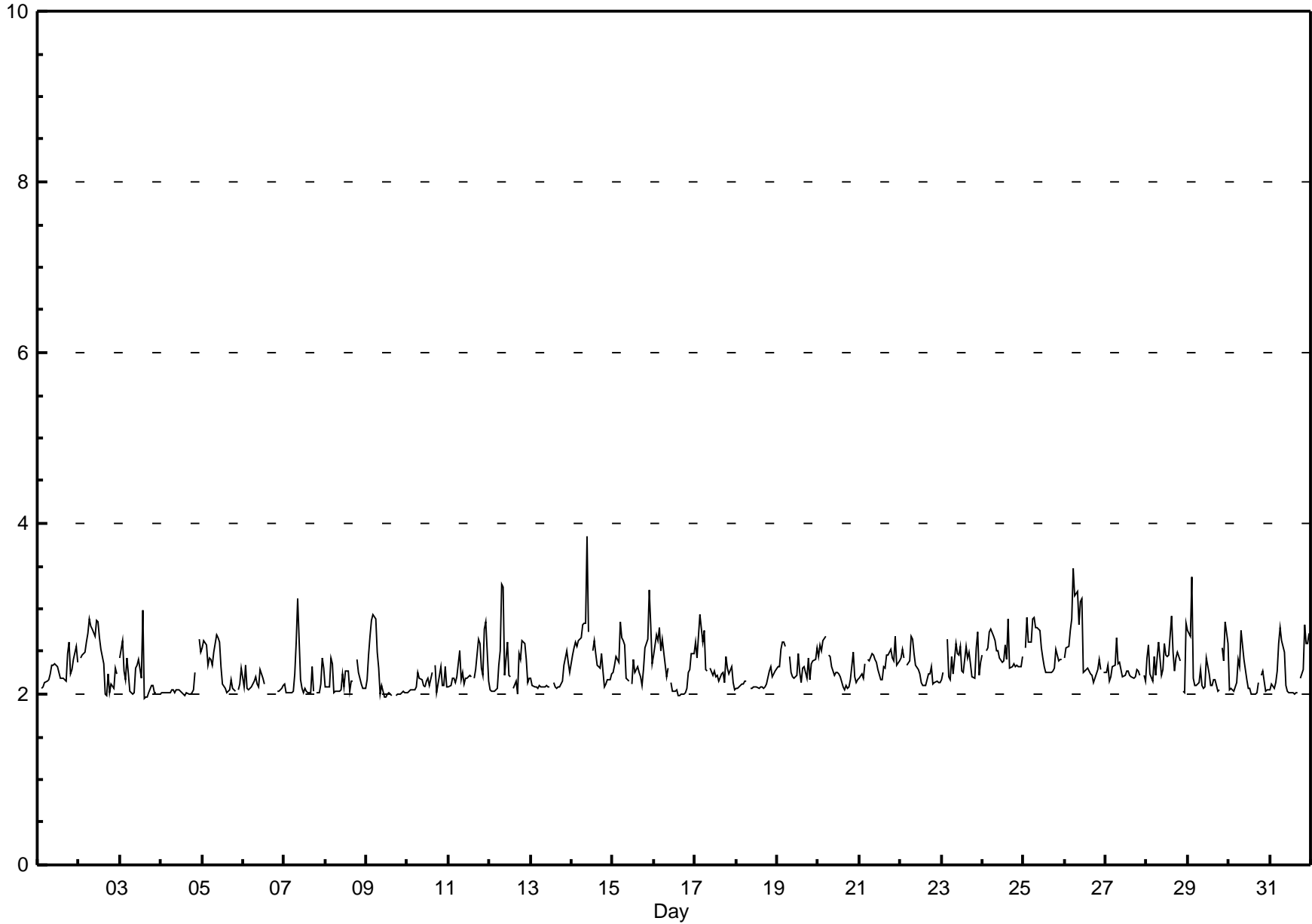
Total Hydrocarbons (THC) - ppm

Henry Pirker - March 2012

| Maximum Value: 3.85 ppm on Mar 14 10:00 | | Maximum Daily Average: 2.57 ppm on Mar 26 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|---|------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|-----------------|--|
| Minimum Value: 2.0 ppm on Mar 3 15:00 | | Minimum Daily Average: 2.08 ppm on Mar 4 | | Hours of Data: 706 | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 2.46 ppm at hour 8 | | Minimum Diurnal Average: 2.18 ppm at hour 16 | | Hours of Missing Data: 38 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 2.302 ppm | | Percentiles: P ₁ = 1.99 P ₁₀ = 2.02 Q ₁ = 2.09 Median = 2.25 Q ₃ = 2.44 P ₉₀ = 2.64 P ₉₉ = 3.20 | | Hours of Calibration: 38 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 2.1 | A | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.5 | 2.6 | 2.2 | 2.3 | 2.4 | 2.6 | 2.4 | 2.27 | 2.60 | | |
| 2-Mar | A | 2.4 | 2.5 | 2.5 | 2.6 | 2.7 | 2.9 | 2.8 | 2.8 | 2.7 | 2.9 | 2.9 | 2.7 | 2.5 | 2.4 | 2.0 | 2.0 | 2.2 | 2.0 | 2.1 | 2.1 | 2.3 | 2.2 | A | 2.27 | 2.60 | |
| 3-Mar | 2.4 | 2.6 | 2.3 | 2.2 | 2.4 | 2.2 | 2.0 | 2.0 | 2.0 | 2.3 | 2.3 | 2.4 | 2.2 | 3.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | A | 2.0 | 2.20 | 2.98 | |
| 4-Mar | 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 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | A | 2.6 | 2.5 | 2.08 | 2.64 | |
| 5-Mar | 2.5 | 2.6 | 2.6 | 2.3 | 2.4 | 2.4 | 2.3 | 2.5 | 2.7 | 2.7 | 2.6 | 2.3 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.2 | 2.1 | 2.0 | A | 2.0 | 2.1 | 2.3 | 2.31 | 2.70 | |
| 6-Mar | 2.1 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.3 | 2.2 | 2.1 | C | C | C | C | C | 2.0 | A | 2.0 | 2.0 | 2.1 | 2.1 | 2.12 | 2.34 | |
| 7-Mar | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.6 | 3.1 | 2.2 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 | 2.3 | 2.0 | A | 2.0 | 2.0 | 2.1 | 2.4 | 2.3 | 2.17 | 3.13 | |
| 8-Mar | 2.1 | 2.1 | 2.1 | 2.4 | 2.4 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.3 | 2.3 | 2.0 | 2.1 | 2.2 | A | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.15 | 2.43 | |
| 9-Mar | 2.2 | 2.5 | 2.7 | 2.9 | 2.9 | 2.9 | 2.5 | 2.3 | 2.0 | 2.1 | 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 | 2.21 | 2.94 | |
| 10-Mar | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.3 | A | 2.3 | 2.0 | 2.1 | 2.3 | 2.1 | 2.1 | 2.3 | 2.1 | 2.14 | 2.35 | |
| 11-Mar | 2.1 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.5 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | A | 2.2 | 2.3 | 2.6 | 2.6 | 2.3 | 2.2 | 2.8 | 2.8 | 2.2 | 2.29 | 2.84 | |
| 12-Mar | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.5 | 3.3 | 3.2 | 2.2 | 2.6 | 2.2 | 2.2 | A | 2.1 | 2.1 | 2.0 | 2.5 | 2.4 | 2.6 | 2.6 | 2.4 | 2.1 | 2.2 | 2.34 | 3.29 | |
| 13-Mar | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | A | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.4 | 2.5 | 2.4 | 2.3 | 2.16 | 2.51 | |
| 14-Mar | 2.5 | 2.5 | 2.6 | 2.6 | 2.6 | 2.7 | 2.8 | 2.8 | 2.8 | 3.9 | 2.7 | A | 2.5 | 2.6 | 2.5 | 2.3 | 2.3 | 2.5 | 2.3 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.53 | 3.85 | |
| 15-Mar | 2.2 | 2.3 | 2.4 | 2.4 | 2.8 | 2.7 | 2.6 | 2.6 | 2.2 | 2.1 | A | 2.1 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.3 | 2.5 | 2.6 | 3.2 | 2.8 | 2.4 | 2.43 | 3.22 | |
| 16-Mar | 2.5 | 2.7 | 2.6 | 2.8 | 2.5 | 2.6 | 2.5 | 2.2 | 2.3 | A | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.5 | 2.5 | 2.28 | 2.77 | |
| 17-Mar | 2.6 | 2.4 | 2.7 | 2.9 | 2.6 | 2.8 | 2.3 | 2.3 | A | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.1 | 2.4 | 2.3 | 2.2 | 2.3 | 2.1 | 2.0 | 2.35 | 2.92 | |
| 18-Mar | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | A | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.13 | 2.33 | |
| 19-Mar | 2.3 | 2.3 | 2.5 | 2.6 | 2.6 | 2.6 | A | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.5 | 2.3 | 2.1 | 2.3 | 2.3 | 2.2 | 2.4 | 2.2 | 2.4 | 2.4 | 2.4 | 2.5 | 2.36 | 2.61 | |
| 20-Mar | 2.4 | 2.6 | 2.5 | 2.6 | 2.7 | A | 2.5 | 2.4 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.5 | 2.2 | 2.1 | 2.2 | 2.29 | 2.68 | |
| 21-Mar | 2.2 | 2.2 | 2.2 | 2.4 | A | 2.4 | 2.4 | 2.5 | 2.5 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.5 | 2.5 | 2.5 | 2.4 | 2.4 | 2.7 | 2.3 | 2.4 | 2.36 | 2.68 | |
| 22-Mar | 2.4 | 2.5 | 2.4 | A | 2.3 | 2.4 | 2.7 | 2.6 | 2.5 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.29 | 2.67 | |
| 23-Mar | 2.2 | 2.3 | A | 2.7 | 2.2 | 2.2 | 2.4 | 2.2 | 2.6 | 2.5 | 2.5 | 2.6 | 2.3 | 2.3 | 2.6 | 2.4 | 2.5 | 2.4 | 2.2 | 2.2 | 2.5 | 2.7 | 2.2 | 2.4 | 2.38 | 2.72 | |
| 24-Mar | 2.5 | A | 2.5 | 2.5 | 2.7 | 2.8 | 2.7 | 2.6 | 2.5 | 2.5 | 2.4 | 2.4 | 2.4 | 2.6 | 2.4 | 2.9 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.48 | 2.88 | |
| 25-Mar | A | 2.5 | 2.9 | 2.6 | 2.6 | 2.9 | 2.9 | 2.8 | 2.8 | 2.7 | 2.6 | 2.4 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.5 | 2.4 | 2.4 | 2.4 | A | 2.52 | 2.91 | |
| 26-Mar | 2.4 | 2.5 | 2.6 | 2.7 | 2.9 | 3.5 | 3.2 | 3.2 | 2.8 | 3.1 | 3.1 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.2 | 2.3 | 2.4 | 2.3 | A | 2.3 | 2.3 | 2.57 | 3.47 | |
| 27-Mar | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.7 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | A | 2.2 | 2.1 | 2.27 | 2.65 | |
| 28-Mar | 2.4 | 2.6 | 2.2 | 2.2 | 2.4 | 2.2 | 2.4 | 2.6 | 2.2 | 2.3 | 2.6 | 2.5 | 2.4 | 2.5 | 2.9 | 2.5 | 2.3 | 2.4 | 2.5 | 2.4 | A | 2.0 | 2.0 | 2.8 | 2.41 | 2.91 | |
| 29-Mar | 2.8 | 2.7 | 3.4 | 2.2 | 2.1 | 2.1 | 2.1 | 2.3 | 2.1 | 2.1 | 2.1 | 2.4 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.0 | 2.0 | A | 2.5 | 2.4 | 2.8 | 2.6 | 2.33 | 3.38 | |
| 30-Mar | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.4 | 2.3 | 2.8 | 2.6 | 2.4 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | A | 2.2 | 2.3 | 2.0 | 2.0 | 2.1 | 2.17 | 2.75 | |
| 31-Mar | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.6 | 2.8 | 2.6 | 2.5 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | A | 2.2 | 2.3 | 2.8 | 2.6 | 2.6 | 2.7 | 2.29 | 2.82 | |
| | | 2.27 | 2.34 | 2.35 | 2.35 | 2.38 | 2.41 | 2.44 | 2.46 | 2.41 | 2.35 | 2.32 | 2.24 | 2.23 | 2.23 | 2.18 | 2.18 | 2.18 | 2.21 | 2.24 | 2.24 | 2.30 | 2.32 | 2.32 | 2.29 | Diurnal Average | |
| | | 2.75 | 2.70 | 3.38 | 2.92 | 2.94 | 3.47 | 3.15 | 3.29 | 3.25 | 3.85 | 3.11 | 2.85 | 2.67 | 2.98 | 2.91 | 2.88 | 2.50 | 2.64 | 2.60 | 2.64 | 2.82 | 3.22 | 2.85 | 2.83 | Diurnal Maximum | |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | | |

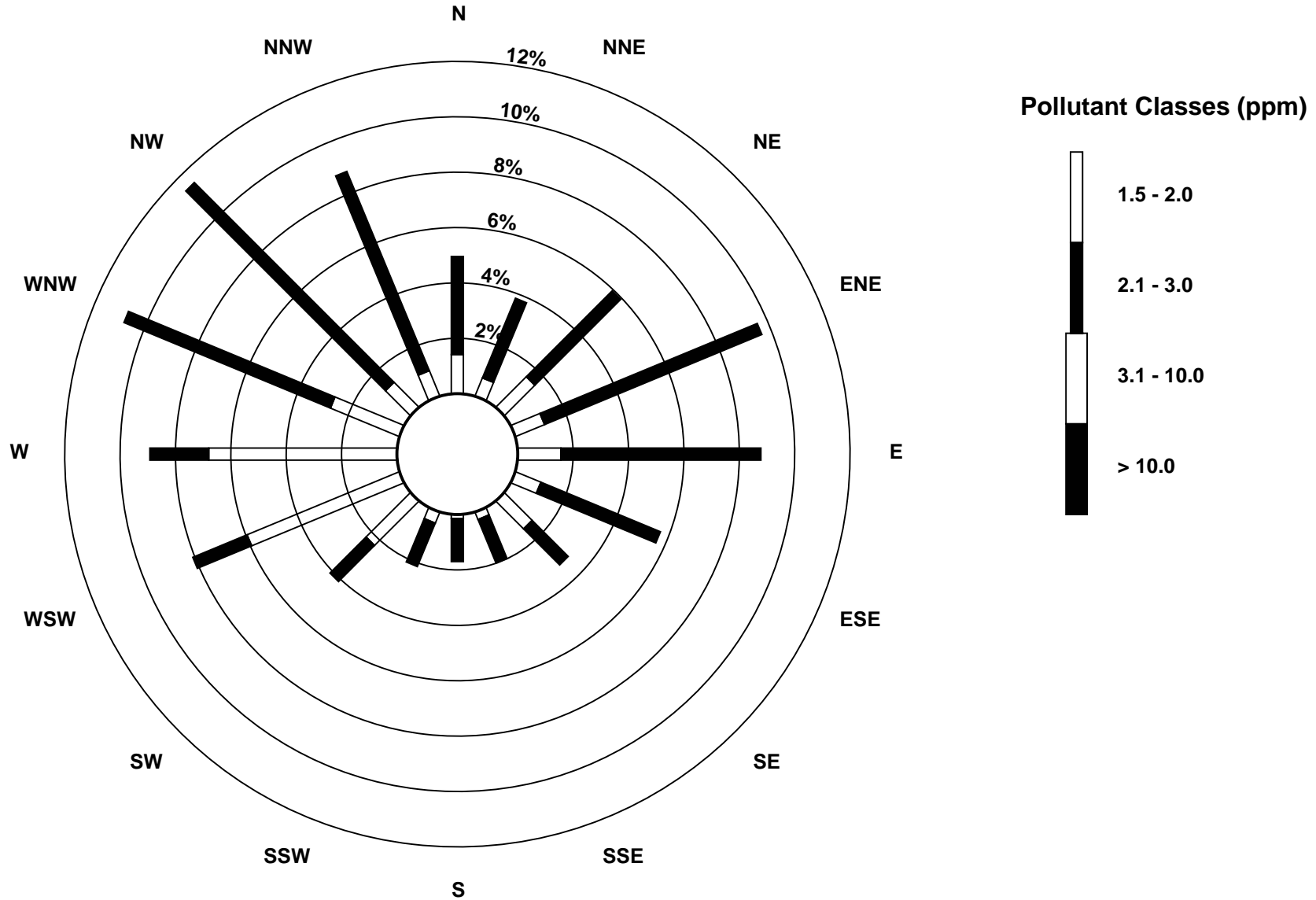
Hourly Maximums

Total Hydrocarbons (THC) - ppm
Henry Pirker - March 2012



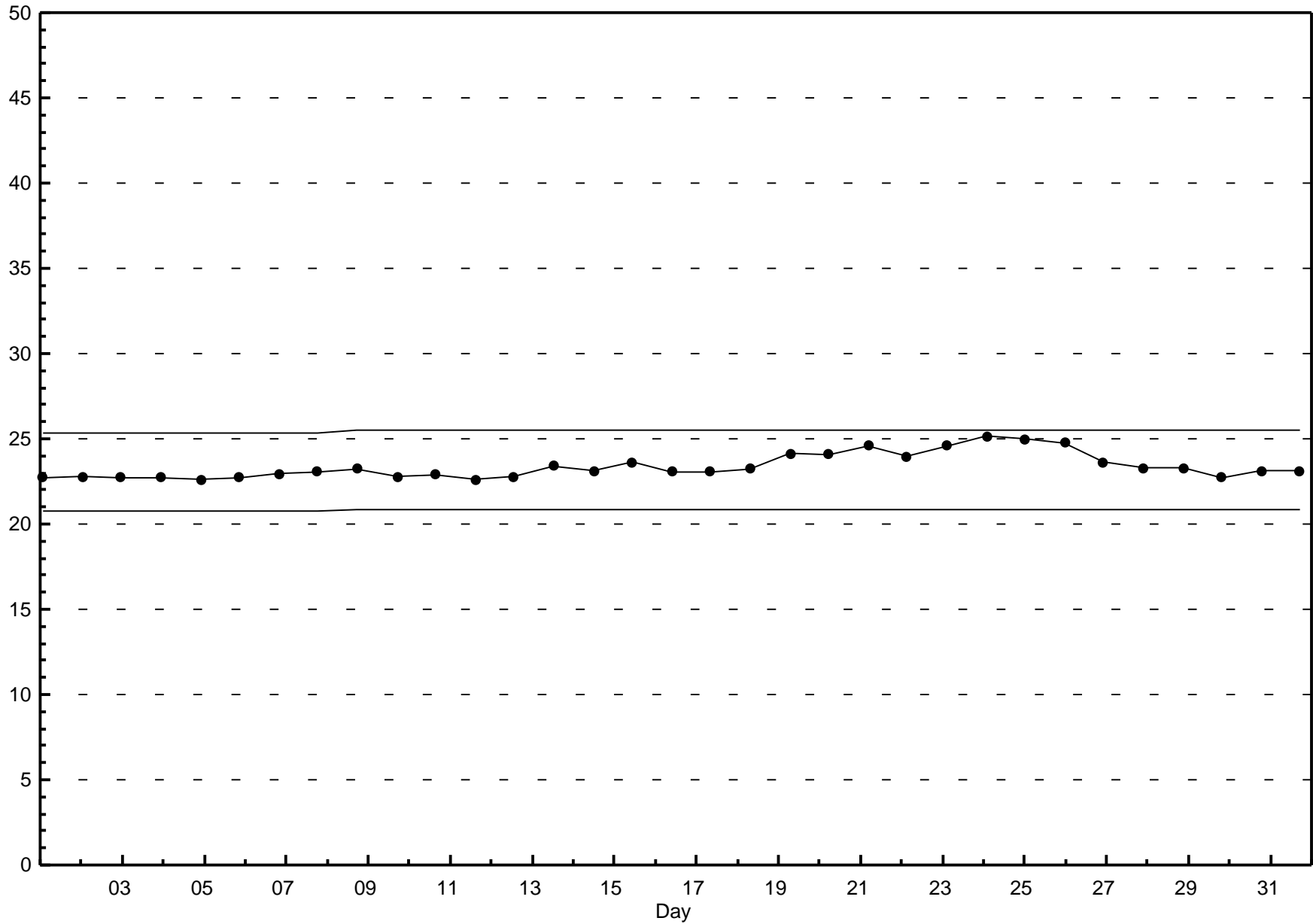
Pollutant Rose

Total Hydrocarbons (THC) - ppm
Henry Pirker - March 2012



Span Responses

Total Hydrocarbons (THC)
Henry Pirker - March 2012



Hourly Averages

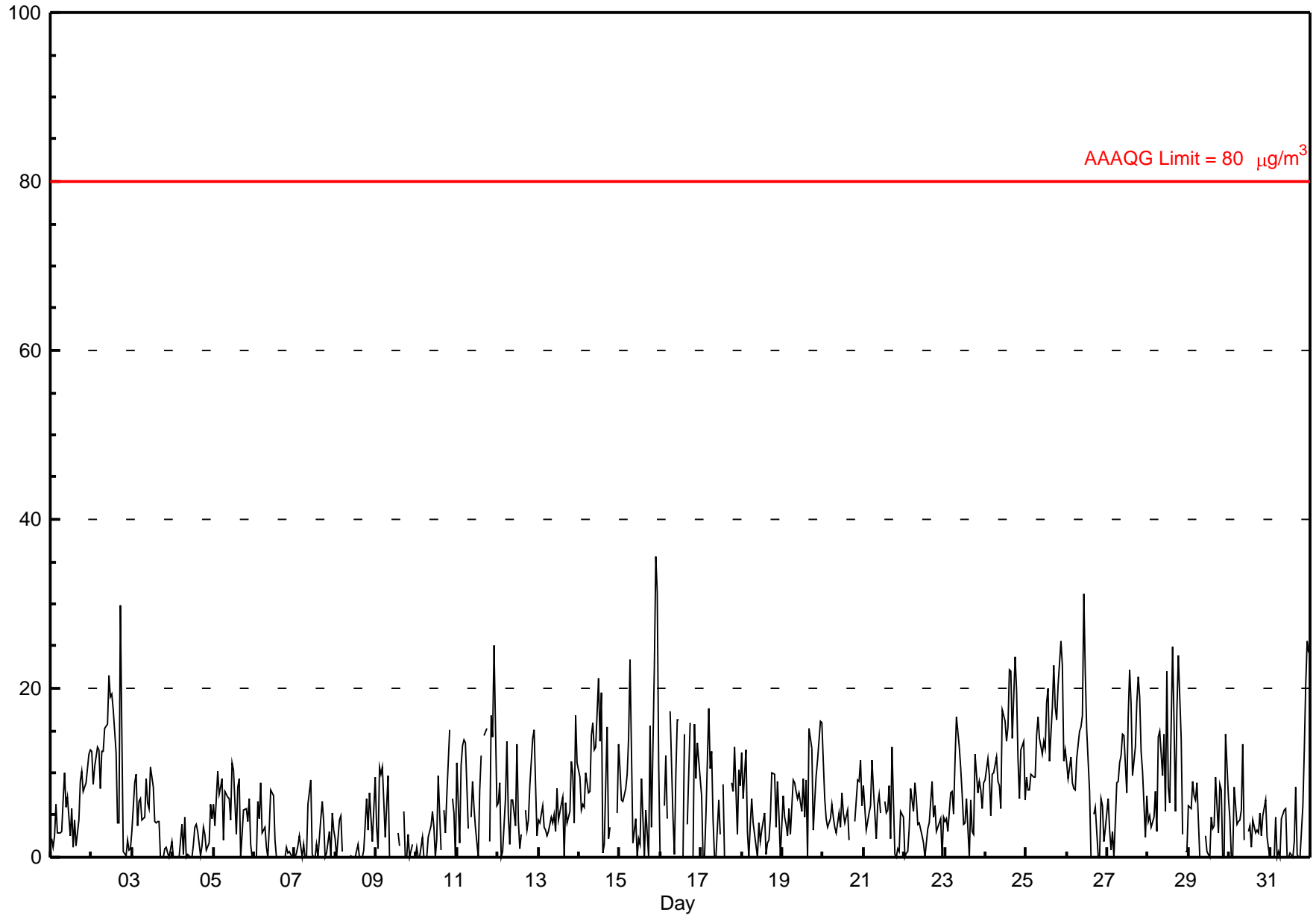
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Henry Pirker - March 2012

| | |
|--|---|
| Number of Exceedences: 1-hr: 0 24-hr: 0 | Hours in Service: 744 |
| Maximum Value: 35.6 µg/m ³ on Mar 15 22:00 | Maximum Daily Average: 14.8 µg/m ³ on Mar 25 |
| Minimum Value: 0 µg/m ³ on Mar 3 18:00 | Hours of Data: 708 |
| Maximum Diurnal Average: 8.7 µg/m ³ at hour 23 | Hours of Missing Data: 36 |
| Monthly Average: 6.68 µg/m ³ | Hours of Calibration: 0 |
| Minimum Daily Average: 1.8 µg/m ³ on Mar 4 | Percent Operational Time: 95.2 |
| Minimum Diurnal Average: 4.0 µg/m ³ at hour 2 | |
| Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 2.2 Median = 5.3 Q ₃ = 9.6 P ₉₀ = 14.9 P ₉₉ = 24.7 | |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 2 | 1 | 3 | 6 | 3 | 3 | 3 | 7 | 10 | 6 | 7 | 3 | 6 | 1 | 4 | 1 | 4 | 9 | 10 | 8 | 8 | 9 | 12 | 13 | 5.8 | 12.7 |
| 2-Mar | 13 | 9 | 11 | 13 | 13 | 8 | 13 | 12 | 15 | 16 | 22 | 19 | 19 | 18 | 12 | 4 | 4 | 30 | 15 | 1 | 0 | 2 | 1 | 1 | 11.2 | 29.9 |
| 3-Mar | 3 | 9 | 10 | 4 | 7 | 7 | 4 | 5 | 9 | 6 | 6 | 11 | 8 | 4 | 4 | 4 | 4 | 0 | 0 | 1 | 1 | 1 | 0 | 2 | 4.6 | 10.7 |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 0 | 2 | 4 | 4 | 3 | 0 | 1 | 4 | 3 | 1 | 2 | 6 | 5 | 1.8 | 6.2 |
| 5-Mar | 6 | 4 | 10 | 7 | 8 | 9 | 2 | 8 | 7 | 7 | 4 | 11 | 10 | 3 | 8 | 9 | 0 | 3 | 6 | 6 | 4 | 7 | 2 | 0 | 5.9 | 11.1 |
| 6-Mar | 0 | 0 | 7 | 5 | 9 | 3 | 4 | 1 | 0 | 4 | 8 | 7 | 2 | 0 | N | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | N | 2.3 | 8.8 |
| 7-Mar | 0 | 1 | 1 | 3 | 0 | 1 | 0 | 0 | 6 | 9 | 0 | 0 | 0 | 2 | 0 | 5 | 7 | 4 | 0 | 0 | 3 | 0 | 5 | 3 | 2.1 | 9.1 |
| 8-Mar | 2 | 0 | 4 | 5 | 1 | N | N | 0 | 0 | 0 | 0 | 0 | 2 | 0 | M | 0 | 1 | 7 | 3 | 8 | 5 | 2 | 10 | 2.3 | 9.6 | |
| 9-Mar | 4 | 1 | 11 | 10 | 11 | 2 | 6 | 10 | 0 | N | N | 3 | N | 3 | 1 | N | 5 | 0 | 0 | 3 | 0 | 2 | N | 0 | 3.7 | 10.7 |
| 10-Mar | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 4 | 5 | 4 | 0 | 2 | 10 | 1 | N | 6 | 3 | 7 | 15 | N | 7 | 5 | 0 | 3.4 | 15.1 |
| 11-Mar | 11 | 2 | 11 | 13 | 14 | 13 | 3 | N | 5 | 9 | 6 | 4 | 0 | 8 | 12 | N | 14 | 15 | N | 2 | 17 | 14 | 25 | 6 | 9.7 | 25.0 |
| 12-Mar | 6 | 9 | 0 | 1 | 7 | 14 | 5 | 2 | 7 | 7 | 4 | 13 | 4 | 1 | 3 | N | 6 | 3 | 4 | 9 | 14 | 15 | 9 | 3 | 6.2 | 15.0 |
| 13-Mar | 4 | 4 | 6 | 4 | 3 | 2 | 3 | 5 | 4 | 5 | 3 | 8 | 4 | 6 | 7 | 0 | 6 | 4 | 5 | 11 | 10 | 4 | 17 | 11 | 5.8 | 16.7 |
| 14-Mar | 9 | 6 | 6 | 6 | 10 | 8 | 8 | 14 | 16 | 13 | 13 | 21 | 14 | 20 | 1 | 2 | 15 | 2 | 4 | N | N | N | 5 | 13 | 9.8 | 21.1 |
| 15-Mar | 10 | 7 | 7 | 8 | 10 | 14 | 23 | 12 | 2 | 4 | 0 | 2 | 2 | 9 | 0 | 6 | 3 | 0 | 16 | 4 | 23 | 36 | 31 | 11 | 10.0 | 35.6 |
| 16-Mar | 0 | N | 6 | 12 | 5 | N | 17 | 5 | 0 | 10 | 16 | 16 | N | 0 | 14 | N | 4 | 16 | N | 0 | 16 | 9 | 14 | 9 | 8.9 | 17.3 |
| 17-Mar | 7 | 0 | 0 | 5 | 18 | 11 | 13 | 4 | 0 | 0 | 7 | 3 | N | 9 | 0 | 0 | N | N | 9 | 8 | 13 | 3 | 10 | 8 | 6.0 | 17.7 |
| 18-Mar | 12 | 7 | 13 | 3 | 0 | 4 | 7 | 4 | 1 | 0 | 4 | 2 | 3 | 5 | 0 | 2 | 2 | 5 | 10 | 10 | 4 | 9 | 5 | 0 | 4.7 | 12.6 |
| 19-Mar | 7 | 5 | 4 | 3 | 6 | 3 | 9 | 9 | 8 | 7 | 8 | 5 | 9 | 5 | 9 | 0 | 15 | 13 | 3 | 7 | 10 | 12 | 16 | 16 | 7.8 | 16.1 |
| 20-Mar | 11 | 7 | 5 | 4 | 5 | 6 | 5 | 3 | 3 | 5 | 4 | 8 | 5 | 4 | 6 | 2 | N | N | N | 4 | 9 | 9 | 11 | 6 | 5.8 | 11.5 |
| 21-Mar | 8 | 3 | 4 | 5 | 6 | 12 | 8 | 2 | 6 | 7 | 5 | N | 7 | 5 | 6 | 8 | 2 | 13 | 0 | 0 | 1 | 1 | 5 | 5 | 5.3 | 13.0 |
| 22-Mar | 0 | 0 | 1 | 3 | 8 | 5 | 9 | 7 | 4 | 4 | 2 | 2 | 0 | 2 | 3 | 4 | 9 | 5 | 6 | 3 | 4 | 5 | 0 | 5 | 3.8 | 9.0 |
| 23-Mar | 4 | 5 | 3 | 8 | 8 | 5 | 11 | 17 | 13 | 11 | 8 | 4 | 4 | 7 | 0 | 7 | 3 | 3 | 12 | 8 | 9 | 8 | 6 | 9 | 7.1 | 16.6 |
| 24-Mar | 9 | 12 | 10 | 5 | 10 | 10 | 12 | 9 | 9 | 6 | 18 | 16 | 14 | 15 | 22 | 22 | 14 | 24 | 20 | 12 | 7 | 13 | 14 | 7 | 12.8 | 23.8 |
| 25-Mar | 9 | 8 | 8 | 10 | 9 | 9 | 14 | 17 | 14 | 12 | 14 | 13 | 18 | 20 | 11 | 18 | 23 | 18 | 16 | 20 | 26 | 23 | 11 | 13 | 14.8 | 25.6 |
| 26-Mar | 11 | 9 | 12 | 9 | 8 | 8 | 12 | 15 | 15 | 17 | 31 | 22 | 15 | 8 | 0 | N | 5 | 6 | 0 | 0 | 7 | 6 | 2 | 3 | 9.6 | 31.2 |
| 27-Mar | 7 | 3 | 1 | 3 | 0 | 9 | 9 | 11 | 12 | 15 | 14 | 8 | 17 | 22 | 18 | 10 | 13 | 18 | 21 | 19 | 13 | 10 | 2 | 7 | 10.9 | 22.1 |
| 28-Mar | 4 | 5 | 4 | 5 | 8 | 3 | 14 | 15 | 10 | 15 | 5 | 22 | 8 | 7 | 25 | 16 | 5 | 18 | 24 | 14 | 3 | N | 1 | 1 | 10.0 | 25.0 |
| 29-Mar | 6 | 6 | 9 | 7 | 7 | 9 | 0 | N | 0 | N | 3 | 1 | 0 | 5 | 3 | 4 | 10 | 3 | 9 | 8 | 0 | 0 | 15 | 7 | 5.0 | 14.6 |
| 30-Mar | 5 | 0 | 0 | 8 | 4 | 4 | 4 | 6 | 13 | 2 | M | 3 | 4 | 1 | 4 | 3 | 3 | 3 | 5 | 3 | 5 | 7 | 2 | 1 | 4.0 | 13.4 |
| 31-Mar | 0 | 0 | 0 | 5 | 0 | 1 | 0 | 5 | 6 | 6 | 0 | 0 | 1 | 0 | 2 | 8 | 0 | 0 | 0 | 6 | 13 | 20 | 26 | 24 | 5.1 | 25.7 |
| | 5.7 | 4.0 | 5.3 | 5.8 | 6.3 | 6.5 | 7.3 | 7.3 | 6.4 | 7.2 | 7.4 | 7.5 | 6.4 | 6.6 | 6.1 | 5.7 | 6.4 | 7.5 | 7.6 | 6.2 | 7.8 | 8.2 | 8.7 | 6.6 | Diurnal Average | |
| | 12.6 | 11.6 | 12.6 | 13.2 | 17.7 | 14.0 | 23.4 | 16.6 | 15.9 | 16.8 | 31.2 | 22.1 | 19.3 | 22.1 | 25.0 | 22.0 | 22.7 | 29.9 | 23.9 | 20.4 | 25.6 | 35.6 | 31.3 | 24.2 | Diurnal Maximum | |

M - Maintenance N - Not Valid
 Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³

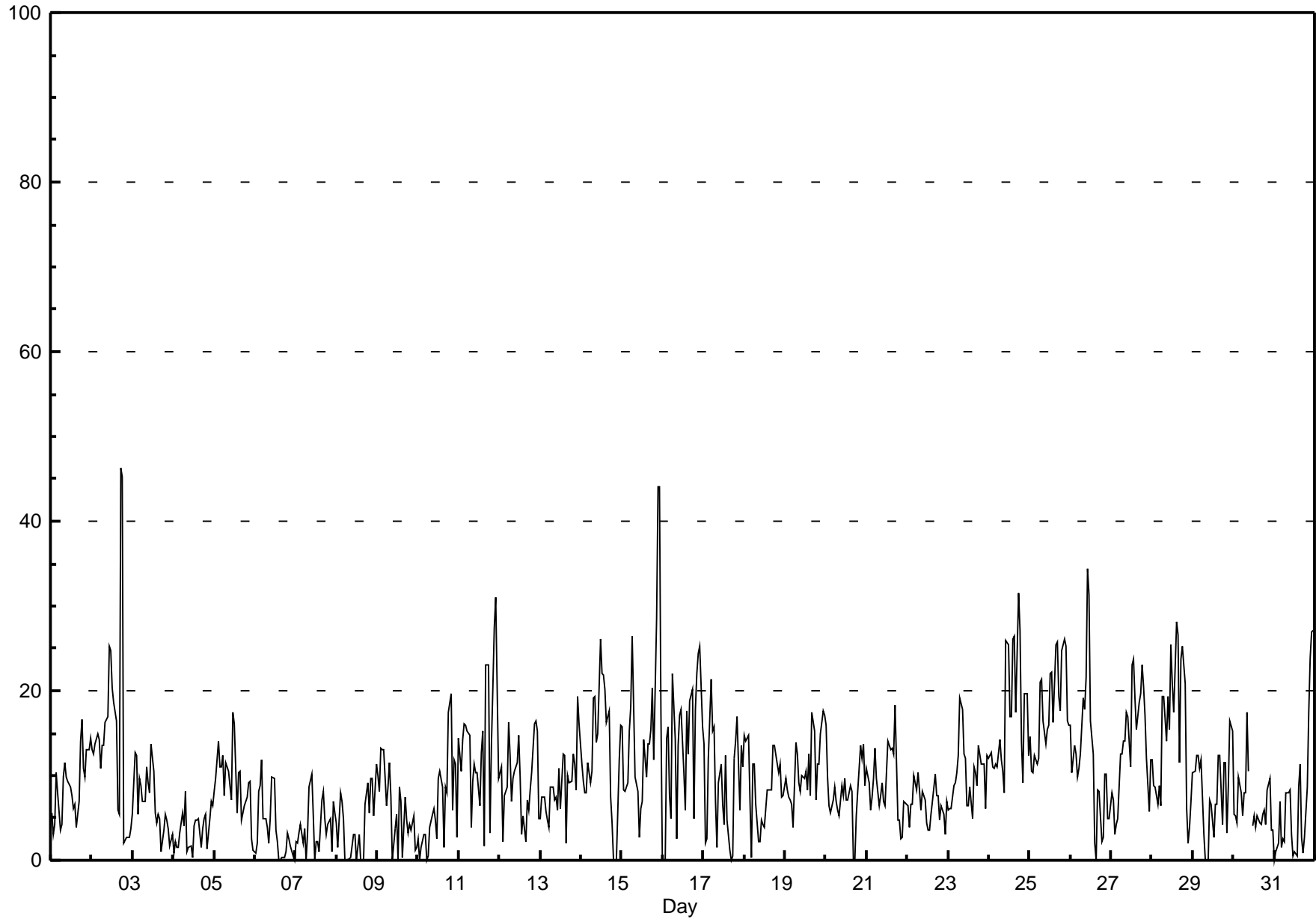


Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - µg/m³

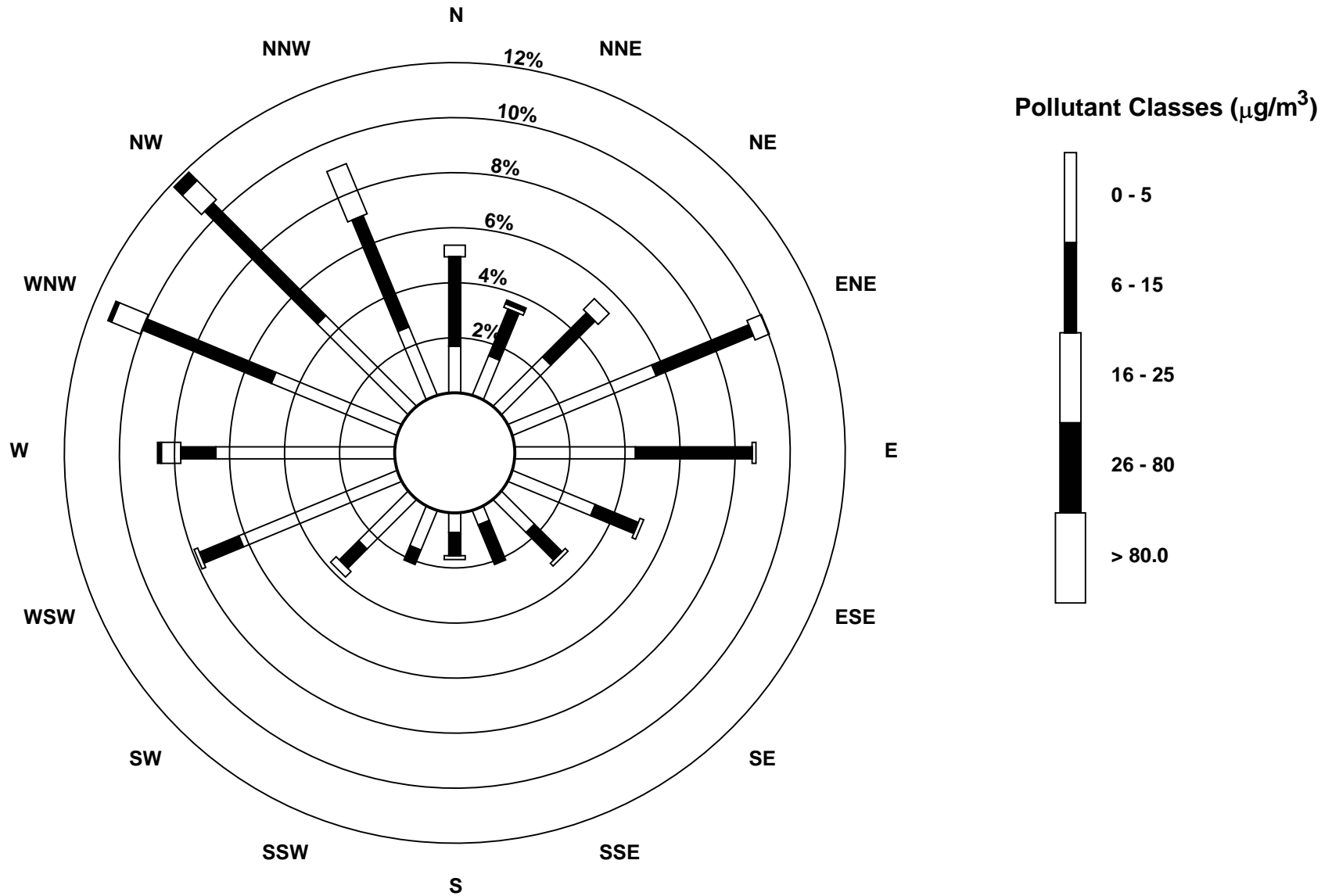
Henry Pirker - March 2012

| Maximum Value: 46.2 µg/m ³ on Mar 2 18:00 Minimum Value: 0 µg/m ³ on Mar 6 15:00 Maximum Diurnal Average: 11.8 µg/m ³ at hour 23 Monthly Average: 9.74 µg/m ³ | | Maximum Daily Average: 18.0 µg/m ³ on Mar 25 Minimum Daily Average: 3.6 µg/m ³ on Mar 4 Minimum Diurnal Average: 7.1 µg/m ³ at hour 2 Percentiles: P ₁ = 0.0 P ₁₀ = 2.0 Q ₁ = 5.0 Median = 8.6 Q ₃ = 13.3 P ₉₀ = 18.6 P ₉₉ = 31.1 | | Hours in Service: 744 Hours of Data: 742 Hours of Missing Data: 2 Hours of Calibration: 0 Percent Operational Time: 99.7 | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|---|------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------|--|
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| 1-Mar | 6 | 3 | 4 | 10 | 8 | 3 | 4 | 10 | 12 | 10 | 9 | 9 | 8 | 6 | 7 | 4 | 7 | 14 | 17 | 11 | 10 | 13 | 13 | 14 | 8.8 | 16.7 | |
| 2-Mar | 13 | 13 | 14 | 15 | 14 | 11 | 14 | 14 | 16 | 17 | 25 | 25 | 20 | 19 | 16 | 6 | 5 | 46 | 45 | 2 | 3 | 3 | 3 | 4 | 15.1 | 46.2 | |
| 3-Mar | 5 | 13 | 12 | 5 | 10 | 9 | 7 | 7 | 11 | 9 | 8 | 14 | 11 | 6 | 4 | 5 | 5 | 1 | 3 | 5 | 5 | 4 | 2 | 3 | 6.8 | 13.8 | |
| 4-Mar | 1 | 2 | 2 | 2 | 3 | 6 | 4 | 8 | 1 | 2 | 2 | 0 | 4 | 5 | 5 | 5 | 2 | 4 | 5 | 5 | 1 | 5 | 7 | 6 | 3.6 | 8.1 | |
| 5-Mar | 8 | 10 | 14 | 11 | 11 | 12 | 8 | 12 | 11 | 9 | 7 | 17 | 16 | 6 | 10 | 11 | 5 | 6 | 6 | 7 | 9 | 9 | 3 | 1 | 9.1 | 17.4 | |
| 6-Mar | 1 | 2 | 8 | 9 | 12 | 5 | 5 | 4 | 2 | 5 | 10 | 10 | 3 | 2 | 0 | 0 | 0 | 0 | 1 | 3 | 3 | 2 | 1 | 0 | 3.6 | 11.8 | |
| 7-Mar | 2 | 2 | 3 | 4 | 2 | 4 | 0 | 3 | 9 | 10 | 5 | 0 | 2 | 2 | 1 | 7 | 8 | 5 | 3 | 4 | 5 | 1 | 7 | 6 | 4.0 | 10.1 | |
| 8-Mar | 4 | 2 | 8 | 7 | 5 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 3 | 0 | 0 | M | 0 | 7 | 9 | 6 | 10 | 10 | 5 | 11 | 4.1 | 11.3 | |
| 9-Mar | 10 | 8 | 13 | 13 | 13 | 6 | 9 | 12 | 8 | 0 | 4 | 5 | 0 | 9 | 7 | 0 | 7 | 5 | 3 | 4 | 3 | 5 | 1 | 2 | 6.2 | 13.3 | |
| 10-Mar | 3 | 0 | 2 | 3 | 3 | 0 | 1 | 4 | 5 | 6 | 5 | 3 | 10 | 11 | 9 | 2 | 9 | 8 | 17 | 20 | 6 | 12 | 11 | 3 | 6.2 | 19.6 | |
| 11-Mar | 14 | 11 | 14 | 16 | 16 | 15 | 15 | 4 | 9 | 11 | 10 | 10 | 6 | 13 | 15 | 2 | 23 | 23 | 3 | 14 | 20 | 27 | 31 | 10 | 13.9 | 31.1 | |
| 12-Mar | 10 | 11 | 2 | 8 | 9 | 16 | 12 | 7 | 10 | 11 | 12 | 15 | 10 | 3 | 5 | 2 | 7 | 6 | 8 | 10 | 16 | 16 | 15 | 5 | 9.4 | 16.4 | |
| 13-Mar | 5 | 7 | 7 | 6 | 5 | 4 | 9 | 9 | 7 | 7 | 6 | 11 | 6 | 13 | 12 | 2 | 10 | 9 | 9 | 13 | 11 | 8 | 19 | 16 | 8.8 | 19.3 | |
| 14-Mar | 11 | 9 | 8 | 8 | 12 | 9 | 11 | 19 | 19 | 14 | 15 | 26 | 22 | 22 | 20 | 16 | 18 | 7 | 4 | 0 | 0 | 0 | 12 | 16 | 12.4 | 26.2 | |
| 15-Mar | 16 | 8 | 8 | 9 | 15 | 18 | 26 | 18 | 10 | 8 | 3 | 6 | 7 | 14 | 10 | 14 | 14 | 15 | 20 | 12 | 28 | 44 | 44 | 18 | 16.1 | 44.0 | |
| 16-Mar | 0 | 0 | 14 | 16 | 8 | 5 | 22 | 14 | 3 | 14 | 17 | 18 | 10 | 6 | 18 | 13 | 19 | 20 | 5 | 18 | 22 | 24 | 25 | 16 | 13.6 | 25.2 | |
| 17-Mar | 14 | 2 | 3 | 12 | 21 | 15 | 16 | 7 | 2 | 9 | 11 | 7 | 4 | 12 | 5 | 1 | 0 | 1 | 12 | 14 | 17 | 6 | 14 | 11 | 8.9 | 21.3 | |
| 18-Mar | 15 | 14 | 15 | 7 | 0 | 11 | 11 | 7 | 2 | 2 | 5 | 4 | 4 | 8 | 8 | 8 | 8 | 14 | 14 | 11 | 10 | 11 | 7 | 8 | 8.6 | 14.7 | |
| 19-Mar | 10 | 8 | 7 | 7 | 7 | 4 | 14 | 13 | 9 | 8 | 10 | 10 | 11 | 8 | 13 | 8 | 17 | 15 | 7 | 11 | 11 | 15 | 18 | 17 | 10.7 | 17.6 | |
| 20-Mar | 16 | 10 | 6 | 6 | 7 | 9 | 7 | 6 | 5 | 9 | 8 | 10 | 7 | 7 | 9 | 8 | 0 | 0 | 5 | 8 | 14 | 12 | 14 | 9 | 7.9 | 16.0 | |
| 21-Mar | 11 | 9 | 6 | 7 | 10 | 13 | 10 | 6 | 8 | 9 | 7 | 6 | 14 | 14 | 13 | 13 | 13 | 18 | 5 | 5 | 3 | 3 | 7 | 7 | 9.0 | 18.4 | |
| 22-Mar | 6 | 4 | 7 | 7 | 10 | 8 | 10 | 8 | 6 | 8 | 7 | 4 | 3 | 3 | 5 | 7 | 10 | 8 | 8 | 5 | 6 | 5 | 3 | 7 | 6.6 | 10.3 | |
| 23-Mar | 6 | 6 | 6 | 9 | 9 | 10 | 12 | 19 | 18 | 13 | 12 | 6 | 6 | 9 | 5 | 11 | 10 | 9 | 14 | 11 | 11 | 11 | 6 | 12 | 10.1 | 19.1 | |
| 24-Mar | 12 | 13 | 11 | 11 | 11 | 11 | 14 | 12 | 11 | 8 | 26 | 25 | 17 | 17 | 26 | 26 | 17 | 32 | 27 | 14 | 9 | 20 | 20 | 12 | 16.8 | 31.6 | |
| 25-Mar | 15 | 11 | 10 | 12 | 11 | 12 | 21 | 21 | 16 | 14 | 15 | 16 | 22 | 22 | 16 | 25 | 26 | 19 | 18 | 25 | 26 | 25 | 16 | 16 | 18.0 | 26.2 | |
| 26-Mar | 16 | 10 | 14 | 13 | 10 | 11 | 13 | 19 | 18 | 22 | 34 | 31 | 16 | 13 | 2 | 0 | 8 | 8 | 2 | 3 | 10 | 10 | 5 | 5 | 12.2 | 34.5 | |
| 27-Mar | 8 | 7 | 3 | 4 | 5 | 13 | 13 | 14 | 14 | 17 | 17 | 11 | 23 | 24 | 19 | 15 | 19 | 20 | 23 | 21 | 17 | 12 | 6 | 12 | 14.0 | 23.8 | |
| 28-Mar | 12 | 9 | 9 | 7 | 9 | 6 | 19 | 19 | 14 | 19 | 15 | 25 | 21 | 17 | 28 | 27 | 12 | 24 | 25 | 21 | 6 | 2 | 4 | 7 | 14.9 | 28.2 | |
| 29-Mar | 10 | 11 | 12 | 12 | 11 | 12 | 3 | 0 | 0 | 0 | 7 | 7 | 3 | 7 | 7 | 12 | 12 | 4 | 12 | 12 | 3 | 9 | 16 | 15 | 8.2 | 16.4 | |
| 30-Mar | 5 | 5 | 4 | 10 | 8 | 5 | 8 | 8 | 17 | 11 | M | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 6 | 4 | 8 | 10 | 3 | 3 | 6.5 | 17.4 | |
| 31-Mar | 0 | 1 | 2 | 7 | 2 | 3 | 2 | 8 | 8 | 8 | 3 | 1 | 1 | 1 | 9 | 11 | 3 | 1 | 3 | 9 | 17 | 24 | 27 | 27 | 7.3 | 27.2 | |
| | 8.6 | 7.1 | 8.0 | 8.8 | 8.9 | 8.6 | 10.3 | 10.0 | 9.0 | 9.4 | 10.6 | 10.9 | 9.5 | 9.8 | 10.0 | 8.9 | 9.6 | 11.4 | 11.0 | 9.9 | 10.4 | 11.6 | 11.8 | 9.6 | Diurnal Average | | |
| | 16.0 | 14.0 | 14.7 | 16.2 | 21.3 | 18.1 | 26.4 | 21.3 | 19.3 | 21.6 | 34.5 | 31.3 | 23.0 | 23.8 | 28.2 | 26.7 | 25.7 | 46.2 | 45.2 | 24.7 | 28.4 | 44.0 | 44.0 | 27.2 | Diurnal Maximum | | |
| M - Maintenance | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Henry Pirker - March 2012

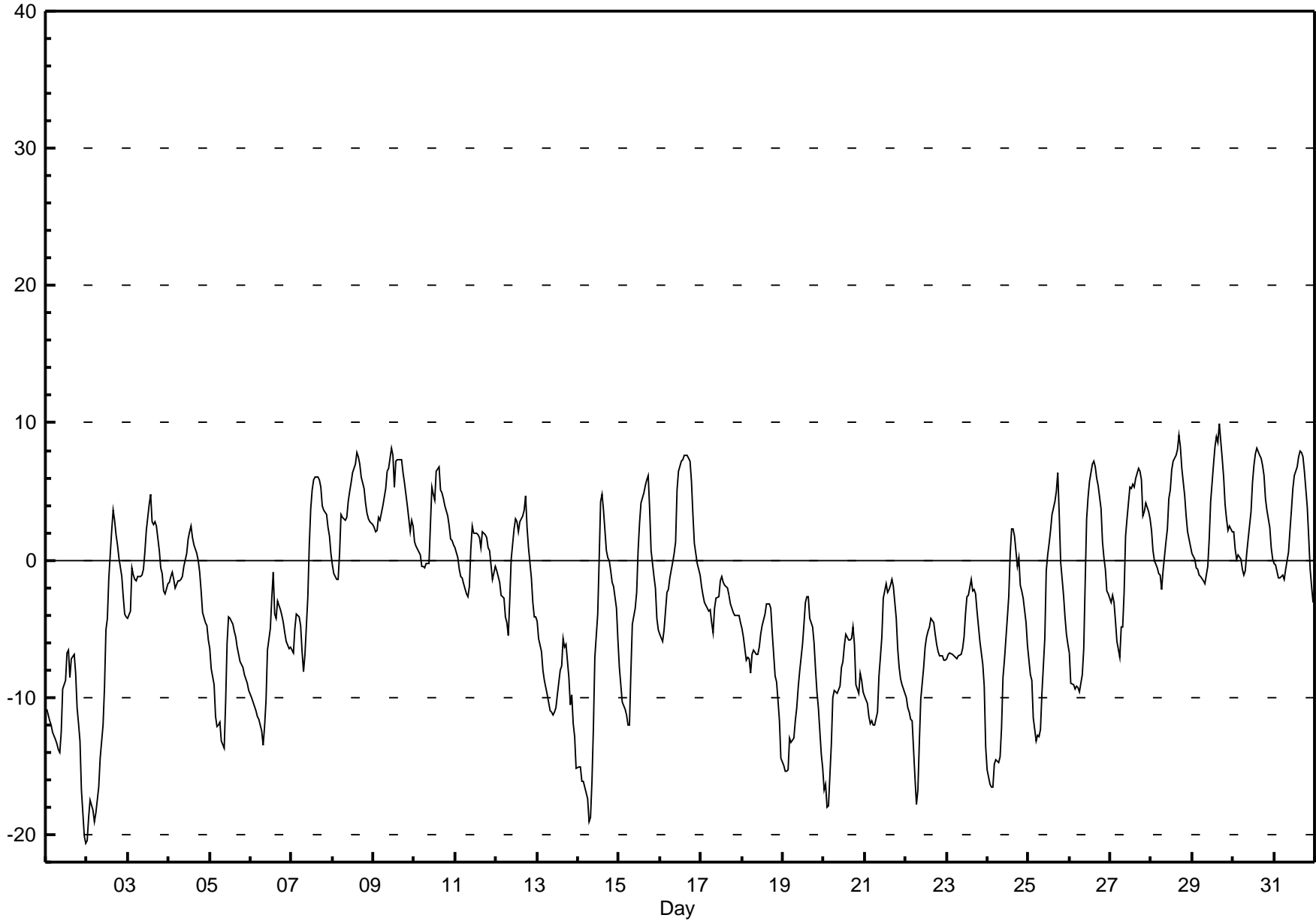


Hourly Averages

External Temperature (ET) - °C

Henry Pirker - March 2012

| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 9.9 °C on Mar 29 17:00 Maximum Daily Average: 4.9 °C on Mar 9 | | Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|-----|-----|-----|-----|-----|------|---------------|---------------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|-----------------|--|
| Minimum Value: -21 °C on Mar 2 00:00 Minimum Daily Average: -11.7 °C on Mar 1 Maximum Diurnal Average: 2.0 °C at hour 16 Minimum Diurnal Average: -7.3 °C at hour 7 Monthly Average: -3.03 °C Percentiles: P ₁ = -18.4 P ₁₀ = -12.0 Q ₁ = -7.3 Median = -2.4 Q ₃ = 2.1 P ₉₀ = 5.4 P ₉₉ = 8.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Mar | -11 | -11 | -12 | -12 | -13 | -13 | -13 | -14 | -14 | -13 | -9 | -9 | -7 | -7 | -9 | -7 | -7 | -8 | -11 | -12 | -13 | -17 | -20 | -21 | -11.7 | -6.5 | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Mar | -20 | -19 | -17 | -18 | -19 | -18 | -18 | -17 | -14 | -12 | -9 | -5 | -4 | -1 | 2 | 4 | 3 | 2 | 1 | 0 | -1 | -3 | -4 | -4 | -8.0 | 3.6 | | | | | | | | | | | | | | | | | | | | | | | |
| 3-Mar | -4 | -4 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | 2 | 4 | 5 | 3 | 3 | 3 | 2 | 1 | -1 | -1 | -2 | -2 | -2 | -0.1 | 4.8 | | | | | | | | | | | | | | | | | | | | | | | |
| 4-Mar | -2 | -1 | -1 | -1 | -2 | -2 | -2 | -1 | -1 | -1 | 0 | 2 | 2 | 2 | 2 | 1 | 0 | 0 | -1 | -2 | -4 | -5 | -5 | -6 | -1.1 | 2.5 | | | | | | | | | | | | | | | | | | | | | | | |
| 5-Mar | -6 | -8 | -9 | -11 | -12 | -12 | -12 | -13 | -14 | -10 | -6 | -4 | -4 | -5 | -5 | -6 | -6 | -7 | -7 | -8 | -8 | -9 | -9 | -9 | -8.4 | -4.1 | | | | | | | | | | | | | | | | | | | | | | | |
| 6-Mar | -10 | -10 | -11 | -11 | -11 | -12 | -12 | -13 | -12 | -10 | -7 | -5 | -3 | -1 | -4 | -4 | -3 | -4 | -4 | -5 | -5 | -6 | -6 | -6 | -7.3 | -0.8 | | | | | | | | | | | | | | | | | | | | | | | |
| 7-Mar | -7 | -7 | -5 | -4 | -4 | -5 | -7 | -8 | -7 | -3 | 1 | 4 | 5 | 6 | 6 | 6 | 6 | 5 | 4 | 4 | 3 | 2 | 2 | 0 | 0.0 | 6.1 | | | | | | | | | | | | | | | | | | | | | | | |
| 8-Mar | 0 | -1 | -1 | -1 | 1 | 3 | 3 | 3 | 3 | 4 | 5 | 6 | 6 | 7 | 8 | 8 | 7 | 6 | 5 | 4 | 3 | 3 | 3 | 3 | 3.6 | 7.9 | | | | | | | | | | | | | | | | | | | | | | | |
| 9-Mar | 2 | 2 | 2 | 3 | 3 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 5 | 7 | 7 | 7 | 6 | 6 | 5 | 4 | 2 | 3 | 2 | 2 | 4.9 | 8.2 | | | | | | | | | | | | | | | | | | | | | | | |
| 10-Mar | 1 | 1 | 1 | 0 | 0 | 0 | -1 | 0 | 0 | 3 | 5 | 5 | 4 | 6 | 7 | 5 | 5 | 5 | 4 | 3 | 2 | 2 | 1 | 1 | 2.5 | 6.8 | | | | | | | | | | | | | | | | | | | | | | | |
| 11-Mar | 1 | 0 | -1 | -1 | -1 | -2 | -2 | -3 | -2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 0 | -1 | 0 | 0.2 | 2.5 | | | | | | | | | | | | | | | | | | | | | | | |
| 12-Mar | -1 | -1 | -2 | -3 | -3 | -4 | -5 | -6 | -3 | 0 | 2 | 3 | 3 | 2 | 3 | 3 | 4 | 5 | 2 | 1 | -1 | -3 | -4 | -4 | -0.4 | 4.7 | | | | | | | | | | | | | | | | | | | | | | | |
| 13-Mar | -4 | -6 | -7 | -8 | -9 | -9 | -10 | -11 | -11 | -11 | -11 | -11 | -10 | -8 | -8 | -6 | -6 | -6 | -9 | -11 | -10 | -12 | -13 | -15 | -9.2 | -4.4 | | | | | | | | | | | | | | | | | | | | | | | |
| 14-Mar | -15 | -15 | -16 | -16 | -16 | -17 | -19 | -19 | -16 | -12 | -7 | -4 | 0 | 4 | 5 | 4 | 1 | 0 | 0 | -1 | -2 | -2 | -3 | -6 | -7.2 | 4.8 | | | | | | | | | | | | | | | | | | | | | | | |
| 15-Mar | -8 | -9 | -10 | -11 | -11 | -12 | -12 | -8 | -5 | -4 | -2 | 1 | 3 | 4 | 5 | 5 | 6 | 6 | 4 | 1 | -1 | -2 | -4 | -5 | -2.9 | 6.1 | | | | | | | | | | | | | | | | | | | | | | | |
| 16-Mar | -5 | -6 | -5 | -4 | -2 | -2 | -1 | 0 | 1 | 1 | 5 | 6 | 7 | 7 | 8 | 8 | 8 | 7 | 6 | 3 | 1 | 0 | 0 | -1 | 1.7 | 7.6 | | | | | | | | | | | | | | | | | | | | | | | |
| 17-Mar | -2 | -3 | -3 | -3 | -4 | -4 | -5 | -5 | -3 | -3 | -3 | -1 | -1 | -2 | -2 | -2 | -3 | -3 | -4 | -4 | -4 | -4 | -4 | -5 | -3.1 | -1.2 | | | | | | | | | | | | | | | | | | | | | | | |
| 18-Mar | -5 | -6 | -7 | -7 | -7 | -8 | -7 | -7 | -7 | -7 | -6 | -5 | -5 | -4 | -3 | -3 | -3 | -3 | -5 | -8 | -9 | -10 | -12 | -14 | -6.7 | -3.2 | | | | | | | | | | | | | | | | | | | | | | | |
| 19-Mar | -15 | -15 | -15 | -15 | -13 | -13 | -13 | -12 | -11 | -9 | -8 | -6 | -5 | -3 | -3 | -3 | -4 | -5 | -6 | -8 | -10 | -11 | -14 | -15 | -9.7 | -2.6 | | | | | | | | | | | | | | | | | | | | | | | |
| 20-Mar | -17 | -16 | -18 | -18 | -13 | -10 | -9 | -10 | -10 | -9 | -8 | -7 | -6 | -5 | -6 | -6 | -6 | -5 | -6 | -9 | -10 | -8 | -9 | -10 | -9.6 | -4.9 | | | | | | | | | | | | | | | | | | | | | | | |
| 21-Mar | -10 | -10 | -11 | -12 | -12 | -12 | -12 | -11 | -8 | -7 | -6 | -3 | -2 | -2 | -2 | -2 | -1 | -2 | -4 | -6 | -8 | -9 | -9 | -10 | -7.2 | -1.4 | | | | | | | | | | | | | | | | | | | | | | | |
| 22-Mar | -10 | -11 | -11 | -12 | -12 | -16 | -18 | -17 | -13 | -10 | -8 | -6 | -6 | -5 | -5 | -4 | -5 | -5 | -6 | -7 | -7 | -7 | -7 | -7 | -8.9 | -4.2 | | | | | | | | | | | | | | | | | | | | | | | |
| 23-Mar | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -6 | -6 | -4 | -3 | -3 | -1 | -2 | -2 | -2 | -4 | -6 | -7 | -8 | -9 | -14 | -5.8 | -1.4 | | | | | | | | | | | | | | | | | | | | | | | |
| 24-Mar | -15 | -16 | -17 | -17 | -15 | -15 | -15 | -14 | -12 | -9 | -7 | -4 | -3 | 0 | 2 | 2 | 2 | 0 | 0 | -2 | -2 | -3 | -5 | -6 | -7.1 | 2.2 | | | | | | | | | | | | | | | | | | | | | | | |
| 25-Mar | -7 | -8 | -9 | -12 | -13 | -13 | -13 | -12 | -10 | -6 | -1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 3 | 0 | -3 | -4 | -5 | -6 | -4.0 | 6.3 | | | | | | | | | | | | | | | | | | | | | | | |
| 26-Mar | -7 | -9 | -9 | -9 | -9 | -9 | -10 | -8 | -6 | -2 | 3 | 5 | 6 | 7 | 7 | 7 | 6 | 5 | 4 | 1 | 0 | -1 | -2 | -2 | -1.4 | 7.2 | | | | | | | | | | | | | | | | | | | | | | | |
| 27-Mar | -3 | -3 | -3 | -4 | -6 | -7 | -5 | -5 | -2 | 2 | 3 | 5 | 5 | 6 | 5 | 6 | 7 | 6 | 6 | 3 | 3 | 4 | 4 | 3 | 1.3 | 6.7 | | | | | | | | | | | | | | | | | | | | | | | |
| 28-Mar | 2 | 1 | 0 | -1 | -1 | -1 | -2 | -1 | 1 | 2 | 4 | 5 | 7 | 7 | 8 | 8 | 9 | 8 | 7 | 5 | 3 | 2 | 2 | 1 | 3.2 | 9.1 | | | | | | | | | | | | | | | | | | | | | | | |
| 29-Mar | 0 | 0 | -1 | -1 | -1 | -1 | -2 | -2 | -1 | -1 | 2 | 4 | 7 | 8 | 9 | 9 | 10 | 7 | 6 | 4 | 3 | 2 | 2 | 2 | 2.8 | 9.9 | | | | | | | | | | | | | | | | | | | | | | | |
| 30-Mar | 2 | 1 | 0 | 0 | 0 | -1 | -1 | -1 | 0 | 1 | 4 | 6 | 7 | 8 | 8 | 8 | 8 | 7 | 7 | 6 | 4 | 4 | 2 | 1 | 0 | 3.1 | 8.2 | | | | | | | | | | | | | | | | | | | | | | |
| 31-Mar | 0 | 0 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | 2 | 4 | 5 | 6 | 7 | 8 | 8 | 8 | 8 | 6 | 4 | 2 | -1 | -2 | -3 | 2.3 | 8.0 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | -5.9 | -6.4 | -6.7 | -7.0 | -7.0 | -7.1 | -7.3 | -7.0 | -5.8 | -3.9 | -1.7 | -0.2 | 0.8 | 1.7 | 1.9 | 2.0 | 1.9 | 1.4 | 0.2 | -1.5 | -2.4 | -3.4 | -4.3 | -5.1 | Diurnal Average | |
| | | | | | | | | | | | | | | | | | | | | | | | | 2.3 | 2.1 | 2.2 | 3.1 | 2.9 | 4.0 | 4.5 | 5.2 | 6.5 | 6.7 | 8.2 | 7.6 | 7.2 | 8.3 | 9.0 | 8.6 | 9.9 | 8.3 | 6.7 | 4.8 | 4.0 | 4.2 | 3.6 | 3.0 | Diurnal Maximum | |



Hourly Averages

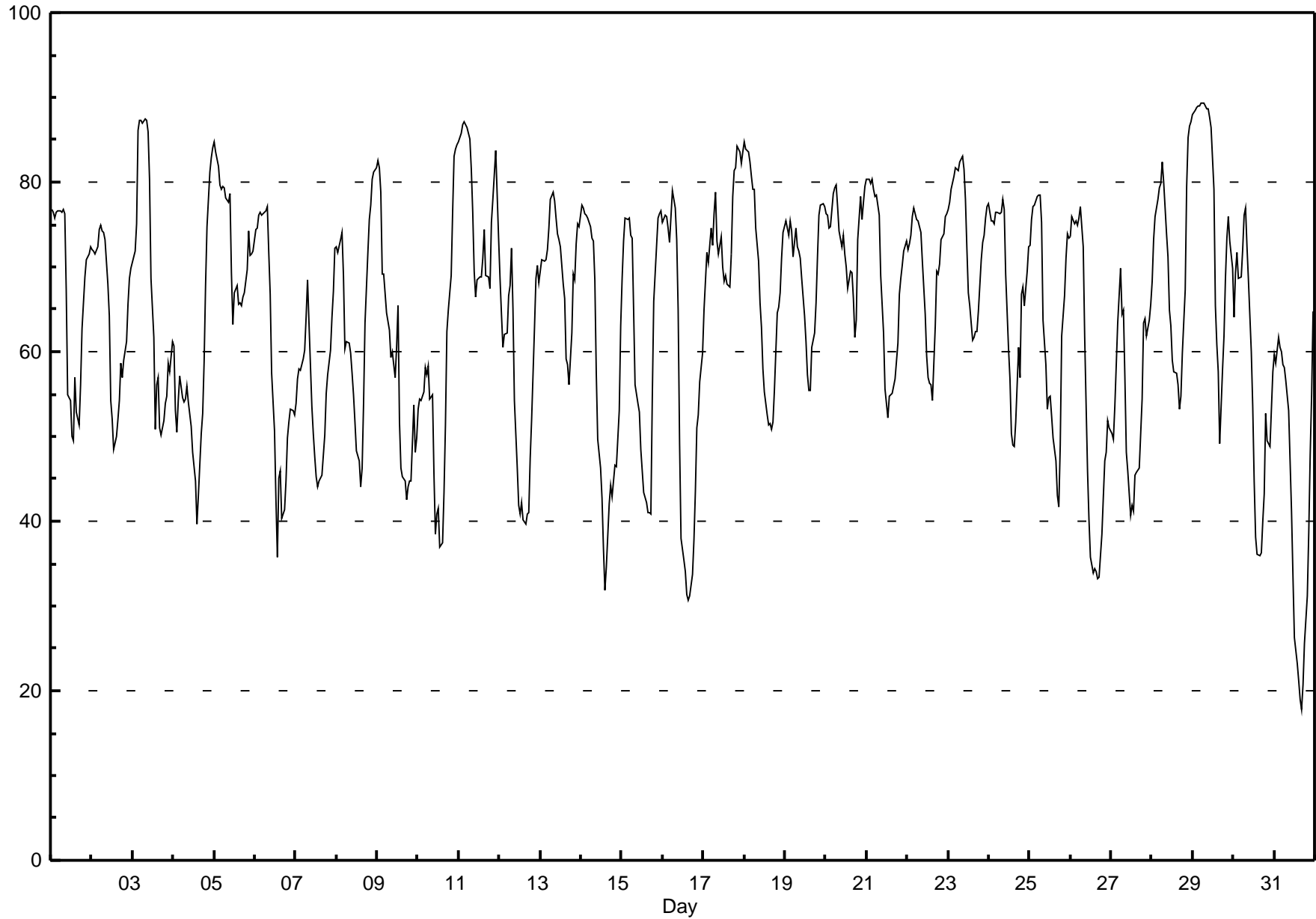
Relative Humidity (RH) - %

Henry Pirker - March 2012

| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 89.4 % on Mar 29 06:00 Maximum Daily Average: 77.3 % on Mar 29 | | Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------|------|
| Minimum Value: 18 % on Mar 31 17:00 Maximum Diurnal Average: 74.1 % at hour 7 Monthly Average: 63.91 % | | Minimum Daily Average: 43.3 % on Mar 31 Minimum Diurnal Average: 49.5 % at hour 16 Percentiles: P ₁ = 30.7 P ₁₀ = 44.2 Q ₁ = 53.9 Median = 66.7 Q ₃ = 75.2 P ₉₀ = 79.5 P ₉₉ = 88.4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 77 | 76 | 76 | 76 | 77 | 77 | 76 | 77 | 76 | 67 | 55 | 54 | 50 | 49 | 57 | 53 | 51 | 56 | 63 | 66 | 69 | 71 | 72 | 72 | 66.4 | 76.8 | |
| 2-Mar | 72 | 72 | 72 | 72 | 74 | 75 | 74 | 74 | 73 | 68 | 64 | 54 | 52 | 48 | 50 | 52 | 54 | 59 | 57 | 59 | 61 | 66 | 69 | 70 | 64.2 | 74.8 | |
| 3-Mar | 70 | 72 | 75 | 86 | 87 | 87 | 87 | 87 | 87 | 86 | 80 | 69 | 62 | 51 | 56 | 57 | 51 | 50 | 52 | 54 | 55 | 59 | 58 | 61 | 68.3 | 87.4 | |
| 4-Mar | 61 | 53 | 51 | 54 | 57 | 55 | 54 | 54 | 56 | 54 | 51 | 48 | 47 | 45 | 40 | 43 | 50 | 53 | 59 | 68 | 75 | 81 | 83 | 84 | 57.3 | 84.0 | |
| 5-Mar | 85 | 83 | 82 | 80 | 79 | 79 | 79 | 78 | 78 | 79 | 69 | 63 | 67 | 68 | 66 | 66 | 65 | 66 | 67 | 70 | 74 | 71 | 72 | 72 | 73.2 | 84.7 | |
| 6-Mar | 74 | 75 | 76 | 77 | 76 | 76 | 77 | 77 | 72 | 67 | 57 | 51 | 43 | 36 | 45 | 46 | 40 | 41 | 45 | 50 | 52 | 53 | 53 | 53 | 58.8 | 77.2 | |
| 7-Mar | 54 | 57 | 58 | 58 | 59 | 60 | 64 | 69 | 63 | 53 | 50 | 48 | 45 | 44 | 45 | 45 | 48 | 50 | 55 | 57 | 60 | 64 | 67 | 72 | 56.1 | 72.3 | |
| 8-Mar | 72 | 72 | 73 | 74 | 69 | 60 | 61 | 61 | 60 | 57 | 55 | 52 | 48 | 47 | 44 | 46 | 54 | 63 | 72 | 76 | 77 | 80 | 81 | 82 | 64.1 | 81.7 | |
| 9-Mar | 83 | 82 | 79 | 69 | 69 | 65 | 64 | 62 | 59 | 60 | 57 | 60 | 65 | 52 | 46 | 45 | 45 | 43 | 44 | 45 | 45 | 54 | 48 | 50 | 57.9 | 82.6 | |
| 10-Mar | 53 | 54 | 54 | 55 | 58 | 57 | 58 | 54 | 55 | 46 | 38 | 41 | 42 | 37 | 37 | 43 | 51 | 62 | 65 | 69 | 76 | 83 | 84 | 84 | 56.7 | 84.4 | |
| 11-Mar | 85 | 86 | 87 | 87 | 87 | 86 | 85 | 82 | 76 | 70 | 67 | 69 | 69 | 71 | 74 | 69 | 69 | 67 | 75 | 78 | 81 | 84 | 73 | 73 | 76.9 | 87.1 | |
| 12-Mar | 69 | 64 | 61 | 62 | 62 | 67 | 68 | 72 | 65 | 54 | 46 | 42 | 41 | 42 | 40 | 40 | 41 | 41 | 48 | 52 | 63 | 69 | 70 | 68 | 56.1 | 72.2 | |
| 13-Mar | 69 | 71 | 71 | 71 | 72 | 75 | 78 | 79 | 78 | 76 | 74 | 73 | 72 | 68 | 66 | 59 | 58 | 56 | 62 | 69 | 69 | 73 | 75 | 75 | 70.4 | 78.7 | |
| 14-Mar | 77 | 77 | 76 | 76 | 76 | 75 | 73 | 73 | 68 | 58 | 50 | 46 | 43 | 37 | 32 | 35 | 42 | 44 | 43 | 45 | 47 | 47 | 53 | 63 | 56.4 | 77.3 | |
| 15-Mar | 69 | 73 | 76 | 76 | 76 | 74 | 73 | 65 | 56 | 54 | 53 | 48 | 46 | 43 | 42 | 41 | 41 | 41 | 55 | 66 | 72 | 76 | 76 | 77 | 61.2 | 76.7 | |
| 16-Mar | 75 | 76 | 76 | 75 | 73 | 76 | 79 | 77 | 73 | 65 | 49 | 38 | 35 | 34 | 31 | 31 | 31 | 34 | 38 | 44 | 51 | 52 | 56 | 60 | 55.4 | 79.0 | |
| 17-Mar | 65 | 68 | 72 | 71 | 75 | 73 | 76 | 79 | 73 | 72 | 74 | 70 | 68 | 69 | 68 | 68 | 71 | 78 | 81 | 82 | 84 | 84 | 82 | 84 | 74.4 | 84.2 | |
| 18-Mar | 85 | 84 | 83 | 82 | 81 | 79 | 79 | 75 | 71 | 66 | 63 | 58 | 55 | 52 | 51 | 52 | 51 | 52 | 55 | 65 | 65 | 67 | 71 | 74 | 67.3 | 84.7 | |
| 19-Mar | 75 | 75 | 74 | 75 | 74 | 71 | 75 | 72 | 72 | 71 | 69 | 64 | 61 | 57 | 55 | 55 | 61 | 62 | 66 | 71 | 76 | 77 | 77 | 77 | 69.3 | 77.4 | |
| 20-Mar | 76 | 76 | 74 | 75 | 79 | 79 | 80 | 77 | 74 | 72 | 74 | 71 | 70 | 67 | 70 | 69 | 66 | 62 | 64 | 73 | 78 | 76 | 78 | 80 | 73.3 | 79.6 | |
| 21-Mar | 80 | 80 | 80 | 80 | 79 | 78 | 78 | 76 | 69 | 66 | 62 | 56 | 52 | 55 | 55 | 55 | 56 | 57 | 61 | 67 | 69 | 70 | 72 | 73 | 67.8 | 80.4 | |
| 22-Mar | 72 | 73 | 74 | 76 | 77 | 76 | 75 | 75 | 74 | 71 | 64 | 59 | 57 | 56 | 56 | 54 | 63 | 70 | 69 | 70 | 73 | 74 | 76 | 76 | 69.2 | 77.0 | |
| 23-Mar | 77 | 78 | 79 | 81 | 82 | 82 | 81 | 82 | 83 | 82 | 78 | 72 | 67 | 65 | 61 | 62 | 62 | 62 | 65 | 71 | 73 | 74 | 76 | 77 | 73.8 | 83.1 | |
| 24-Mar | 77 | 75 | 75 | 75 | 76 | 76 | 76 | 77 | 78 | 77 | 69 | 60 | 57 | 50 | 49 | 49 | 52 | 61 | 57 | 67 | 68 | 65 | 70 | 72 | 67.0 | 77.9 | |
| 25-Mar | 73 | 76 | 77 | 77 | 78 | 78 | 78 | 75 | 64 | 59 | 53 | 55 | 55 | 52 | 50 | 47 | 43 | 42 | 49 | 62 | 67 | 71 | 74 | 73 | 63.7 | 78.4 | |
| 26-Mar | 74 | 76 | 75 | 75 | 75 | 76 | 77 | 72 | 62 | 54 | 46 | 40 | 36 | 34 | 34 | 34 | 33 | 33 | 38 | 43 | 47 | 48 | 52 | 51 | 53.6 | 77.1 | |
| 27-Mar | 50 | 50 | 54 | 58 | 63 | 70 | 64 | 65 | 57 | 48 | 46 | 41 | 42 | 41 | 45 | 46 | 46 | 50 | 54 | 63 | 64 | 62 | 64 | 66 | 54.6 | 69.8 | |
| 28-Mar | 68 | 73 | 76 | 78 | 79 | 80 | 82 | 80 | 74 | 71 | 65 | 63 | 59 | 58 | 57 | 56 | 53 | 55 | 60 | 67 | 79 | 85 | 87 | 87 | 70.6 | 87.1 | |
| 29-Mar | 88 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 88 | 86 | 79 | 65 | 61 | 58 | 49 | 58 | 62 | 69 | 73 | 76 | 73 | 70 | 77.3 | 89.4 |
| 30-Mar | 64 | 69 | 72 | 69 | 69 | 72 | 76 | 77 | 72 | 68 | 60 | 54 | 45 | 38 | 36 | 36 | 36 | 40 | 43 | 53 | 49 | 49 | 53 | 58 | 56.6 | 76.9 | |
| 31-Mar | 60 | 59 | 62 | 61 | 60 | 58 | 58 | 57 | 53 | 47 | 41 | 34 | 26 | 23 | 21 | 19 | 18 | 21 | 26 | 31 | 39 | 48 | 55 | 65 | 43.3 | 64.8 | |
| | 71.9 | 72.4 | 72.8 | 73.2 | 73.8 | 73.6 | 74.1 | 73.2 | 69.7 | 65.3 | 60.2 | 56.1 | 53.4 | 50.2 | 49.7 | 49.5 | 50.1 | 52.6 | 56.2 | 61.8 | 65.4 | 67.9 | 69.7 | 70.9 | Diurnal Average | | |
| | 87.9 | 88.5 | 88.8 | 88.9 | 89.1 | 89.4 | 89.3 | 89.0 | 88.6 | 88.6 | 87.6 | 86.5 | 79.1 | 69.0 | 71.0 | 74.5 | 71.5 | 78.3 | 81.4 | 81.7 | 84.2 | 85.2 | 86.6 | 87.1 | Diurnal Maximum | | |

Hourly Averages

Relative Humidity (RH) - %
Henry Pirker - March 2012

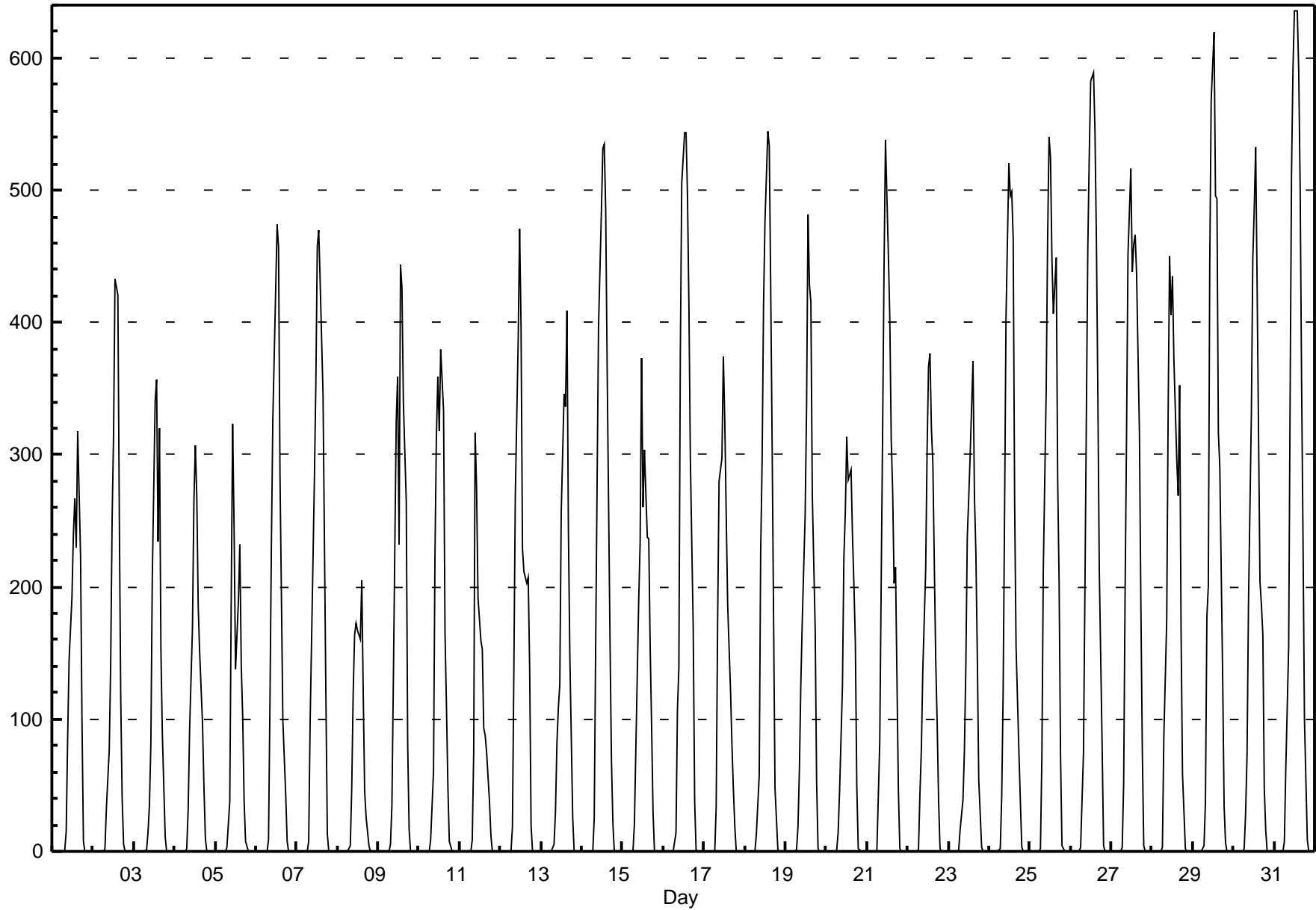


Hourly Averages

Solar Radiation (SR) - W/m²

Henry Pirker - March 2012

| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 635.4 W/m ² on Mar 31 14:00 Maximum Daily Average: 197.4 W/m ² on Mar 31 | | Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-----|-----|-----|---------------|-----------------|
| Minimum Value: 0 W/m ² on Mar 1 01:00 Maximum Diurnal Average: 393.7 W/m ² at hour 14 Monthly Average: 115.76 W/m ² | | Minimum Daily Average: 51.6 W/m ² on Mar 8 Minimum Diurnal Average: 0.0 W/m ² at hour 1 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 4.4 Q ₃ = 212.0 P ₉₀ = 402.6 P ₉₉ = 577.1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 15 | 86 | 145 | 192 | 240 | 267 | 230 | 318 | 224 | 99 | 7 | 0 | 0 | 0 | 0 | 0 | 76.0 | 318.2 |
| 2-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 33 | 77 | 142 | 251 | 314 | 433 | 421 | 256 | 116 | 41 | 5 | 0 | 0 | 0 | 0 | 0 | 87.2 | 433.1 |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 14 | 35 | 82 | 207 | 340 | 357 | 234 | 320 | 153 | 89 | 11 | 0 | 0 | 0 | 0 | 0 | 76.8 | 356.8 |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 32 | 92 | 169 | 265 | 307 | 270 | 185 | 151 | 96 | 49 | 10 | 0 | 0 | 0 | 0 | 0 | 67.8 | 306.9 |
| 5-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 38 | 189 | 324 | 245 | 138 | 189 | 232 | 141 | 102 | 38 | 7 | 0 | 0 | 0 | 0 | 0 | 68.6 | 323.7 |
| 6-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 112 | 231 | 327 | 426 | 474 | 456 | 284 | 193 | 99 | 43 | 7 | 0 | 0 | 0 | 0 | 0 | 110.9 | 474.4 |
| 7-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 98 | 220 | 283 | 355 | 458 | 470 | 431 | 345 | 231 | 116 | 13 | 0 | 0 | 0 | 0 | 0 | 126.1 | 469.7 |
| 8-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 48 | 120 | 164 | 173 | 167 | 160 | 205 | 120 | 45 | 26 | 5 | 0 | 0 | 0 | 0 | 0 | 51.6 | 205.1 |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 35 | 128 | 326 | 359 | 232 | 443 | 426 | 339 | 265 | 80 | 16 | 0 | 0 | 0 | 0 | 0 | 110.6 | 443.2 |
| 10-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 61 | 222 | 313 | 359 | 318 | 379 | 333 | 166 | 110 | 50 | 8 | 0 | 0 | 0 | 0 | 0 | 97.0 | 379.3 |
| 11-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 75 | 316 | 275 | 192 | 160 | 153 | 93 | 88 | 75 | 38 | 11 | 0 | 0 | 0 | 0 | 0 | 61.9 | 316.3 |
| 12-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 138 | 269 | 386 | 470 | 397 | 229 | 212 | 202 | 207 | 139 | 20 | 0 | 0 | 0 | 0 | 0 | 111.9 | 470.3 |
| 13-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 31 | 82 | 108 | 126 | 256 | 346 | 336 | 409 | 244 | 149 | 26 | 0 | 0 | 0 | 0 | 0 | 88.3 | 408.8 |
| 14-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 155 | 278 | 397 | 484 | 531 | 535 | 484 | 367 | 160 | 69 | 22 | 0 | 0 | 0 | 0 | 0 | 146.2 | 535.3 |
| 15-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 77 | 189 | 233 | 374 | 260 | 304 | 237 | 236 | 154 | 94 | 29 | 0 | 0 | 0 | 0 | 0 | 92.1 | 373.7 |
| 16-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 107 | 139 | 374 | 506 | 544 | 544 | 496 | 412 | 298 | 169 | 38 | 1 | 0 | 0 | 0 | 0 | 151.7 | 543.8 |
| 17-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 173 | 280 | 297 | 374 | 325 | 254 | 187 | 121 | 80 | 46 | 18 | 0 | 0 | 0 | 0 | 0 | 91.2 | 374.0 |
| 18-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 57 | 226 | 294 | 412 | 477 | 544 | 534 | 426 | 308 | 177 | 47 | 1 | 0 | 0 | 0 | 0 | 146.5 | 544.2 |
| 19-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 19 | 62 | 127 | 174 | 254 | 336 | 482 | 428 | 415 | 269 | 168 | 52 | 2 | 0 | 0 | 0 | 0 | 116.2 | 482.1 |
| 20-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 14 | 46 | 124 | 222 | 256 | 314 | 281 | 288 | 239 | 202 | 157 | 50 | 2 | 0 | 0 | 0 | 0 | 91.5 | 313.9 |
| 21-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 82 | 203 | 318 | 443 | 538 | 452 | 403 | 311 | 273 | 203 | 214 | 46 | 2 | 0 | 0 | 0 | 0 | 145.3 | 537.9 |
| 22-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 43 | 77 | 137 | 212 | 304 | 366 | 376 | 320 | 294 | 145 | 98 | 39 | 2 | 0 | 0 | 0 | 0 | 100.6 | 376.1 |
| 23-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 16 | 39 | 76 | 139 | 237 | 267 | 299 | 371 | 269 | 226 | 147 | 54 | 3 | 0 | 0 | 0 | 0 | 89.4 | 370.8 |
| 24-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 41 | 120 | 257 | 404 | 521 | 496 | 499 | 463 | 266 | 155 | 75 | 38 | 3 | 0 | 0 | 0 | 0 | 139.1 | 521.0 |
| 25-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 71 | 213 | 348 | 464 | 540 | 525 | 448 | 407 | 450 | 282 | 204 | 73 | 4 | 0 | 0 | 0 | 0 | 168.0 | 539.9 |
| 26-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 75 | 197 | 329 | 456 | 525 | 583 | 589 | 545 | 462 | 347 | 213 | 79 | 5 | 0 | 0 | 0 | 0 | 183.7 | 588.8 |
| 27-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 52 | 197 | 314 | 452 | 516 | 438 | 458 | 466 | 437 | 316 | 186 | 76 | 4 | 0 | 0 | 0 | 0 | 163.1 | 516.1 |
| 28-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 87 | 175 | 332 | 451 | 406 | 435 | 372 | 296 | 269 | 353 | 168 | 58 | 3 | 0 | 0 | 0 | 0 | 142.0 | 450.7 |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 38 | 178 | 201 | 445 | 569 | 619 | 496 | 494 | 317 | 291 | 131 | 34 | 7 | 0 | 0 | 0 | 0 | 159.4 | 619.2 |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 29 | 74 | 188 | 331 | 448 | 486 | 533 | 428 | 204 | 186 | 164 | 48 | 16 | 0 | 0 | 0 | 0 | 130.8 | 533.1 |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 63 | 155 | 341 | 514 | 593 | 635 | 635 | 591 | 502 | 356 | 235 | 100 | 9 | 0 | 0 | 0 | 0 | 197.4 | 635.4 |
| | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 26.2 | 97.9 | 202.3 | 301.5 | 370.2 | 383.6 | 393.7 | 353.8 | 290.5 | 203.2 | 118.5 | 33.8 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | Diurnal Average |
| | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.3 | 87.3 | 213.2 | 347.7 | 514.2 | 592.7 | 635.3 | 635.4 | 590.6 | 502.3 | 356.3 | 235.3 | 100.1 | 16.3 | 0.0 | 0.0 | 0.0 | 0.0 | Diurnal Maximum |



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - March 2012

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1 Spd | 7 | 8 | 6 | 5 | 5 | 4 | 5 | 3 | 5 | 5 | 4 | 5 | 6 | 6 | 8 | 6 | 4 | 5 | 5 | 5 | 3 | 3 | 4 | 4 | 4.0 | 8.2 |
| Dir | 340 | 354 | 357 | 343 | 328 | 333 | 315 | 318 | 327 | 331 | 287 | 289 | 293 | 298 | 331 | 323 | 339 | 17 | 76 | 84 | 102 | 314 | 315 | 327 | 333.3 | 331.4 |
| 2 Spd | 4 | 4 | 4 | 4 | 2 | 2 | 3 | 4 | 2 | 2 | 2 | 3 | 5 | 8 | 15 | 22 | 24 | 20 | 18 | 15 | 10 | 6 | 3 | 2 | 7.1 | 24.2 |
| Dir | 319 | 296 | 305 | 333 | 316 | 299 | 326 | 315 | 291 | 280 | 189 | 276 | 298 | 319 | 281 | 260 | 275 | 284 | 280 | 283 | 272 | 236 | 212 | 331 | 281.4 | 274.5 |
| 3 Spd | 2 | 4 | 11 | 2 | 2 | 6 | 6 | 6 | 7 | 6 | 3 | 7 | 14 | 25 | 31 | 26 | 29 | 21 | 19 | 11 | 16 | 14 | 17 | 17 | 8.5 | 31.0 |
| Dir | 166 | 160 | 239 | 192 | 137 | 161 | 131 | 134 | 150 | 160 | 150 | 213 | 246 | 289 | 318 | 308 | 292 | 289 | 292 | 268 | 254 | 247 | 248 | 250 | 268.6 | 318.5 |
| 4 Spd | 14 | 16 | 20 | 15 | 11 | 14 | 12 | 16 | 15 | 12 | 8 | 10 | 14 | 13 | 17 | 14 | 13 | 13 | 14 | 8 | 3 | 6 | 4 | 4 | 10.9 | 19.7 |
| Dir | 251 | 262 | 264 | 254 | 248 | 252 | 247 | 252 | 253 | 249 | 240 | 249 | 260 | 271 | 275 | 254 | 229 | 229 | 231 | 236 | 185 | 166 | 147 | 143 | 248.2 | 263.8 |
| 5 Spd | 3 | 1 | 3 | 4 | 3 | 4 | 4 | 5 | 5 | 3 | 5 | 9 | 15 | 18 | 19 | 17 | 15 | 11 | 13 | 14 | 11 | 11 | 8 | 6 | 7.6 | 18.7 |
| Dir | 105 | 76 | 331 | 316 | 289 | 334 | 338 | 316 | 319 | 310 | 291 | 316 | 329 | 356 | 357 | 2 | 5 | 21 | 7 | 349 | 347 | 3 | 26 | 56 | 351.9 | 357.4 |
| 6 Spd | 4 | 3 | 6 | 7 | 7 | 7 | 8 | 8 | 9 | 8 | 6 | 9 | 8 | 11 | 12 | 10 | 26 | 28 | 25 | 24 | 17 | 15 | 8 | 8 | 6.2 | 27.6 |
| Dir | 97 | 102 | 122 | 139 | 127 | 119 | 120 | 114 | 126 | 124 | 180 | 234 | 254 | 273 | 314 | 284 | 258 | 258 | 265 | 265 | 263 | 245 | 234 | 235 | 242.1 | 258.1 |
| 7 Spd | 4 | 6 | 15 | 17 | 13 | 11 | 6 | 3 | 5 | 11 | 14 | 20 | 24 | 26 | 24 | 23 | 25 | 23 | 23 | 25 | 21 | 10 | 5 | 5 | 13.8 | 26.0 |
| Dir | 310 | 287 | 283 | 284 | 278 | 289 | 268 | 301 | 293 | 292 | 279 | 274 | 266 | 271 | 262 | 262 | 258 | 258 | 260 | 269 | 281 | 316 | 39 | 97 | 273.7 | 270.9 |
| 8 Spd | 8 | 5 | 6 | 3 | 7 | 17 | 15 | 16 | 14 | 13 | 13 | 10 | 7 | 4 | 2 | 8 | 8 | 5 | 8 | 5 | 4 | 6 | 8 | 5 | 4.0 | 16.8 |
| Dir | 110 | 120 | 132 | 106 | 250 | 248 | 246 | 239 | 247 | 244 | 249 | 237 | 240 | 266 | 326 | 198 | 213 | 115 | 83 | 84 | 99 | 103 | 113 | 120 | 214.2 | 248.2 |
| 9 Spd | 3 | 4 | 6 | 5 | 2 | 4 | 6 | 9 | 15 | 17 | 21 | 23 | 20 | 25 | 29 | 23 | 21 | 31 | 24 | 22 | 21 | 15 | 23 | 20 | 14.0 | 30.6 |
| Dir | 94 | 126 | 163 | 169 | 96 | 190 | 193 | 198 | 216 | 236 | 255 | 279 | 261 | 257 | 263 | 273 | 266 | 273 | 267 | 271 | 272 | 286 | 277 | 278 | 260.2 | 273.4 |
| 10 Spd | 11 | 11 | 14 | 11 | 8 | 9 | 10 | 6 | 6 | 3 | 4 | 7 | 8 | 5 | 7 | 8 | 8 | 9 | 6 | 7 | 9 | 3 | 4 | 8 | 2.1 | 13.7 |
| Dir | 275 | 247 | 261 | 269 | 256 | 250 | 210 | 254 | 354 | 338 | 268 | 189 | 179 | 134 | 93 | 69 | 104 | 126 | 126 | 87 | 121 | 131 | 96 | 117 | 196.5 | 261.2 |
| 11 Spd | 8 | 7 | 6 | 6 | 5 | 4 | 5 | 6 | 7 | 7 | 3 | 3 | 3 | 5 | 5 | 6 | 5 | 5 | 4 | 10 | 5 | 1 | 5 | 11 | 1.4 | 11.2 |
| Dir | 124 | 115 | 95 | 102 | 94 | 72 | 78 | 96 | 106 | 120 | 158 | 324 | 33 | 351 | 300 | 302 | 115 | 91 | 105 | 268 | 285 | 323 | 235 | 255 | 102.9 | 255.2 |
| 12 Spd | 13 | 14 | 12 | 11 | 9 | 3 | 5 | 2 | 4 | 5 | 6 | 10 | 11 | 15 | 14 | 17 | 14 | 11 | 6 | 4 | 1 | 3 | 5 | 9 | 2.0 | 16.5 |
| Dir | 263 | 228 | 228 | 234 | 238 | 294 | 226 | 79 | 128 | 136 | 107 | 88 | 77 | 83 | 87 | 89 | 88 | 81 | 62 | 27 | 261 | 320 | 322 | 327 | 105.7 | 89.4 |
| 13 Spd | 12 | 13 | 12 | 13 | 17 | 16 | 18 | 18 | 15 | 17 | 16 | 15 | 14 | 13 | 12 | 8 | 7 | 4 | 5 | 5 | 5 | 3 | 5 | 5 | 10.8 | 17.6 |
| Dir | 315 | 319 | 299 | 307 | 314 | 316 | 303 | 318 | 307 | 305 | 302 | 302 | 301 | 300 | 309 | 309 | 311 | 321 | 328 | 5 | 358 | 295 | 348 | 322 | 311.2 | 302.6 |
| 14 Spd | 6 | 4 | 1 | 2 | 4 | 4 | 4 | 4 | 5 | 5 | 3 | 4 | 3 | 3 | 7 | 10 | 12 | 10 | 11 | 10 | 7 | 3 | 1 | 1 | 2.3 | 12.4 |
| Dir | 354 | 327 | 284 | 305 | 340 | 332 | 305 | 312 | 315 | 295 | 289 | 290 | 296 | 29 | 48 | 62 | 75 | 75 | 88 | 99 | 115 | 113 | 193 | 296 | 36.8 | 74.8 |
| 15 Spd | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 7 | 12 | 14 | 14 | 13 | 10 | 12 | 12 | 11 | 10 | 7 | 5 | 2 | 2 | 0 | 5 | 1 | 4.7 | 14.5 |
| Dir | 294 | 33 | 184 | 320 | 18 | 314 | 67 | 100 | 98 | 107 | 100 | 108 | 90 | 88 | 88 | 78 | 77 | 142 | 331 | 89 | 302 | 20 | 322 | 303 | 90.9 | 100.4 |
| 16 Spd | 5 | 3 | 6 | 5 | 4 | 4 | 8 | 9 | 8 | 9 | 10 | 16 | 17 | 17 | 19 | 19 | 17 | 13 | 8 | 8 | 7 | 5 | 3 | 1 | 8.6 | 19.2 |
| Dir | 325 | 324 | 301 | 255 | 231 | 237 | 222 | 236 | 237 | 233 | 244 | 266 | 267 | 262 | 258 | 266 | 270 | 277 | 274 | 237 | 262 | 242 | 285 | 254 | 260.0 | 258.1 |
| 17 Spd | 3 | 4 | 5 | 0 | 3 | 5 | 11 | 12 | 16 | 15 | 15 | 14 | 15 | 13 | 15 | 12 | 12 | 10 | 9 | 9 | 9 | 4 | 2 | 8 | 8.1 | 16.4 |
| Dir | 349 | 357 | 138 | 152 | 5 | 32 | 65 | 57 | 68 | 71 | 68 | 55 | 51 | 56 | 46 | 50 | 48 | 43 | 45 | 56 | 60 | 95 | 349 | 307 | 53.0 | 67.9 |
| 18 Spd | 9 | 10 | 7 | 11 | 13 | 11 | 13 | 17 | 16 | 15 | 14 | 15 | 15 | 15 | 14 | 13 | 9 | 10 | 7 | 4 | 7 | 3 | 3 | 4 | 9.3 | 16.7 |
| Dir | 310 | 317 | 264 | 269 | 288 | 291 | 277 | 289 | 302 | 308 | 305 | 306 | 302 | 301 | 300 | 309 | 303 | 296 | 308 | 358 | 79 | 83 | 85 | 335 | 301.4 | 288.7 |
| 19 Spd | 4 | 4 | 4 | 1 | 2 | 4 | 4 | 6 | 8 | 10 | 9 | 7 | 8 | 6 | 7 | 8 | 9 | 10 | 9 | 4 | 2 | 2 | 3 | 3 | 3.9 | 9.7 |
| Dir | 339 | 308 | 311 | 75 | 45 | 316 | 3 | 331 | 348 | 355 | 354 | 10 | 42 | 43 | 37 | 50 | 86 | 94 | 88 | 81 | 354 | 5 | 311 | 329 | 21.4 | 94.1 |
| 20 Spd | 2 | 2 | 4 | 2 | 5 | 8 | 8 | 8 | 12 | 11 | 10 | 12 | 9 | 7 | 10 | 9 | 8 | 4 | 0 | 3 | 4 | 5 | 6 | 7 | 5.1 | 11.7 |
| Dir | 344 | 330 | 339 | 48 | 65 | 74 | 71 | 63 | 54 | 79 | 59 | 48 | 46 | 29 | 346 | 345 | 359 | 19 | 227 | 109 | 99 | 112 | 98 | 90 | 50.0 | 54.3 |
| 21 Spd | 7 | 6 | 4 | 4 | 5 | 7 | 8 | 6 | 8 | 9 | 8 | 4 | 5 | 7 | 5 | 6 | 7 | 10 | 10 | 9 | 8 | 6 | 8 | 6 | 6.4 | 10.5 |
| Dir | 86 | 86 | 55 | 84 | 79 | 67 | 68 | 64 | 68 | 84 | 95 | 102 | 15 | 28 | 33 | 26 | 63 | 71 | 66 | 61 | 78 | 77 | 77 | 78 | 68.3 | 70.7 |
| 22 Spd | 6 | 5 | 6 | 5 | 5 | 4 | 4 | 6 | 6 | 6 | 7 | 8 | 9 | 10 | 10 | 6 | 6 | 7 | 7 | 8 | 5 | 4 | 5 | 5 | 4.7 | 10.2 |
| Dir | 75 | 67 | 68 | 58 | 58 | 323 | 329 | 329 | 330 | 324 | 24 | 31 | 359 | 325 | 293 | 324 | 37 | 30 | 24 | 21 | 355 | 329 | 312 | 319 | 0.8 | 293.0 |

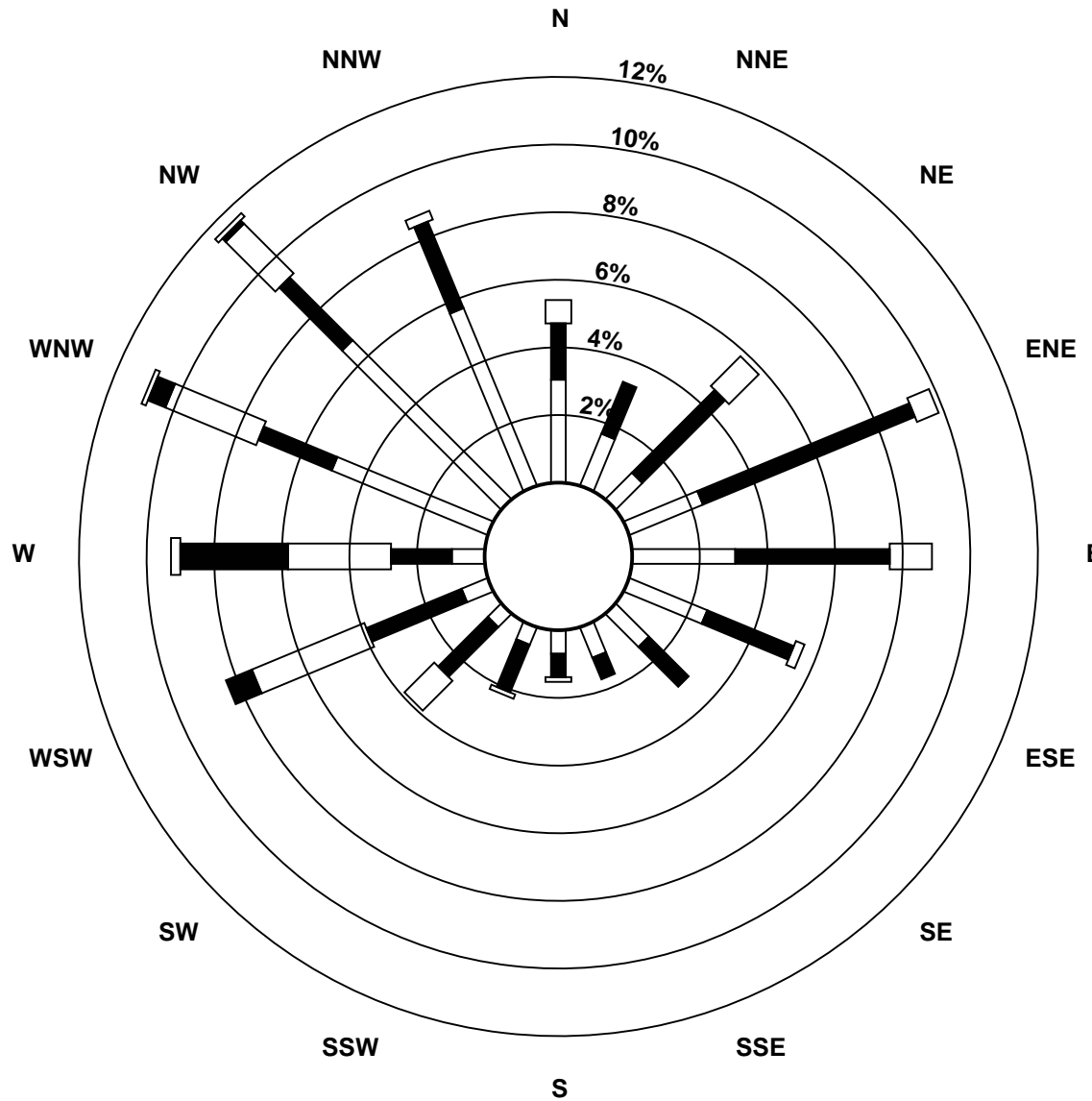
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - March 2012

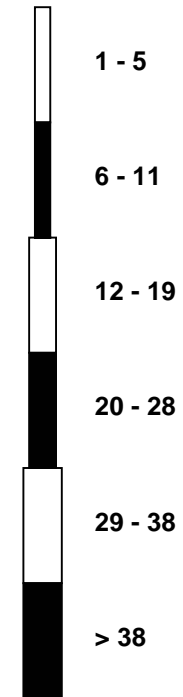
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--|-------------------------------|---|----------|----------|----------|-------|-------|-------|-------|-------|-------|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 23 Spd | 4 | 3 | 7 | 6 | 6 | 6 | 1 | 6 | 8 | 9 | 8 | 6 | 5 | 8 | 8 | 8 | 7 | 7 | 7 | 5 | 5 | 3 | 5 | 5.1 | 8.9 | |
| Dir | 315 | 55 | 69 | 77 | 86 | 124 | 231 | 45 | 74 | 88 | 78 | 57 | 62 | 39 | 58 | 71 | 62 | 49 | 43 | 48 | 64 | 76 | 3 | 323 | 61.1 | 88.4 |
| 24 Spd | 5 | 4 | 4 | 3 | 6 | 3 | 2 | 1 | 2 | 2 | 5 | 5 | 6 | 5 | 6 | 7 | 5 | 10 | 4 | 5 | 5 | 5 | 3 | 3 | 3.4 | 9.7 |
| Dir | 335 | 326 | 313 | 350 | 298 | 303 | 314 | 289 | 301 | 291 | 285 | 312 | 332 | 22 | 48 | 82 | 42 | 346 | 347 | 325 | 338 | 355 | 313 | 301 | 338.5 | 345.6 |
| 25 Spd | 5 | 4 | 5 | 4 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 8 | 8 | 8 | 6 | 8 | 4 | 5 | 6 | 3 | 3 | 3 | 3 | 2 | 4.2 | 8.5 |
| Dir | 325 | 22 | 20 | 338 | 282 | 347 | 3 | 329 | 296 | 286 | 288 | 319 | 348 | 345 | 357 | 345 | 347 | 291 | 312 | 354 | 316 | 317 | 338 | 354 | 332.5 | 344.8 |
| 26 Spd | 4 | 3 | 7 | 7 | 7 | 1 | 3 | 4 | 5 | 3 | 2 | 7 | 10 | 10 | 10 | 11 | 12 | 11 | 10 | 10 | 10 | 7 | 3 | 4 | 4.5 | 12.4 |
| Dir | 325 | 308 | 302 | 316 | 341 | 332 | 351 | 337 | 289 | 285 | 270 | 104 | 77 | 62 | 61 | 56 | 52 | 50 | 55 | 59 | 69 | 71 | 5 | 55 | 39.7 | 52.3 |
| 27 Spd | 4 | 5 | 4 | 2 | 1 | 3 | 4 | 2 | 3 | 1 | 5 | 3 | 6 | 7 | 10 | 9 | 7 | 8 | 5 | 2 | 7 | 10 | 12 | 10 | 2.0 | 11.8 |
| Dir | 64 | 84 | 119 | 121 | 62 | 59 | 65 | 275 | 305 | 245 | 141 | 248 | 284 | 311 | 345 | 345 | 312 | 347 | 333 | 5 | 91 | 92 | 100 | 106 | 37.0 | 99.8 |
| 28 Spd | 9 | 8 | 8 | 9 | 10 | 10 | 4 | 8 | 9 | 9 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 8 | 7 | 3 | 22 | 10 | 9 | 6 | 4.7 | 21.6 |
| Dir | 92 | 77 | 97 | 97 | 89 | 110 | 84 | 95 | 108 | 93 | 80 | 78 | 63 | 52 | 54 | 54 | 48 | 60 | 66 | 32 | 266 | 286 | 338 | 208 | 73.5 | 265.6 |
| 29 Spd | 7 | 6 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 5 | 6 | 7 | 8 | 10 | 8 | 14 | 14 | 6 | 3 | 5 | 4 | 5 | 0.9 | 13.9 |
| Dir | 175 | 180 | 163 | 167 | 164 | 125 | 114 | 101 | 101 | 72 | 115 | 60 | 56 | 33 | 22 | 38 | 39 | 310 | 283 | 319 | 93 | 151 | 172 | 265 | 34.4 | 283.3 |
| 30 Spd | 9 | 4 | 6 | 7 | 4 | 1 | 1 | 1 | 3 | 8 | 10 | 12 | 15 | 15 | 14 | 11 | 14 | 10 | 11 | 12 | 12 | 11 | 10 | 12 | 7.8 | 15.1 |
| Dir | 247 | 282 | 260 | 299 | 327 | 123 | 291 | 353 | 232 | 242 | 259 | 250 | 257 | 265 | 271 | 258 | 232 | 212 | 205 | 184 | 208 | 234 | 238 | 246 | 243.9 | 264.7 |
| 31 Spd | 10 | 8 | 9 | 8 | 8 | 7 | 5 | 6 | 7 | 13 | 17 | 18 | 20 | 18 | 16 | 15 | 13 | 13 | 8 | 4 | 4 | 3 | 2 | 2 | 7.3 | 19.7 |
| Dir | 247 | 234 | 217 | 224 | 226 | 220 | 209 | 203 | 201 | 219 | 240 | 253 | 271 | 265 | 281 | 275 | 288 | 303 | 9 | 53 | 114 | 128 | 316 | 341 | 254.2 | 271.4 |
| Spd | 1.8 | 1.4 | 2.2 | 2.0 | 1.8 | 1.7 | 1.4 | 1.5 | 1.1 | 1.2 | 1.9 | 3.4 | 4.4 | 5.4 | 6.3 | 5.0 | 3.7 | 3.7 | 3.2 | 2.5 | 2.0 | 0.9 | 1.4 | 1.9 | Diurnal Average | |
| Dir | 305.9 | 299.3 | 265.1 | 278.7 | 293.7 | 285.4 | 279.1 | 301.7 | 310.9 | 269.4 | 270.3 | 289.7 | 301.3 | 313.7 | 321.2 | 320.4 | 308.3 | 307.7 | 311.5 | 311.1 | 286.1 | 281.3 | 302.2 | 282.6 | Diurnal Maximum | |
| Spd | 13.8 | 15.6 | 19.7 | 17.3 | 16.7 | 16.8 | 17.6 | 17.5 | 16.4 | 17.5 | 20.6 | 22.9 | 23.5 | 26.0 | 31.0 | 25.7 | 28.7 | 30.6 | 24.8 | 24.7 | 21.6 | 14.6 | 22.7 | 20.5 | Diurnal Maximum | |
| Dir | 250.6 | 262.1 | 263.8 | 283.7 | 314.1 | 248.2 | 302.6 | 317.8 | 67.9 | 304.7 | 255.4 | 278.6 | 265.9 | 270.9 | 318.5 | 307.7 | 291.9 | 273.4 | 265.1 | 268.6 | 265.6 | 244.6 | 277.2 | 277.9 | Diurnal Maximum | |
| Maximum Speed Value: 31 km/h on Mar 3 15:00 | | Minimum Speed Value: 0 km/h on Mar 15 05:00 | | | | | | | | | | Hours in Service: 744 | | | | | | | | | | | | | | |
| Maximum Daily Speed Average: 14.0 km/h on Mar 9 | | Minimum Daily Speed Average: 0.9 km/h on Mar 24 | | | | | | | | | | Hours of Data: 744 | | | | | | | | | | | | | | |
| Maximum Diurnal Speed Average: 6.3 km/h at hour 15 | | Minimum Diurnal Speed Average: 0.9 km/h at hour 22 | | | | | | | | | | Hours of Missing Data: 0 | | | | | | | | | | | | | | |
| Monthly Average Velocity: 2.47 km/h 301.34 deg | | Speed Percentiles: P ₁ = 0.6 P ₁₀ = 2.7 Q ₁ = 4.2 Median = 6.8 Q ₃ = 10.9 P ₉₀ = 15.6 P ₉₉ = 25.5 | | | | | | | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | |
| All monthly, daily, and diurnal averages have been calculated using vector methods | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequency Distribution | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Speed Range (km/h) | | | | | | | | | | | | | | | | | | | | | | | | |
| Direction | 0 to 5 | 5 to 11 | 11 to 19 | 19 to 28 | 28 to 38 | > 38 | Total | | | | | | | | | | | | | | | | | | | |
| North | 39 | 35 | 7 | 0 | 0 | 0 | 81 | | | | | | | | | | | | | | | | | | | |
| NorthEast | 20 | 61 | 12 | 0 | 0 | 0 | 93 | | | | | | | | | | | | | | | | | | | |
| East | 33 | 73 | 18 | 0 | 0 | 0 | 124 | | | | | | | | | | | | | | | | | | | |
| SouthEast | 21 | 28 | 0 | 0 | 0 | 0 | 49 | | | | | | | | | | | | | | | | | | | |
| South | 13 | 14 | 1 | 0 | 0 | 0 | 28 | | | | | | | | | | | | | | | | | | | |
| SouthWest | 7 | 36 | 23 | 0 | 0 | 0 | 66 | | | | | | | | | | | | | | | | | | | |
| West | 29 | 24 | 53 | 36 | 3 | 0 | 145 | | | | | | | | | | | | | | | | | | | |
| NorthWest | 82 | 47 | 27 | 1 | 1 | 0 | 158 | | | | | | | | | | | | | | | | | | | |
| Total | 244 | 318 | 141 | 37 | 4 | 0 | 744 | | | | | | | | | | | | | | | | | | | |

Wind Rose

Wind Speed (WS) (km/h)
Henry Pirker - March 2012



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - March 2012

| | | |
|---|---|---------------------------------|
| Maximum Speed: 31 km/h on Mar 3 15:00 | Maximum Daily Speed Average: 16.5 km/h on Mar 9 | Hours in Service: 744 |
| Minimum Speed: 1 km/h on Mar 29 05:00 | Minimum Daily Speed Average: 5.2 km/h on Mar 24 | Hours of Data: 744 |
| Maximum Diurnal Speed Average: 12.7 km/h at hour 15 | Minimum Diurnal Speed Average: 6.3 km/h at hour 5 | Hours of Missing Data: 0 |
| Monthly Average Speed: 8.69 km/h | Percentiles: P ₁ = 1.0 P ₁₀ = 3.6 Q ₁ = 4.9 Median = 7.3 Q ₃ = 11.1 P ₉₀ = 15.8 P ₉₉ = 25.7 | Percent Operational Time: 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 7 | 8 | 7 | 5 | 5 | 4 | 5 | 3 | 5 | 5 | 4 | 5 | 6 | 6 | 8 | 7 | 5 | 6 | 5 | 5 | 4 | 4 | 4 | 4 | 5.3 | 8.5 |
| 2-Mar | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 5 | 8 | 16 | 22 | 24 | 21 | 18 | 15 | 11 | 6 | 4 | 3 | 8.2 | 24.4 |
| 3-Mar | 3 | 5 | 11 | 3 | 4 | 7 | 6 | 6 | 7 | 6 | 5 | 7 | 14 | 26 | 31 | 26 | 29 | 22 | 19 | 11 | 16 | 14 | 17 | 18 | 13.0 | 31.4 |
| 4-Mar | 14 | 16 | 20 | 15 | 11 | 14 | 12 | 16 | 15 | 12 | 8 | 10 | 14 | 14 | 17 | 15 | 14 | 14 | 14 | 8 | 4 | 6 | 4 | 4 | 12.2 | 19.8 |
| 5-Mar | 3 | 2 | 3 | 5 | 4 | 4 | 4 | 5 | 5 | 4 | 6 | 9 | 15 | 18 | 19 | 17 | 15 | 12 | 13 | 15 | 11 | 11 | 8 | 7 | 9.0 | 19.0 |
| 6-Mar | 5 | 4 | 6 | 7 | 7 | 7 | 8 | 8 | 9 | 8 | 7 | 10 | 9 | 12 | 12 | 11 | 26 | 28 | 25 | 24 | 18 | 15 | 8 | 9 | 11.6 | 27.7 |
| 7-Mar | 7 | 7 | 15 | 18 | 13 | 11 | 6 | 4 | 5 | 11 | 14 | 20 | 24 | 26 | 24 | 23 | 25 | 23 | 23 | 25 | 21 | 10 | 6 | 5 | 15.3 | 26.2 |
| 8-Mar | 8 | 5 | 6 | 5 | 8 | 17 | 16 | 16 | 14 | 13 | 13 | 10 | 7 | 5 | 3 | 8 | 9 | 7 | 8 | 7 | 5 | 6 | 8 | 5 | 8.8 | 16.9 |
| 9-Mar | 3 | 5 | 6 | 5 | 3 | 5 | 6 | 10 | 15 | 17 | 21 | 23 | 21 | 25 | 30 | 24 | 21 | 31 | 24 | 22 | 21 | 15 | 23 | 21 | 16.5 | 30.8 |
| 10-Mar | 12 | 12 | 14 | 11 | 9 | 9 | 10 | 9 | 7 | 5 | 5 | 8 | 8 | 6 | 8 | 8 | 9 | 9 | 7 | 7 | 9 | 4 | 4 | 8 | 8.1 | 13.9 |
| 11-Mar | 8 | 7 | 7 | 7 | 6 | 4 | 6 | 6 | 7 | 8 | 4 | 5 | 4 | 6 | 6 | 7 | 5 | 6 | 7 | 11 | 6 | 3 | 6 | 12 | 6.3 | 11.6 |
| 12-Mar | 14 | 14 | 13 | 11 | 9 | 5 | 6 | 3 | 4 | 6 | 6 | 10 | 12 | 15 | 14 | 17 | 14 | 11 | 7 | 5 | 3 | 4 | 6 | 10 | 9.1 | 16.7 |
| 13-Mar | 12 | 14 | 12 | 13 | 17 | 17 | 18 | 18 | 15 | 18 | 16 | 15 | 15 | 13 | 12 | 9 | 7 | 5 | 6 | 5 | 5 | 3 | 5 | 5 | 11.4 | 17.8 |
| 14-Mar | 6 | 4 | 2 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 7 | 11 | 13 | 10 | 11 | 10 | 7 | 3 | 2 | 1 | 5.6 | 12.5 |
| 15-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 7 | 12 | 15 | 15 | 13 | 10 | 12 | 13 | 11 | 10 | 9 | 6 | 3 | 2 | 1 | 5 | 2 | 6.4 | 14.6 |
| 16-Mar | 5 | 4 | 6 | 6 | 4 | 4 | 9 | 9 | 8 | 9 | 10 | 17 | 17 | 17 | 19 | 19 | 17 | 13 | 8 | 9 | 7 | 5 | 5 | 3 | 9.6 | 19.4 |
| 17-Mar | 3 | 4 | 5 | 3 | 4 | 6 | 11 | 12 | 17 | 15 | 15 | 15 | 15 | 13 | 15 | 13 | 12 | 10 | 9 | 9 | 9 | 6 | 5 | 8 | 9.8 | 16.6 |
| 18-Mar | 10 | 10 | 8 | 11 | 13 | 11 | 13 | 17 | 16 | 15 | 14 | 16 | 15 | 15 | 14 | 14 | 10 | 10 | 7 | 5 | 8 | 4 | 3 | 4 | 11.0 | 16.8 |
| 19-Mar | 4 | 5 | 4 | 2 | 4 | 5 | 5 | 7 | 9 | 10 | 9 | 8 | 8 | 7 | 8 | 9 | 9 | 10 | 9 | 5 | 3 | 4 | 4 | 3 | 6.3 | 10.1 |
| 20-Mar | 3 | 3 | 4 | 3 | 5 | 8 | 8 | 9 | 12 | 12 | 10 | 12 | 10 | 7 | 10 | 9 | 8 | 5 | 4 | 3 | 4 | 5 | 6 | 7 | 7.0 | 12.1 |
| 21-Mar | 7 | 6 | 4 | 5 | 5 | 7 | 8 | 6 | 9 | 9 | 9 | 6 | 6 | 7 | 6 | 7 | 7 | 11 | 10 | 9 | 8 | 6 | 8 | 6 | 7.1 | 10.8 |
| 22-Mar | 7 | 5 | 6 | 5 | 5 | 4 | 5 | 6 | 6 | 7 | 8 | 8 | 9 | 10 | 10 | 8 | 7 | 8 | 8 | 8 | 6 | 5 | 5 | 5 | 6.7 | 10.4 |
| 23-Mar | 4 | 4 | 7 | 6 | 6 | 7 | 3 | 6 | 9 | 9 | 8 | 6 | 6 | 9 | 9 | 8 | 8 | 7 | 7 | 7 | 6 | 6 | 4 | 5 | 6.5 | 9.0 |
| 24-Mar | 5 | 4 | 4 | 3 | 6 | 3 | 3 | 2 | 2 | 3 | 5 | 7 | 7 | 6 | 7 | 7 | 8 | 10 | 7 | 6 | 6 | 8 | 3 | 5 | 5.2 | 10.4 |
| 25-Mar | 5 | 4 | 5 | 4 | 4 | 3 | 5 | 4 | 6 | 4 | 4 | 8 | 8 | 8 | 7 | 9 | 6 | 5 | 6 | 5 | 5 | 4 | 5 | 4 | 5.4 | 9.1 |
| 26-Mar | 4 | 5 | 8 | 7 | 7 | 4 | 4 | 5 | 5 | 3 | 4 | 8 | 11 | 10 | 10 | 12 | 13 | 12 | 10 | 11 | 10 | 7 | 4 | 5 | 7.4 | 12.8 |
| 27-Mar | 4 | 6 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 6 | 5 | 6 | 8 | 10 | 10 | 8 | 8 | 5 | 3 | 7 | 10 | 12 | 10 | 6.1 | 11.9 |
| 28-Mar | 9 | 8 | 9 | 9 | 10 | 10 | 4 | 8 | 9 | 9 | 10 | 9 | 8 | 9 | 8 | 7 | 9 | 8 | 8 | 7 | 22 | 11 | 11 | 7 | 9.0 | 21.9 |
| 29-Mar | 7 | 6 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 6 | 7 | 7 | 8 | 10 | 9 | 14 | 14 | 6 | 4 | 5 | 4 | 6 | 5.5 | 14.3 |
| 30-Mar | 9 | 6 | 6 | 9 | 6 | 3 | 2 | 3 | 4 | 9 | 10 | 12 | 15 | 16 | 15 | 12 | 14 | 11 | 11 | 13 | 13 | 12 | 11 | 12 | 9.6 | 15.5 |
| 31-Mar | 11 | 9 | 9 | 8 | 8 | 7 | 6 | 6 | 7 | 14 | 18 | 18 | 21 | 18 | 16 | 16 | 14 | 14 | 9 | 4 | 4 | 3 | 3 | 4 | 10.3 | 20.6 |
| | 6.6 | 6.3 | 7.2 | 6.4 | 6.3 | 6.4 | 6.5 | 7.2 | 8.1 | 8.6 | 8.9 | 10.1 | 10.9 | 11.8 | 12.7 | 12.4 | 12.4 | 11.8 | 10.5 | 9.1 | 8.5 | 6.6 | 6.6 | 6.6 | Diurnal Average | |
| | 13.9 | 15.7 | 19.8 | 17.5 | 16.9 | 16.9 | 17.8 | 17.6 | 16.6 | 17.7 | 20.8 | 23.1 | 23.7 | 26.2 | 31.4 | 25.9 | 28.8 | 30.8 | 25.1 | 24.8 | 21.9 | 14.8 | 22.9 | 21.0 | Diurnal Maximum | |

All monthly, daily, and diurnal averages have been calculated using scalar methods

Hourly Standard Deviations

Wind Direction (WD) - deg
Henry Pirker - March 2012

| Maximum Value: 92.2 deg on Mar 11 22:00 | | | | | | | | | | | | | | | | | | | | | | Hours in Service: 744 | | | |
|---|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------------------------|------|----|---------------|
| Minimum Value: 0.3 deg on Mar 29 04:00 | | | | | | | | | | | | | | | | | | | | | | Hours of Data: 744 | | | |
| Percentiles: P ₁ = 5.5 P ₁₀ = 7.5 Q ₁ = 10.6 Median = 15.9 Q ₃ = 29.0 P ₉₀ = 54.7 P ₉₉ = 84.9 | | | | | | | | | | | | | | | | | | | | | | Hours of Missing Data: 0 | | | |
| | | | | | | | | | | | | | | | | | | | | | | Hours of Calibration: 0 | | | |
| | | | | | | | | | | | | | | | | | | | | | | Percent Operational Time: 100.0 | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| 1-Mar | 14 | 9 | 11 | 15 | 13 | 22 | 13 | 14 | 9 | 11 | 11 | 6 | 6 | 15 | 14 | 14 | 34 | 36 | 15 | 10 | 29 | 49 | 13 | 20 | 48.6 |
| 2-Mar | 14 | 6 | 24 | 20 | 56 | 48 | 24 | 10 | 64 | 55 | 40 | 59 | 32 | 17 | 23 | 7 | 6 | 13 | 6 | 19 | 13 | 13 | 62 | 61 | 64.0 |
| 3-Mar | 39 | 47 | 11 | 56 | 60 | 17 | 11 | 10 | 13 | 35 | 48 | 12 | 14 | 13 | 9 | 8 | 5 | 7 | 5 | 16 | 7 | 6 | 6 | 5 | 59.7 |
| 4-Mar | 6 | 8 | 7 | 6 | 8 | 8 | 9 | 8 | 6 | 12 | 12 | 10 | 11 | 11 | 11 | 22 | 10 | 8 | 10 | 11 | 58 | 6 | 11 | 16 | 58.5 |
| 5-Mar | 31 | 79 | 39 | 65 | 34 | 11 | 10 | 16 | 7 | 34 | 14 | 11 | 12 | 11 | 10 | 11 | 14 | 17 | 13 | 11 | 13 | 10 | 23 | 33 | 78.8 |
| 6-Mar | 18 | 28 | 12 | 14 | 12 | 10 | 10 | 6 | 10 | 8 | 28 | 23 | 20 | 22 | 14 | 16 | 6 | 5 | 8 | 8 | 9 | 8 | 16 | 14 | 28.4 |
| 7-Mar | 56 | 27 | 4 | 10 | 7 | 7 | 21 | 18 | 15 | 6 | 9 | 8 | 7 | 7 | 8 | 6 | 5 | 6 | 7 | 7 | 10 | 11 | 33 | 25 | 56.2 |
| 8-Mar | 11 | 34 | 16 | 46 | 50 | 7 | 8 | 8 | 8 | 8 | 7 | 10 | 16 | 34 | 63 | 25 | 29 | 47 | 35 | 44 | 50 | 23 | 7 | 10 | 63.5 |
| 9-Mar | 37 | 33 | 12 | 16 | 71 | 30 | 13 | 16 | 6 | 11 | 7 | 8 | 13 | 6 | 8 | 7 | 11 | 7 | 8 | 6 | 7 | 7 | 6 | 13 | 70.8 |
| 10-Mar | 11 | 9 | 10 | 17 | 26 | 8 | 12 | 49 | 22 | 47 | 24 | 31 | 15 | 37 | 29 | 12 | 24 | 10 | 26 | 15 | 14 | 36 | 31 | 7 | 49.1 |
| 11-Mar | 9 | 14 | 14 | 11 | 20 | 16 | 13 | 10 | 14 | 30 | 54 | 66 | 42 | 38 | 70 | 30 | 34 | 43 | 68 | 14 | 33 | 92 | 30 | 14 | 92.2 |
| 12-Mar | 13 | 7 | 11 | 8 | 15 | 59 | 15 | 42 | 28 | 21 | 26 | 12 | 13 | 9 | 11 | 8 | 8 | 12 | 43 | 39 | 80 | 48 | 54 | 27 | 80.3 |
| 13-Mar | 8 | 10 | 10 | 11 | 8 | 10 | 9 | 6 | 6 | 9 | 9 | 6 | 12 | 9 | 9 | 14 | 15 | 31 | 25 | 21 | 28 | 47 | 28 | 18 | 46.9 |
| 14-Mar | 13 | 18 | 63 | 58 | 23 | 24 | 27 | 11 | 21 | 13 | 23 | 11 | 32 | 57 | 19 | 13 | 8 | 8 | 9 | 8 | 14 | 45 | 60 | 56 | 62.6 |
| 15-Mar | 39 | 44 | 75 | 66 | 91 | 59 | 36 | 13 | 8 | 6 | 7 | 9 | 18 | 8 | 9 | 11 | 10 | 41 | 57 | 57 | 63 | 81 | 25 | 38 | 91.3 |
| 16-Mar | 41 | 68 | 22 | 30 | 32 | 47 | 29 | 8 | 15 | 8 | 11 | 10 | 13 | 11 | 9 | 8 | 8 | 5 | 12 | 9 | 17 | 21 | 55 | 64 | 68.2 |
| 17-Mar | 46 | 14 | 37 | 88 | 62 | 31 | 13 | 13 | 10 | 11 | 13 | 14 | 14 | 15 | 11 | 16 | 15 | 26 | 18 | 18 | 20 | 57 | 72 | 16 | 88.5 |
| 18-Mar | 10 | 8 | 28 | 8 | 7 | 8 | 8 | 6 | 6 | 7 | 6 | 7 | 9 | 8 | 9 | 12 | 21 | 9 | 12 | 35 | 20 | 21 | 30 | 23 | 34.6 |
| 19-Mar | 19 | 33 | 33 | 58 | 85 | 45 | 21 | 20 | 20 | 14 | 13 | 21 | 20 | 33 | 27 | 24 | 18 | 16 | 12 | 59 | 50 | 56 | 34 | 73 | 84.6 |
| 20-Mar | 57 | 73 | 26 | 50 | 16 | 11 | 13 | 11 | 16 | 16 | 18 | 23 | 15 | 28 | 17 | 16 | 21 | 34 | 85 | 17 | 15 | 12 | 14 | 8 | 85.1 |
| 21-Mar | 7 | 10 | 22 | 31 | 16 | 10 | 9 | 28 | 13 | 16 | 17 | 64 | 41 | 21 | 35 | 19 | 18 | 15 | 11 | 13 | 14 | 15 | 12 | 19 | 64.2 |
| 22-Mar | 15 | 14 | 13 | 20 | 30 | 28 | 13 | 9 | 8 | 30 | 26 | 21 | 26 | 18 | 11 | 37 | 30 | 21 | 16 | 11 | 18 | 33 | 9 | 21 | 37.0 |
| 23-Mar | 13 | 67 | 16 | 15 | 14 | 23 | 79 | 24 | 15 | 11 | 15 | 22 | 24 | 23 | 22 | 22 | 17 | 24 | 21 | 11 | 13 | 14 | 45 | 10 | 78.5 |
| 24-Mar | 10 | 9 | 25 | 38 | 14 | 12 | 14 | 20 | 19 | 66 | 7 | 56 | 23 | 28 | 26 | 16 | 51 | 22 | 85 | 35 | 28 | 57 | 40 | 76 | 85.0 |
| 25-Mar | 25 | 16 | 11 | 26 | 42 | 16 | 20 | 33 | 23 | 12 | 14 | 22 | 25 | 22 | 22 | 24 | 59 | 21 | 19 | 70 | 76 | 57 | 65 | 79 | 78.5 |
| 26-Mar | 43 | 50 | 23 | 18 | 21 | 83 | 52 | 24 | 14 | 37 | 73 | 24 | 15 | 16 | 17 | 14 | 14 | 16 | 13 | 10 | 10 | 11 | 33 | 46 | 82.6 |
| 27-Mar | 27 | 14 | 22 | 48 | 73 | 40 | 23 | 78 | 34 | 62 | 28 | 59 | 12 | 22 | 19 | 19 | 18 | 17 | 18 | 51 | 18 | 6 | 6 | 7 | 77.9 |
| 28-Mar | 13 | 12 | 9 | 6 | 6 | 8 | 22 | 10 | 11 | 14 | 20 | 20 | 18 | 17 | 24 | 22 | 22 | 16 | 12 | 60 | 10 | 30 | 40 | 21 | 60.0 |
| 29-Mar | 9 | 15 | 13 | 0 | 1 | 10 | 12 | 10 | 18 | 39 | 34 | 36 | 26 | 27 | 19 | 12 | 27 | 14 | 14 | 17 | 41 | 12 | 15 | 41 | 41.3 |
| 30-Mar | 13 | 50 | 27 | 37 | 53 | 77 | 89 | 85 | 41 | 15 | 17 | 14 | 13 | 14 | 19 | 17 | 12 | 12 | 13 | 11 | 18 | 9 | 7 | 7 | 89.2 |
| 31-Mar | 11 | 22 | 11 | 6 | 6 | 19 | 26 | 40 | 18 | 12 | 11 | 12 | 16 | 16 | 13 | 17 | 14 | 26 | 16 | 29 | 10 | 16 | 56 | 75 | 75.2 |
| 57.3 | 78.8 | 74.7 | 88.5 | 91.3 | 82.6 | 89.2 | 85.4 | 64.0 | 65.7 | 73.3 | 66.1 | 42.2 | 57.0 | 70.4 | 37.0 | 59.1 | 47.2 | 85.1 | 70.2 | 80.3 | 92.2 | 71.9 | 78.5 | | |

PAZA

Evergreen Park Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

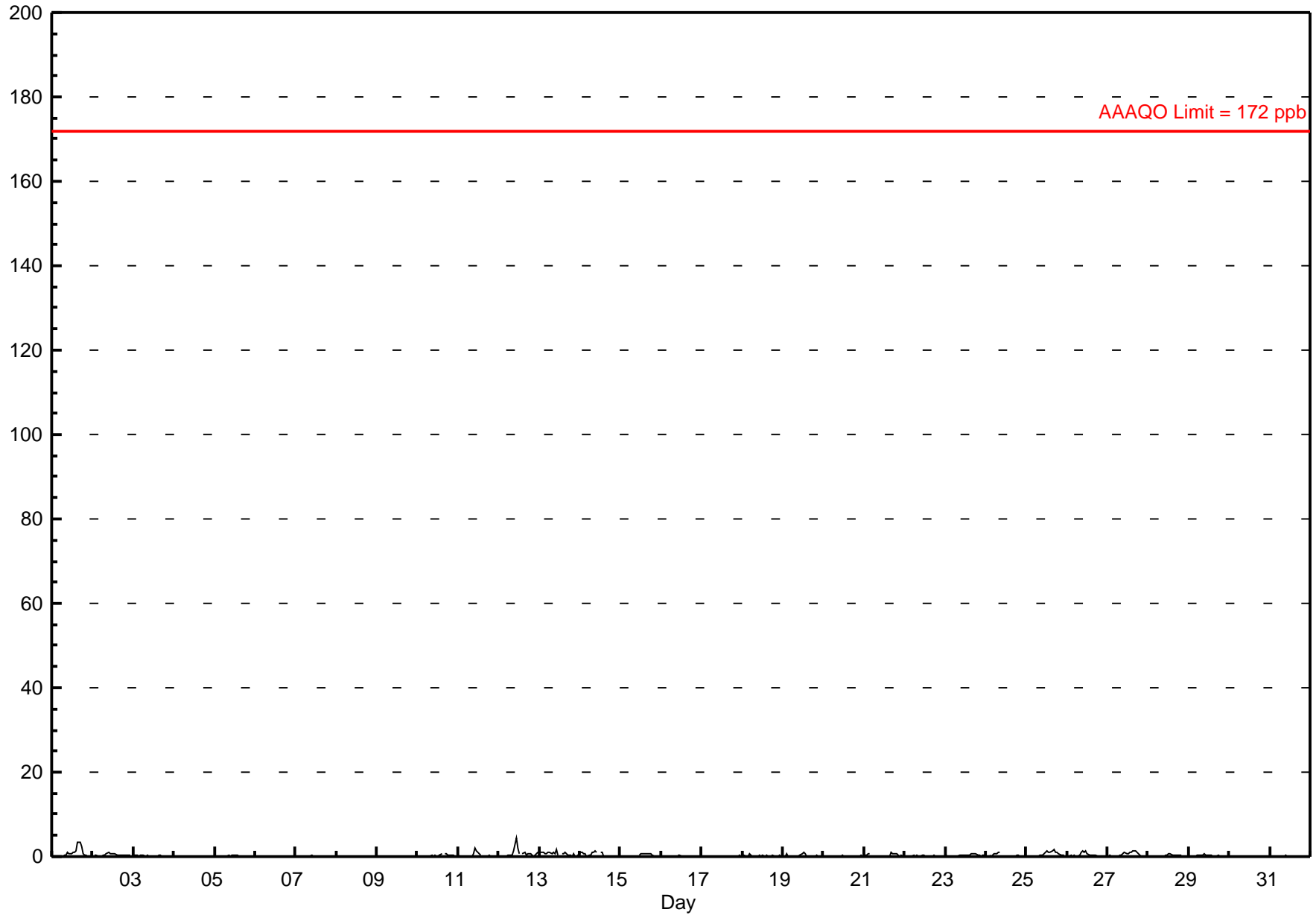
Sulphur Dioxide (SO₂) - ppb

Evergreen Park - March 2012

| | | | | |
|---|--|----------|---------------------------|-------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 4.3 ppb on Mar 12 11:00 | Maximum Daily Average: 0.8 ppb on Mar 1 | | Hours of Data: | 702 |
| Minimum Value: 0 ppb on Mar 4 09:00 | Minimum Daily Average: 0.0 ppb on Mar 17 | | Hours of Missing Data: | 42 |
| Maximum Diurnal Average: 0.6 ppb at hour 11 | Minimum Diurnal Average: 0.1 ppb at hour 22 | | Hours of Calibration: | 42 |
| Monthly Average: 0.24 ppb | Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.3 P ₉₀ = 0.7 P ₉₉ = 1.6 | | Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0.8 | 3.6 |
| 2-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.9 |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.1 | 0.3 |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.1 | 0.1 |
| 5-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.1 | 0.4 |
| 6-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.0 | 0.1 |
| 7-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.2 |
| 8-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.2 |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 |
| 10-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | A | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.8 |
| 11-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 2.0 |
| 12-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 2 | 1 | A | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0.7 | 4.3 |
| 13-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | A | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0.7 | 1.6 |
| 14-Mar | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | A | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.2 |
| 15-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.7 |
| 16-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.3 |
| 17-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.2 |
| 18-Mar | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.7 |
| 19-Mar | 0 | 0 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.9 |
| 20-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.3 |
| 21-Mar | 0 | 0 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | C | C | C | C | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0.3 | 0.9 |
| 22-Mar | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 |
| 23-Mar | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0.3 | 0.7 |
| 24-Mar | 0 | A | 0 | 0 | 0 | 1 | 1 | 1 | 1 | C | C | C | C | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.0 |
| 25-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0.6 | 1.7 |
| 26-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.4 | 1.5 |
| 27-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | A | 0 | 0 | 0.5 | 1.4 |
| 28-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.2 | 0.6 |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.2 | 0.6 |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.0 | 0.1 |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.2 |
| | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average | |
| | 1.2 | 1.2 | 1.1 | 0.8 | 0.8 | 1.1 | 1.1 | 1.0 | 1.1 | 1.5 | 4.3 | 1.9 | 1.2 | 1.0 | 1.4 | 3.6 | 3.5 | 2.4 | 1.1 | 0.6 | 0.8 | 0.3 | 0.7 | 0.9 | Diurnal Maximum | |

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb



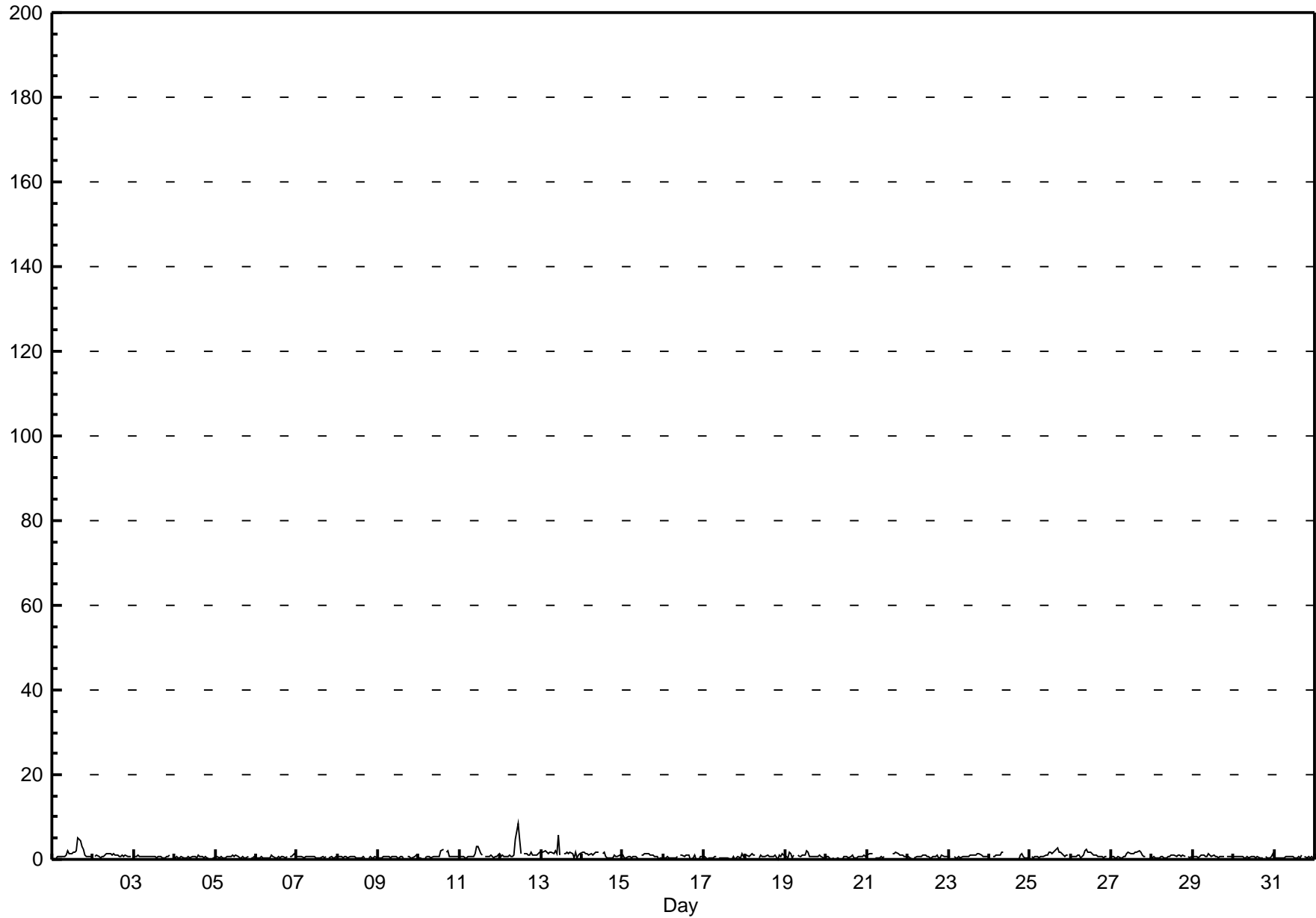
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Evergreen Park - March 2012

| Maximum Value: 8.5 ppb on Mar 12 11:00 | | Maximum Daily Average: 1.7 ppb on Mar 12 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|-----|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|-----------------|
| Minimum Value: 0 ppb on Mar 10 03:00 | | Minimum Daily Average: 0.4 ppb on Mar 17 | | Hours of Data: 702 | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 1.4 ppb at hour 11 | | Minimum Diurnal Average: 0.6 ppb at hour 22 | | Hours of Missing Data: 42 | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 0.80 ppb | | Percentiles: P ₁ = 0.0 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.9 P ₉₀ = 1.4 P ₉₉ = 2.5 | | Hours of Calibration: 42 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 1 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 5 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1.5 | 4.9 |
| 2-Mar | A | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.4 |
| 3-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0.7 | 1.1 |
| 4-Mar | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | A | 0 | 0 | 0.5 | 1.1 |
| 5-Mar | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | A | 0 | 0 | 1 | 0.6 | 1.1 | |
| 6-Mar | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | A | 1 | 1 | 1 | 1 | 0.6 | 1.3 |
| 7-Mar | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | A | 0 | 1 | 0 | 0 | 1 | 0.5 | 0.8 |
| 8-Mar | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | A | 0 | 1 | 0 | 0 | 1 | 0 | 0.5 | 0.8 |
| 9-Mar | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | A | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0.5 | 1.0 |
| 10-Mar | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | A | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 2.5 |
| 11-Mar | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0.9 | 3.0 |
| 12-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 8 | 5 | 1 | A | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1.7 | 8.5 |
| 13-Mar | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 6 | 1 | A | 1 | 1 | 2 | 1 | 2 | 1 | 0 | 2 | 0 | 1 | 1 | 1.6 | 5.6 |
| 14-Mar | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | A | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1.1 | 1.8 |
| 15-Mar | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0.7 | 1.5 |
| 16-Mar | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0.5 | 1.1 |
| 17-Mar | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0.4 | 1.2 |
| 18-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0.8 | 1.3 |
| 19-Mar | 1 | 0 | 2 | 2 | 0 | 1 | A | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0.9 | 1.9 |
| 20-Mar | 1 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0.5 | 1.0 |
| 21-Mar | 1 | 1 | 1 | 1 | A | 0 | 0 | 0 | 1 | 0 | 1 | C | C | C | C | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.6 |
| 22-Mar | 1 | 0 | 0 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0.6 | 1.0 |
| 23-Mar | 1 | 1 | A | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.4 |
| 24-Mar | 1 | A | 1 | 1 | 1 | 1 | 1 | 2 | 2 | C | C | C | C | C | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0.7 | 1.6 |
| 25-Mar | A | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | A | 1.2 | 2.9 |
| 26-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | A | 0 | 1.0 | 2.3 |
| 27-Mar | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | A | 0 | 0 | 1.0 | 2.0 |
| 28-Mar | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0 | 1 | 0.7 | 1.0 |
| 29-Mar | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 0.7 | 1.2 |
| 30-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | A | 1 | 0 | 0 | 1 | 1 | 0.6 | 1.4 |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | A | 1 | 0 | 1 | 0 | 1 | 0 | 0.5 | 1.0 |
| | | 0.7 | 0.7 | 0.6 | 0.7 | 0.6 | 0.7 | 0.6 | 0.7 | 0.8 | 1.0 | 1.4 | 1.0 | 0.9 | 0.9 | 0.9 | 1.0 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | Diurnal Average |
| | | 1.7 | 1.8 | 1.9 | 1.6 | 1.5 | 1.6 | 1.7 | 1.6 | 2.0 | 4.8 | 8.5 | 4.7 | 1.9 | 1.9 | 2.5 | 4.9 | 4.4 | 3.1 | 2.4 | 1.3 | 1.7 | 1.2 | 1.3 | 1.6 | Diurnal Maximum |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | |

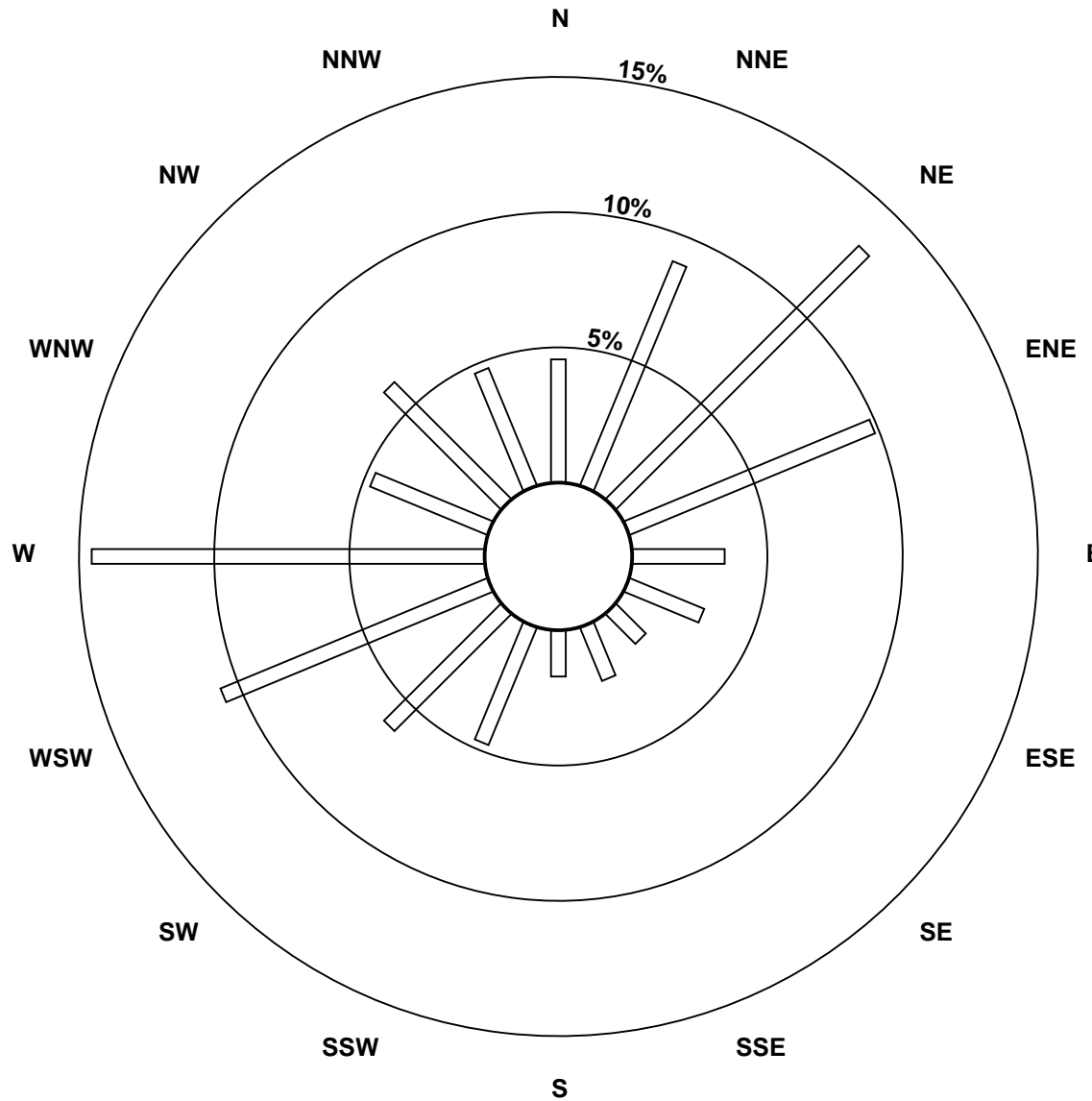
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - March 2012

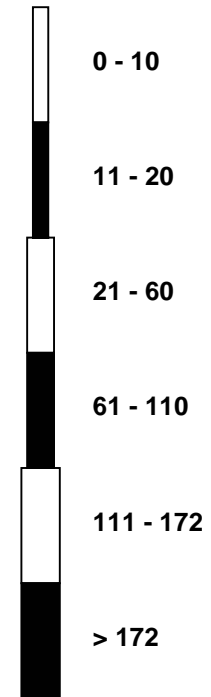


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - March 2012

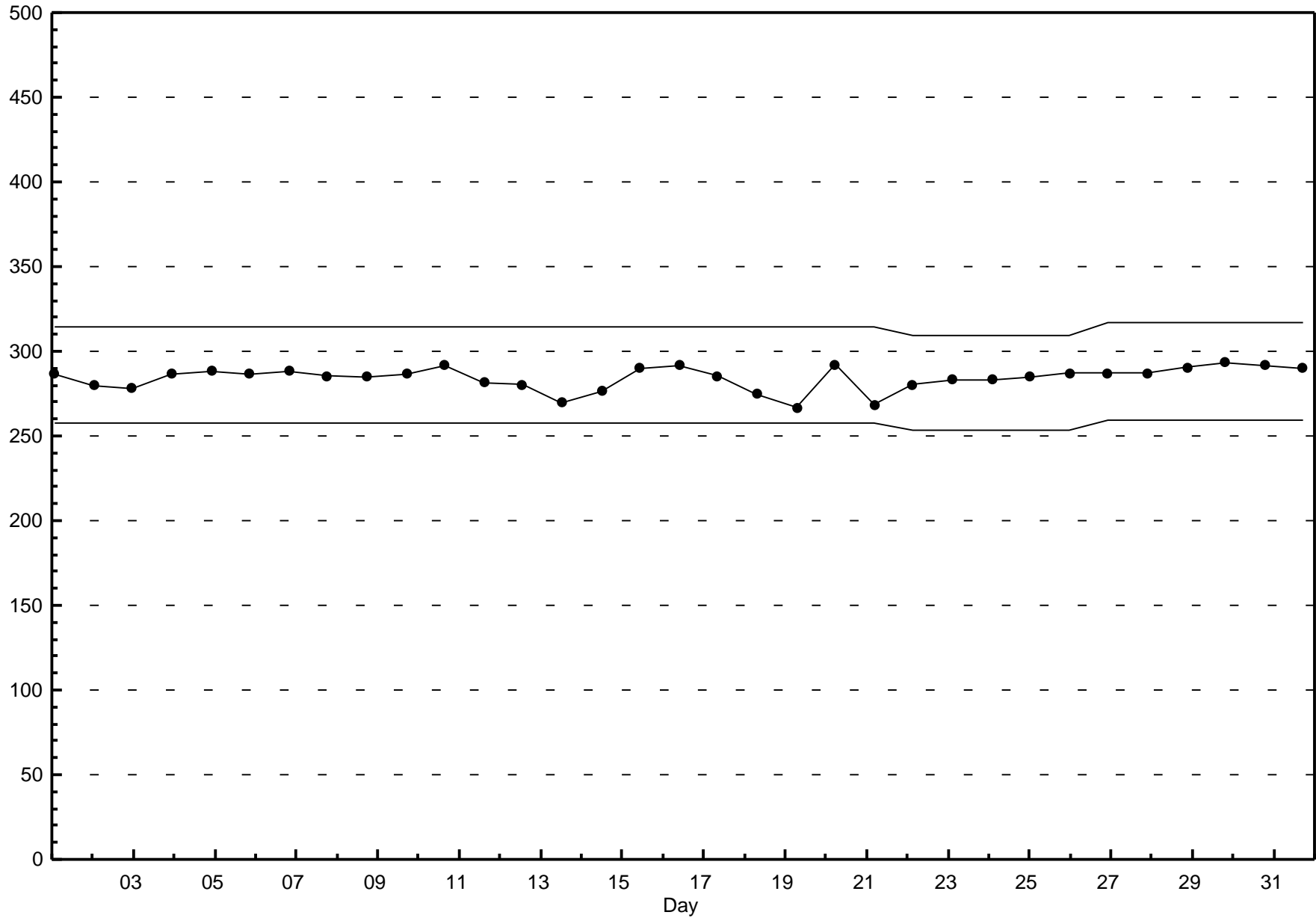


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Evergreen Park - March 2012



Hourly Averages

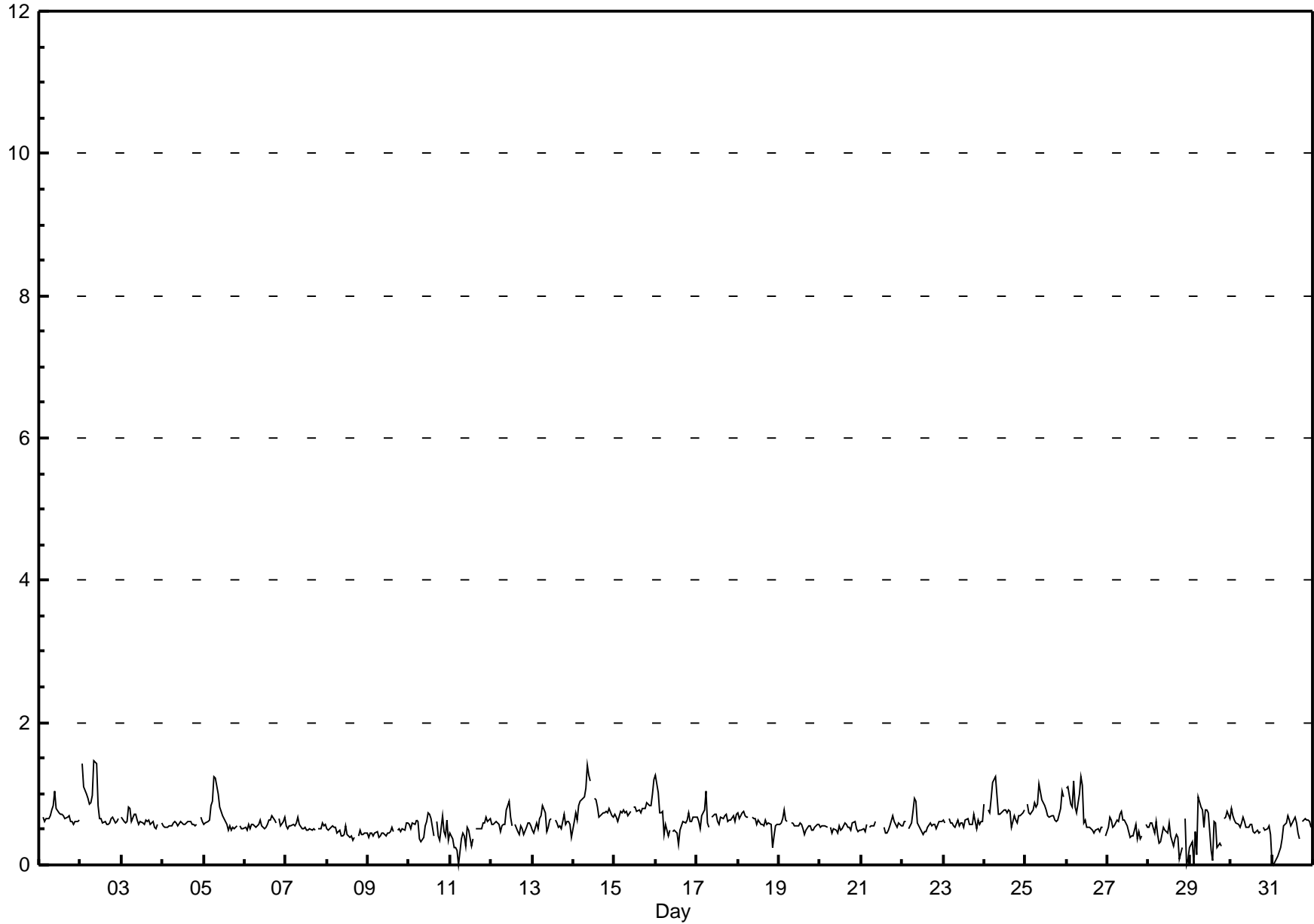
Total Reduced Sulphur (TRS) - ppb

Evergreen Park - March 2012

| | | | | |
|--|--|----------|---------------------------|-------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 1.5 ppb on Mar 2 09:00 | Maximum Daily Average: 0.9 ppb on Mar 14 | | Hours of Data: | 707 |
| Minimum Value: 0 ppb on Mar 28 23:00 | Minimum Daily Average: 0.4 ppb on Mar 28 | | Hours of Missing Data: | 37 |
| Maximum Diurnal Average: 0.7 ppb at hour 9 | Minimum Diurnal Average: 0.5 ppb at hour 14 | | Hours of Calibration: | 37 |
| Monthly Average: 0.60 ppb | Percentiles: P ₁ = 0.1 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.7 P ₉₀ = 0.8 P ₉₉ = 1.2 | | Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.0 |
| 2-Mar | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.5 |
| 3-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0.6 | 0.8 |
| 4-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 0.6 | 0.7 |
| 5-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | A | 1 | 1 | 0 | 0.7 | 1.2 |
| 6-Mar | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0.6 | 0.7 |
| 7-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | A | 1 | 1 | 1 | 1 | 1 | 0.5 | 0.7 |
| 8-Mar | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.6 |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | A | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0.5 | 0.6 |
| 10-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | A | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0.5 | 0.7 |
| 11-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.4 | 0.7 |
| 12-Mar | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0.6 | 0.9 |
| 13-Mar | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0.6 | 0.8 |
| 14-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.4 |
| 15-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.2 |
| 16-Mar | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1.3 |
| 17-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.0 |
| 18-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0.6 | 0.8 |
| 19-Mar | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0.6 | 0.8 |
| 20-Mar | 1 | 1 | 1 | 1 | 1 | A | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0.5 | 0.6 |
| 21-Mar | 0 | 1 | 0 | 1 | A | 1 | 1 | 1 | 1 | C | C | C | C | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.5 | 0.7 |
| 22-Mar | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.9 |
| 23-Mar | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.7 |
| 24-Mar | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.2 |
| 25-Mar | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 0.8 | 1.1 |
| 26-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | A | 0 | 0 | 0.7 | 1.2 |
| 27-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | A | 1 | 1 | 0.5 | 0.8 |
| 28-Mar | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 0 | 0 | 0.4 | 0.6 |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 0.5 | 0.9 |
| 30-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 0 | 1 | 1 | 0 | 0.6 | 0.8 |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0.5 | 0.7 |

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb



Hourly Maximums

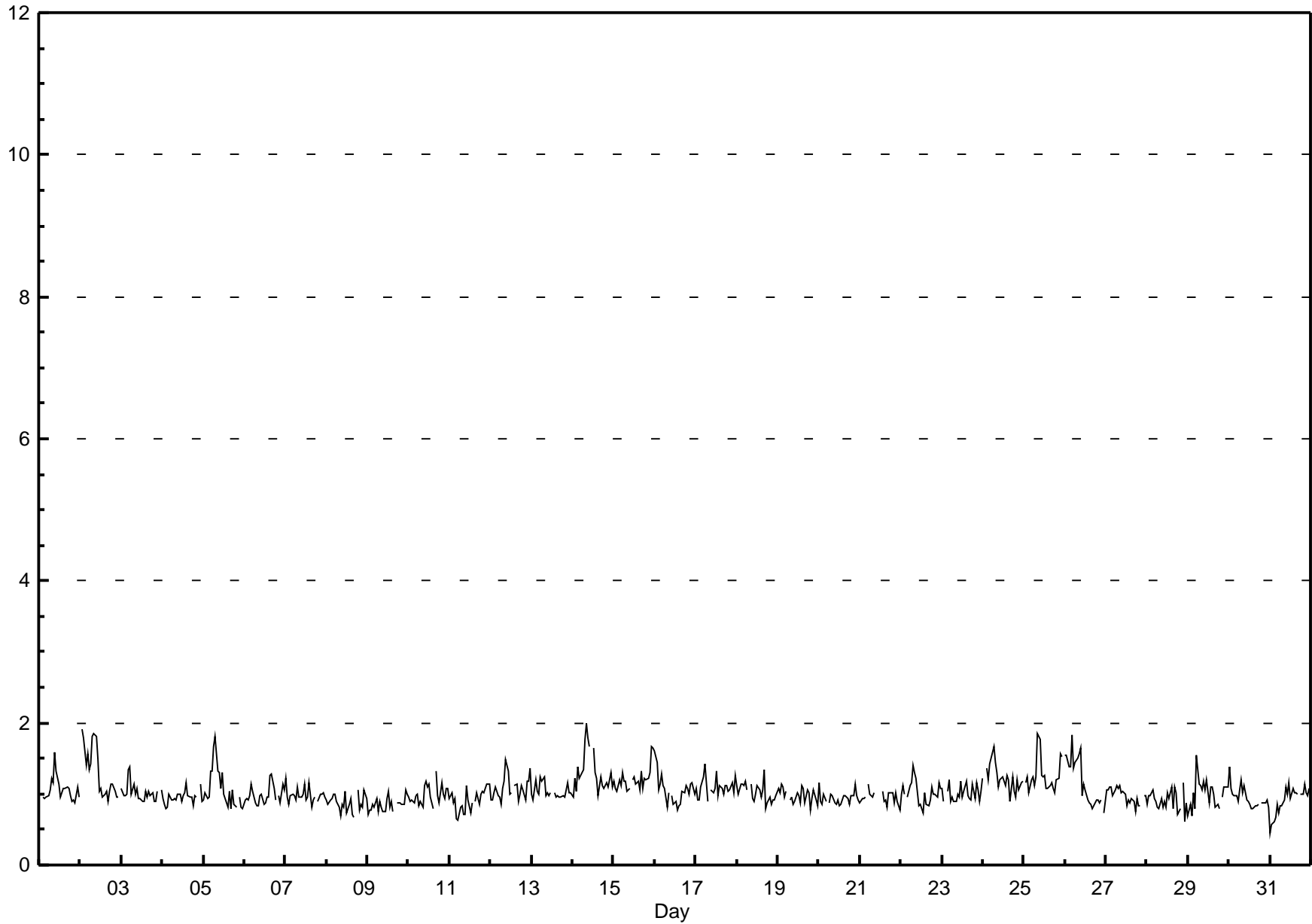
Total Reduced Sulphur (TRS) - ppb

Evergreen Park - March 2012

| Maximum Value: 2.0 ppb on Mar 14 09:00 | | Maximum Daily Average: 1.3 ppb on Mar 14 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|-----|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|-----------------|-----------------|--|
| Minimum Value: 0 ppb on Mar 31 01:00 | | Minimum Daily Average: 0.9 ppb on Mar 9 | | Hours of Data: 707 | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 1.1 ppb at hour 10 | | Minimum Diurnal Average: 1.0 ppb at hour 14 | | Hours of Missing Data: 37 | | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 1.04 ppb | | Percentiles: P ₁ = 0.7 P ₁₀ = 0.8 Q ₁ = 0.9 Median = 1.0 Q ₃ = 1.1 P ₉₀ = 1.3 P ₉₉ = 1.8 | | Hours of Calibration: 37 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | | |
| 1-Mar | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.1 | 1.6 | | |
| 2-Mar | A | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.3 | 1.9 | | |
| 3-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1.0 | 1.4 | | |
| 4-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 0.9 | 1.2 | | |
| 5-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1.1 | 1.8 | | |
| 6-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1.0 | 1.3 | | |
| 7-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.2 | | |
| 8-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.1 | | |
| 9-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.1 | | |
| 10-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.3 | | |
| 11-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.1 | | |
| 12-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.1 | 1.5 | | |
| 13-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.2 | | |
| 14-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | A | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.3 | 2.0 | | |
| 15-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1.2 | 1.7 | | |
| 16-Mar | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.1 | 1.6 | | |
| 17-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.1 | 1.4 | | |
| 18-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.3 | | |
| 19-Mar | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.1 | | |
| 20-Mar | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.2 | | |
| 21-Mar | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | C | C | C | C | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.1 | | |
| 22-Mar | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.4 | | |
| 23-Mar | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.2 | | |
| 24-Mar | 1 | A | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.2 | 1.7 | | |
| 25-Mar | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | A | 1.3 | 1.8 | | |
| 26-Mar | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1.2 | 1.8 | | |
| 27-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1.0 | 1.1 | | |
| 28-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 0.9 | 1.2 | | |
| 29-Mar | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1.0 | 1.5 | | |
| 30-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.4 | | |
| 31-Mar | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.2 | | |
| | | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | Diurnal Average | | |
| | | 1.6 | 1.9 | 1.8 | 1.4 | 1.8 | 1.5 | 1.7 | 1.8 | 2.0 | 1.8 | 1.7 | 1.3 | 1.7 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.6 | 1.7 | 1.7 | Diurnal Maximum | |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | | | |

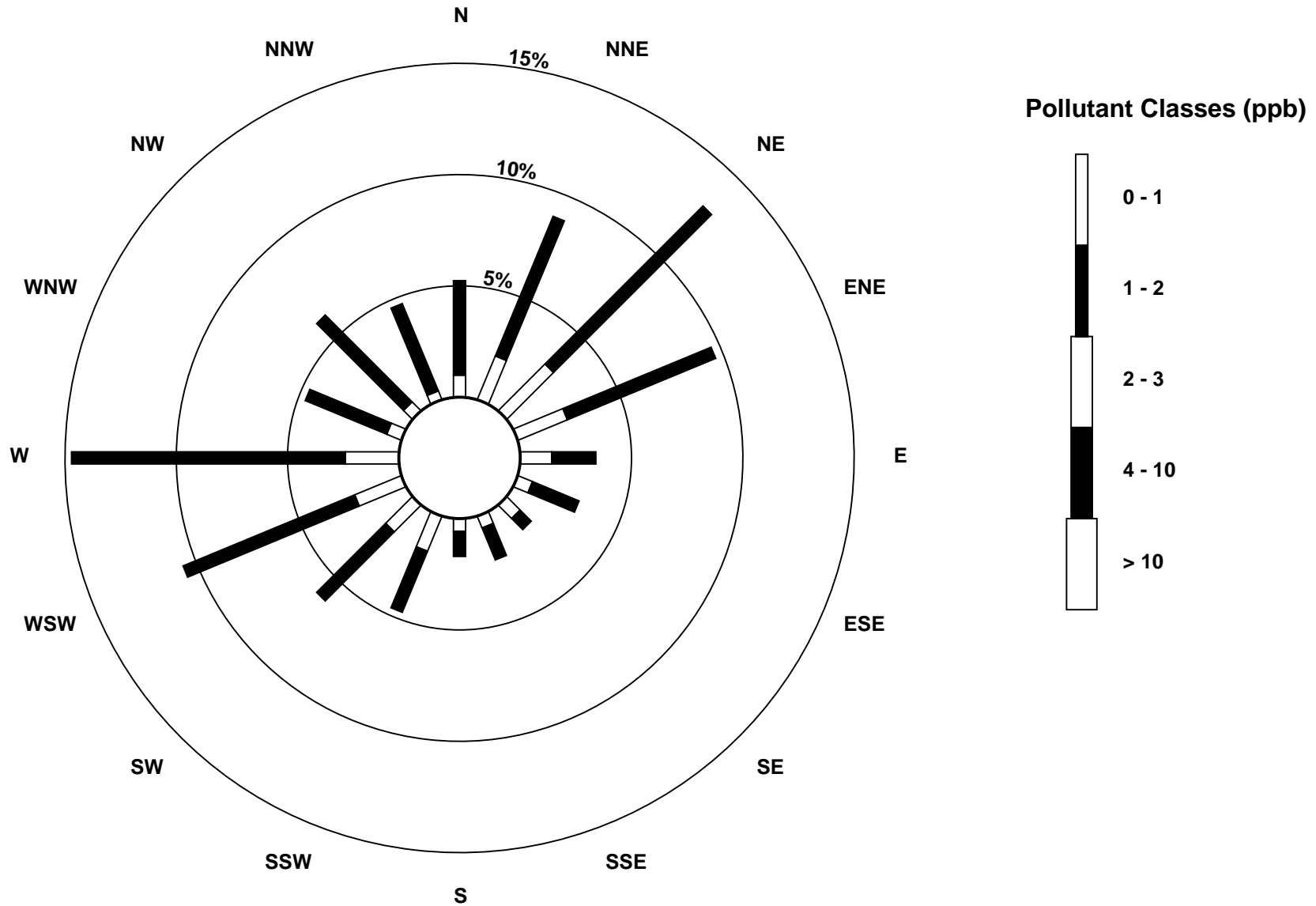
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - March 2012



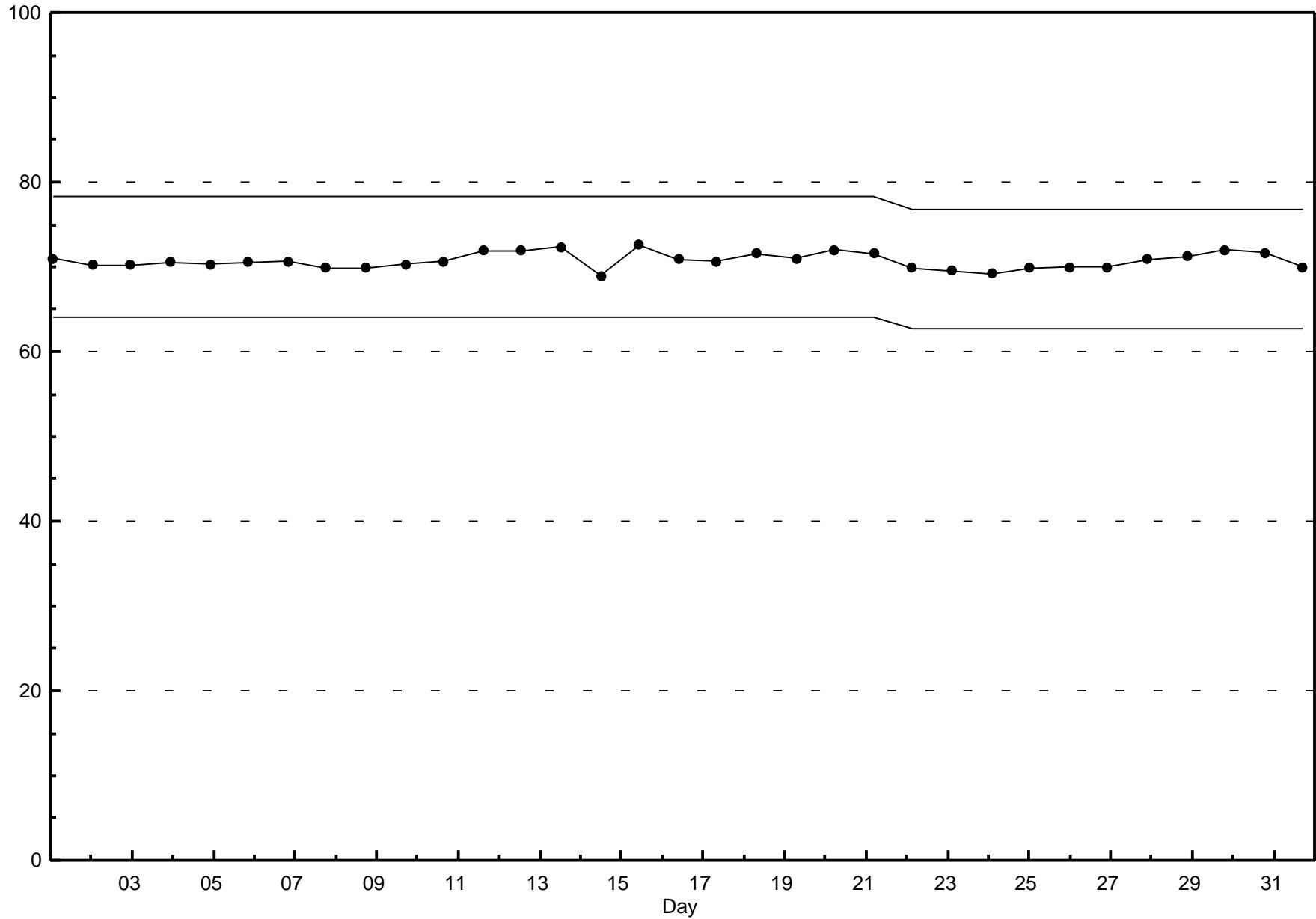
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - March 2012



Span Responses

**Total Reduced Sulphur (TRS)
Evergreen Park - March 2012**



Hourly Averages

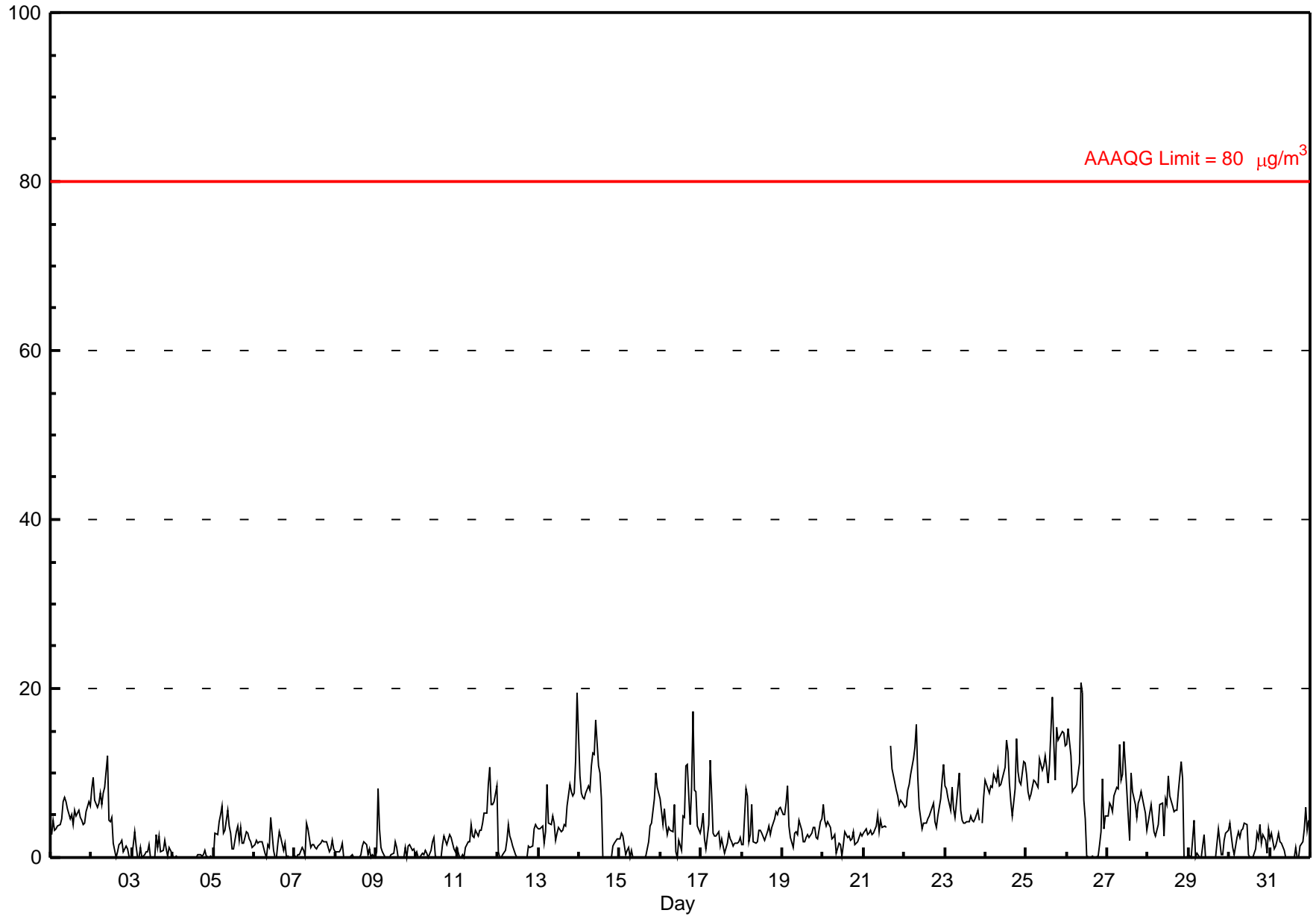
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Evergreen Park - March 2012

| | |
|---|---|
| Number of Exceedences: 1-hr: 0 24-hr: 0 | Hours in Service: 744 |
| Maximum Value: 20.8 µg/m ³ on Mar 26 09:00 | Maximum Daily Average: 11.3 µg/m ³ on Mar 25 |
| Minimum Value: 0 µg/m ³ on Mar 2 15:00 | Hours of Data: 737 |
| Maximum Diurnal Average: 4.9 µg/m ³ at hour 9 | Hours of Missing Data: 7 |
| Monthly Average: 3.80 µg/m ³ | Hours of Calibration: 0 |
| Minimum Daily Average: 0.1 µg/m ³ on Mar 4 | Percent Operational Time: 99.1 |
| Minimum Diurnal Average: 2.6 µg/m ³ at hour 14 | |
| Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.9 Median = 2.8 Q ₃ = 5.9 P ₉₀ = 8.9 P ₉₉ = 15.3 | |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
|--------|-------------------------------|------|------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|-----------------|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 3 | 4 | 3 | 3 | 4 | 4 | 5 | 7 | 7 | 7 | 6 | 5 | 5 | 4 | 6 | 5 | 6 | 5 | 4 | 4 | 4 | 5 | 7 | 6 | 4.9 | 7.1 | |
| 2-Mar | 8 | 10 | 7 | 6 | 7 | 8 | 6 | 8 | 8 | 12 | 4 | 4 | 5 | 2 | 0 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 4.3 | 12.1 | |
| 3-Mar | 0 | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 3 | 1 | 2 | 1 | 1 | 2 | 1 | 0 | 1 | 1 | 0.9 | 3.0 | |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0.1 | 0.8 | |
| 5-Mar | 0 | 3 | 3 | 4 | 5 | 6 | 3 | 3 | 6 | 4 | 3 | 1 | 1 | 3 | 4 | 2 | 4 | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 2.9 | 6.1 | |
| 6-Mar | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 2 | 1 | 5 | 1 | 0 | 0 | 2 | 3 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 1.3 | 4.8 | |
| 7-Mar | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 4 | 3 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1.4 | 4.1 | |
| 8-Mar | 1 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0.5 | 1.8 | |
| 9-Mar | 1 | 8 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 1 | 1 | 0 | 1.0 | 8.1 | |
| 10-Mar | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 3 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 1.0 | 2.7 | |
| 11-Mar | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 4 | 3 | 2 | 3 | 3 | 3 | 3 | 4 | 5 | 5 | 9 | 11 | 6 | 6 | 7 | 8 | 3.7 | 10.6 | |
| 12-Mar | 1 | 0 | 0 | 0 | 1 | 2 | 4 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 4 | 4 | 1.2 | 3.9 | |
| 13-Mar | 3 | 3 | 4 | 2 | 3 | 9 | 4 | 4 | 5 | 4 | 2 | 3 | 4 | 3 | 3 | 4 | 4 | 6 | 9 | 8 | 7 | 8 | 12 | 20 | 5.5 | 19.6 | |
| 14-Mar | 10 | 8 | 7 | 7 | 8 | 9 | 8 | 11 | 12 | 12 | 16 | 11 | 10 | 7 | 0 | N | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 6.2 | 16.2 | |
| 15-Mar | 2 | 3 | 3 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | N | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 4 | 7 | 10 | 8 | 8 | 2.4 | 9.9 | |
| 16-Mar | 7 | 4 | 6 | 4 | 3 | 4 | 3 | 3 | 6 | 1 | 0 | 2 | 1 | 5 | 5 | 11 | 11 | 4 | 8 | 17 | 8 | 8 | 4 | 3 | 5.3 | 17.3 | |
| 17-Mar | 4 | 5 | 2 | 1 | 4 | 11 | 8 | 3 | 3 | 3 | 3 | 1 | 2 | 1 | 1 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2.9 | 11.5 | |
| 18-Mar | 1 | 2 | 8 | 7 | 2 | 3 | 6 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 3.7 | 8.1 | |
| 19-Mar | 5 | 5 | 6 | 8 | 4 | 2 | 1 | 3 | 3 | 3 | 4 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 4 | 4 | 2 | 2 | 4 | 5 | 3.5 | 8.5 | |
| 20-Mar | 6 | 4 | 4 | 4 | 4 | 2 | 2 | 3 | 1 | 2 | 1 | 0 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 2.6 | 6.2 | |
| 21-Mar | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 3 | 4 | 4 | 4 | 4 | M | M | 13 | 10 | 9 | 8 | 7 | 6 | 7 | 6 | 5.2 | 13.2 | |
| 22-Mar | 6 | 6 | 8 | 9 | 10 | 12 | 13 | 16 | 9 | 6 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 4 | 4 | 5 | 7 | 9 | 11 | 7.2 | 15.7 | |
| 23-Mar | 8 | 8 | 7 | 6 | 8 | 6 | 5 | 6 | 10 | 6 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 6 | 4 | N | 4 | 7 | 5.7 | 10.0 | |
| 24-Mar | 9 | 8 | 8 | 8 | 8 | 10 | 9 | 10 | 8 | 9 | 9 | 11 | 14 | 13 | 9 | 7 | 5 | 8 | 14 | 10 | 9 | 9 | 11 | 11 | 9.5 | 14.0 | |
| 25-Mar | 10 | 8 | 7 | 7 | 9 | 9 | 9 | 8 | 12 | 10 | 11 | 12 | 11 | 9 | 11 | 19 | 13 | 9 | 15 | 14 | 15 | 15 | 15 | 13 | 11.3 | 19.0 | |
| 26-Mar | 13 | 15 | 12 | 8 | 8 | 8 | 9 | 11 | 21 | 19 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 9 | 3 | 5 | 6.6 | 20.8 | |
| 27-Mar | 5 | 6 | 6 | 5 | 7 | 8 | 8 | 13 | 9 | 10 | 14 | 8 | 5 | 2 | 10 | 8 | 6 | 5 | 6 | 7 | 8 | 7 | 5 | 3 | 7.2 | 13.7 | |
| 28-Mar | 4 | 5 | 6 | 3 | 2 | 3 | 4 | 6 | 6 | 3 | 7 | 6 | 10 | 7 | 6 | 5 | 6 | 6 | 8 | 11 | 9 | 0 | 0 | 0 | 5.2 | 11.3 | |
| 29-Mar | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | N | 0 | 0 | 0 | N | 0 | 3 | 2 | 0 | 0 | 2 | 3 | 3 | 1.2 | 4.4 |
| 30-Mar | 4 | 3 | 1 | 0 | 2 | 3 | 2 | 3 | 3 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 3 | 2 | 4 | 2 | 3 | 2 | 1 | 3 | 2.1 | 4.1 | |
| 31-Mar | 2 | 3 | 1 | 1 | 2 | 3 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 3 | 6 | 3 | 4 | 1.6 | 6.0 | |
| | 3.9 | 4.2 | 3.9 | 3.5 | 3.6 | 4.2 | 3.8 | 4.4 | 4.9 | 4.2 | 4.0 | 3.1 | 3.0 | 2.6 | 2.6 | 3.4 | 3.6 | 3.2 | 4.1 | 4.3 | 4.0 | 4.1 | 4.1 | 4.4 | | Diurnal Average | |
| | 13.4 | 15.3 | 12.1 | 8.6 | 9.9 | 11.8 | 13.1 | 15.7 | 20.8 | 19.5 | 16.2 | 12.1 | 13.9 | 12.5 | 11.1 | 19.0 | 13.5 | 10.5 | 15.4 | 17.3 | 14.5 | 15.0 | 14.7 | 19.6 | | Diurnal Maximum | |

M - Maintenance N - Not Valid
 Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³

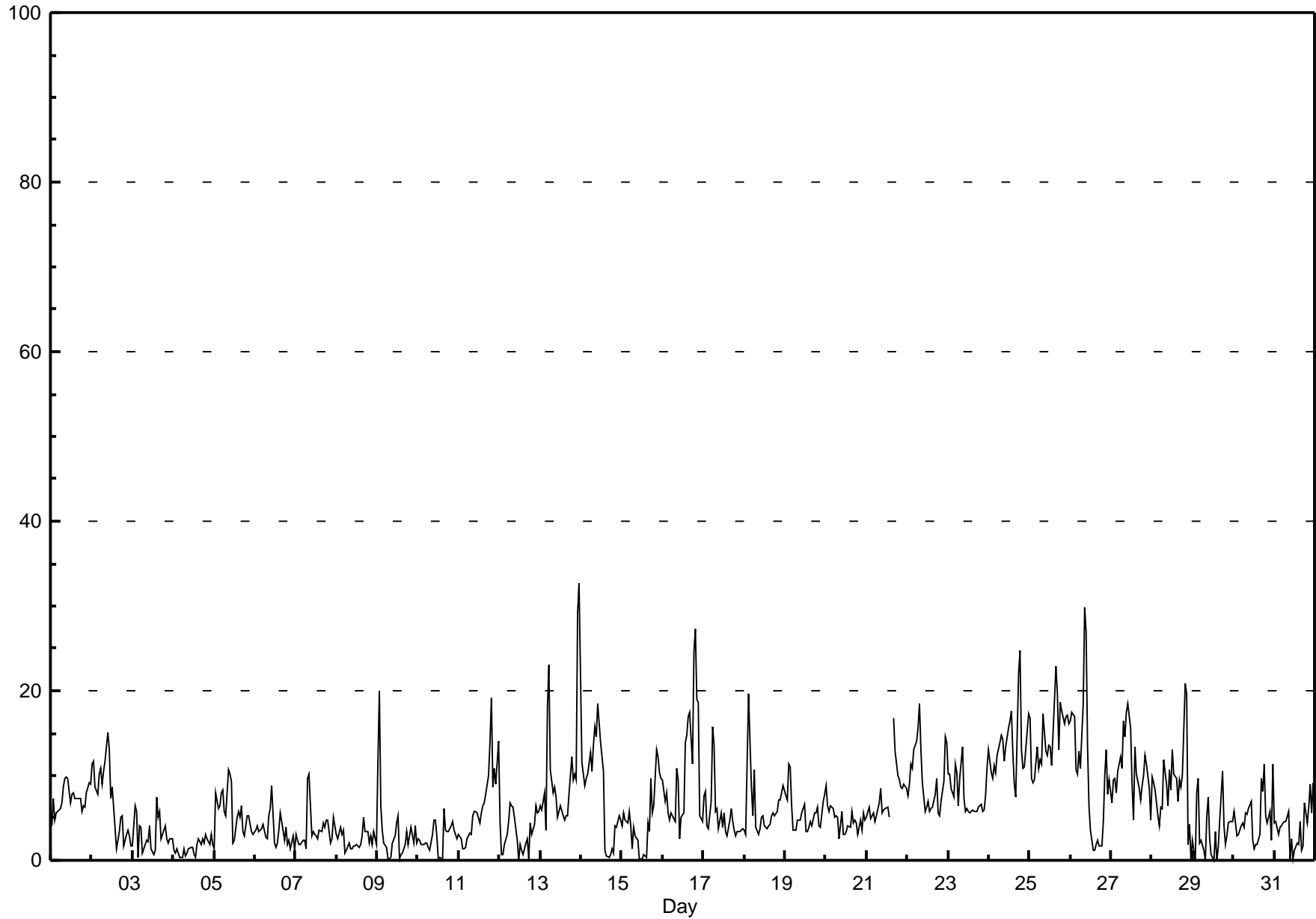


Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - µg/m³

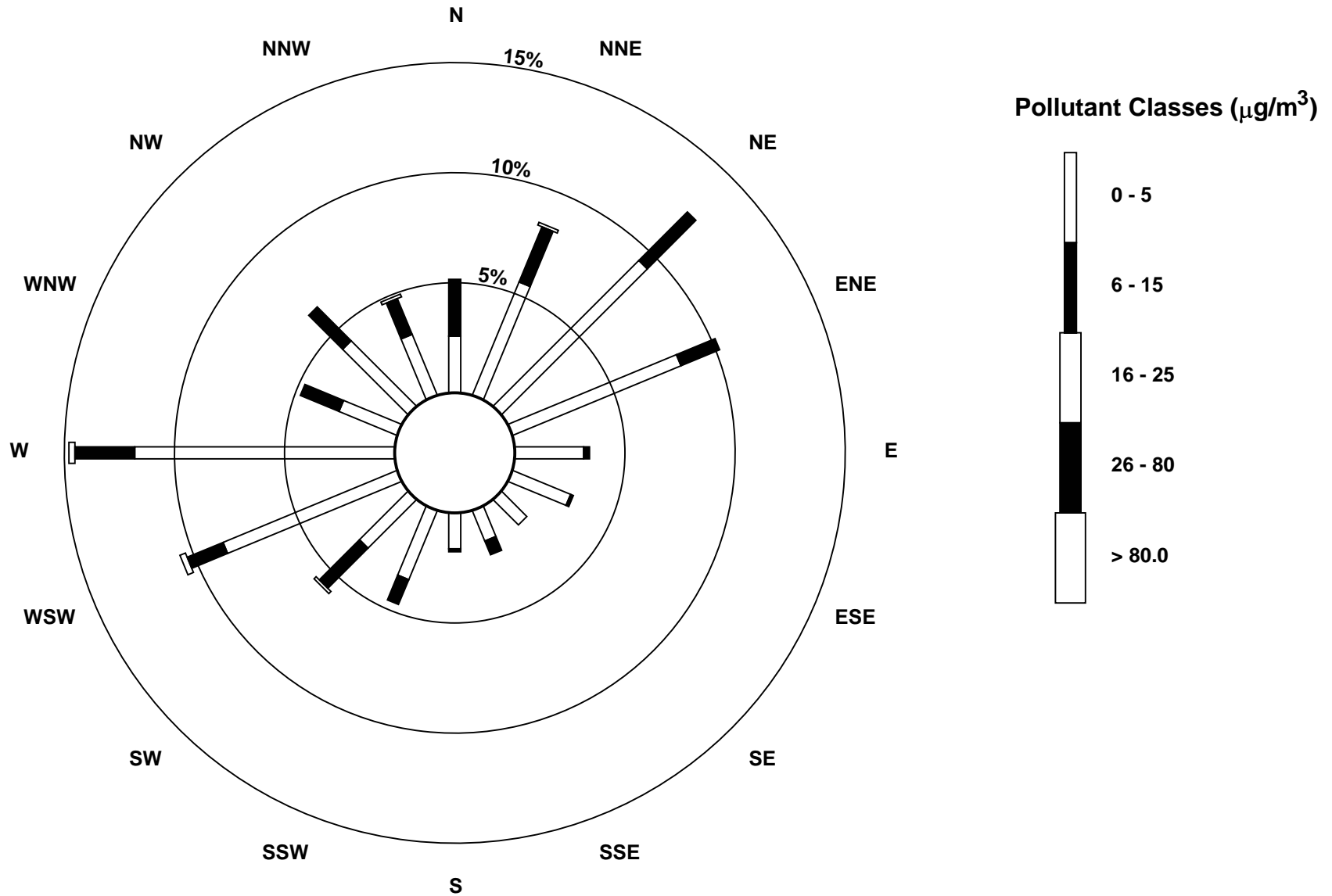
Evergreen Park - March 2012

| Maximum Value: 32.8 µg/m ³ on Mar 14 00:00 Minimum Value: 0 µg/m ³ on Mar 12 12:00 Maximum Diurnal Average: 8.3 µg/m ³ at hour 9 Monthly Average: 6.52 µg/m ³ | | Maximum Daily Average: 14.4 µg/m ³ on Mar 25 Minimum Daily Average: 1.5 µg/m ³ on Mar 4 Minimum Diurnal Average: 4.8 µg/m ³ at hour 14 Percentiles: P ₁ = 0.0 P ₁₀ = 1.6 Q ₁ = 3.1 Median = 5.3 Q ₃ = 9.0 P ₉₀ = 13.0 P ₉₉ = 24.3 | | Hours in Service: 744 Hours of Data: 742 Hours of Missing Data: 2 Hours of Calibration: 0 Percent Operational Time: 99.7 | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|---|------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|-----------------|--|
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 4 | 7 | 5 | 6 | 6 | 6 | 7 | 9 | 10 | 10 | 10 | 7 | 8 | 8 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 8 | 9 | 9 | 7.3 | 9.9 | |
| 2-Mar | 11 | 12 | 9 | 8 | 10 | 11 | 9 | 10 | 12 | 15 | 13 | 7 | 9 | 6 | 1 | 2 | 3 | 5 | 5 | 2 | 3 | 4 | 3 | 2 | 7.2 | 15.0 | |
| 3-Mar | 2 | 7 | 6 | 0 | 4 | 4 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 7 | 5 | 6 | 3 | 4 | 4 | 2 | 2 | 3 | 3 | 3.1 | 7.5 | |
| 4-Mar | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 0 | 2 | 3 | 2 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 1.5 | 3.1 | |
| 5-Mar | 1 | 8 | 6 | 7 | 8 | 8 | 6 | 5 | 11 | 10 | 9 | 2 | 2 | 5 | 6 | 5 | 7 | 3 | 3 | 5 | 5 | 4 | 3 | 3 | 5.6 | 10.6 | |
| 6-Mar | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 5 | 6 | 9 | 2 | 2 | 2 | 4 | 6 | 5 | 2 | 4 | 2 | 2 | 1 | 3 | 1 | 3.5 | 8.9 | |
| 7-Mar | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 10 | 10 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 5 | 5 | 2 | 3 | 5 | 4 | 3.7 | 10.2 | |
| 8-Mar | 3 | 3 | 4 | 3 | 4 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 5 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2.4 | 5.1 | |
| 9-Mar | 12 | 20 | 6 | 4 | 2 | 2 | 0 | 0 | 2 | 3 | 4 | 5 | 0 | 1 | 1 | 2 | 3 | 2 | 3 | 4 | 2 | 4 | 2 | 2 | 3.5 | 19.9 | |
| 10-Mar | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 5 | 5 | 3 | 0 | 0 | 0 | 6 | 4 | 3 | 3 | 4 | 5 | 4 | 3 | 3 | 2.7 | 6.0 | |
| 11-Mar | 3 | 3 | 1 | 1 | 2 | 3 | 3 | 3 | 5 | 6 | 6 | 6 | 4 | 6 | 7 | 7 | 8 | 10 | 14 | 19 | 9 | 11 | 9 | 14 | 6.6 | 19.2 | |
| 12-Mar | 5 | 1 | 1 | 2 | 3 | 5 | 7 | 6 | 6 | 5 | 2 | 0 | 2 | 1 | 1 | 2 | 3 | 0 | 4 | 3 | 4 | 6 | 6 | 6 | 3.3 | 6.7 | |
| 13-Mar | 6 | 6 | 8 | 4 | 18 | 23 | 11 | 8 | 9 | 7 | 5 | 6 | 7 | 5 | 5 | 5 | 5 | 8 | 12 | 9 | 10 | 9 | 29 | 33 | 10.4 | 32.8 | |
| 14-Mar | 12 | 10 | 9 | 10 | 10 | 13 | 11 | 14 | 16 | 15 | 18 | 14 | 12 | 10 | 1 | 0 | 0 | 1 | 1 | 1 | 4 | 4 | 5 | 5 | 8.1 | 18.4 | |
| 15-Mar | 4 | 6 | 5 | 4 | 6 | 4 | 1 | 4 | 3 | 2 | 0 | 0 | 0 | 1 | 0 | 4 | 3 | 10 | 6 | 7 | 13 | 12 | 10 | 10 | 4.8 | 13.1 | |
| 16-Mar | 9 | 7 | 8 | 6 | 5 | 6 | 5 | 5 | 11 | 9 | 3 | 5 | 6 | 14 | 15 | 17 | 17 | 11 | 25 | 27 | 19 | 19 | 5 | 5 | 10.7 | 27.2 | |
| 17-Mar | 8 | 8 | 4 | 4 | 7 | 16 | 14 | 6 | 6 | 4 | 6 | 4 | 6 | 3 | 3 | 5 | 6 | 5 | 4 | 3 | 3 | 3 | 3 | 4 | 5.5 | 15.8 | |
| 18-Mar | 3 | 3 | 20 | 14 | 9 | 5 | 11 | 4 | 3 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 6 | 5 | 6 | 7 | 7 | 8 | 9 | 6.5 | 19.7 | |
| 19-Mar | 8 | 7 | 11 | 11 | 6 | 4 | 4 | 5 | 5 | 5 | 6 | 7 | 3 | 3 | 4 | 5 | 4 | 6 | 6 | 6 | 4 | 4 | 7 | 8 | 5.7 | 11.3 | |
| 20-Mar | 9 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 3 | 6 | 3 | 3 | 3 | 4 | 4 | 6 | 4 | 5 | 4 | 3 | 5 | 4 | 6 | 5 | 4.8 | 8.9 | |
| 21-Mar | 5 | 6 | 5 | 5 | 6 | 5 | 5 | 7 | 8 | 6 | 6 | 6 | 6 | 5 | M | M | 17 | 13 | 10 | 9 | 9 | 8 | 9 | 8 | 7.5 | 16.7 | |
| 22-Mar | 8 | 9 | 11 | 11 | 13 | 14 | 16 | 18 | 13 | 9 | 6 | 6 | 7 | 6 | 6 | 6 | 8 | 10 | 6 | 5 | 7 | 9 | 15 | 14 | 9.7 | 18.4 | |
| 23-Mar | 10 | 10 | 9 | 7 | 11 | 10 | 7 | 10 | 13 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 6 | 6 | 8 | 11 | 7.7 | 13.3 | |
| 24-Mar | 13 | 10 | 10 | 11 | 10 | 12 | 14 | 15 | 14 | 12 | 13 | 16 | 16 | 18 | 13 | 9 | 7 | 22 | 25 | 13 | 11 | 11 | 15 | 17 | 13.7 | 24.8 | |
| 25-Mar | 17 | 10 | 9 | 9 | 13 | 11 | 12 | 11 | 17 | 13 | 12 | 14 | 13 | 11 | 15 | 23 | 20 | 13 | 19 | 18 | 16 | 17 | 17 | 16 | 14.4 | 22.8 | |
| 26-Mar | 17 | 17 | 17 | 11 | 10 | 13 | 11 | 18 | 30 | 27 | 14 | 6 | 4 | 1 | 1 | 2 | 2 | 2 | 2 | 5 | 10 | 13 | 8 | 9 | 10.4 | 29.9 | |
| 27-Mar | 7 | 9 | 10 | 8 | 10 | 12 | 11 | 17 | 15 | 17 | 18 | 16 | 9 | 5 | 13 | 10 | 8 | 7 | 9 | 10 | 12 | 11 | 8 | 5 | 10.8 | 18.4 | |
| 28-Mar | 10 | 9 | 8 | 5 | 4 | 6 | 6 | 12 | 9 | 6 | 11 | 8 | 13 | 10 | 10 | 7 | 9 | 9 | 10 | 21 | 20 | 2 | 4 | 0 | 8.7 | 20.9 | |
| 29-Mar | 2 | 0 | 8 | 10 | 2 | 2 | 1 | 0 | 5 | 7 | 3 | 1 | 0 | 3 | 0 | 2 | 5 | 10 | 4 | 2 | 3 | 4 | 5 | 5 | 3.5 | 10.4 | |
| 30-Mar | 6 | 4 | 3 | 3 | 4 | 4 | 4 | 6 | 5 | 6 | 7 | 2 | 1 | 2 | 2 | 3 | 10 | 8 | 11 | 5 | 4 | 6 | 2 | 11 | 5.1 | 11.4 | |
| 31-Mar | 4 | 5 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 0 | 3 | 0 | 1 | 2 | 2 | 5 | 1 | 2 | 7 | 4 | 6 | 9 | 6 | 9 | 4.0 | 9.2 | |
| | | 6.7 | 6.9 | 6.7 | 5.8 | 6.5 | 7.0 | 6.2 | 7.1 | 8.3 | 7.4 | 6.8 | 5.3 | 5.0 | 4.8 | 4.8 | 5.6 | 6.3 | 6.4 | 7.3 | 7.1 | 7.0 | 6.7 | 7.2 | 7.5 | Diurnal Average | |
| | | 16.7 | 19.9 | 19.7 | 14.1 | 18.0 | 23.1 | 15.5 | 18.4 | 29.9 | 27.0 | 18.4 | 15.6 | 16.5 | 17.7 | 15.1 | 22.8 | 19.7 | 22.1 | 24.8 | 27.2 | 19.7 | 18.7 | 29.2 | 32.8 | Diurnal Maximum | |
| M - Maintenance | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Evergreen Park - March 2012



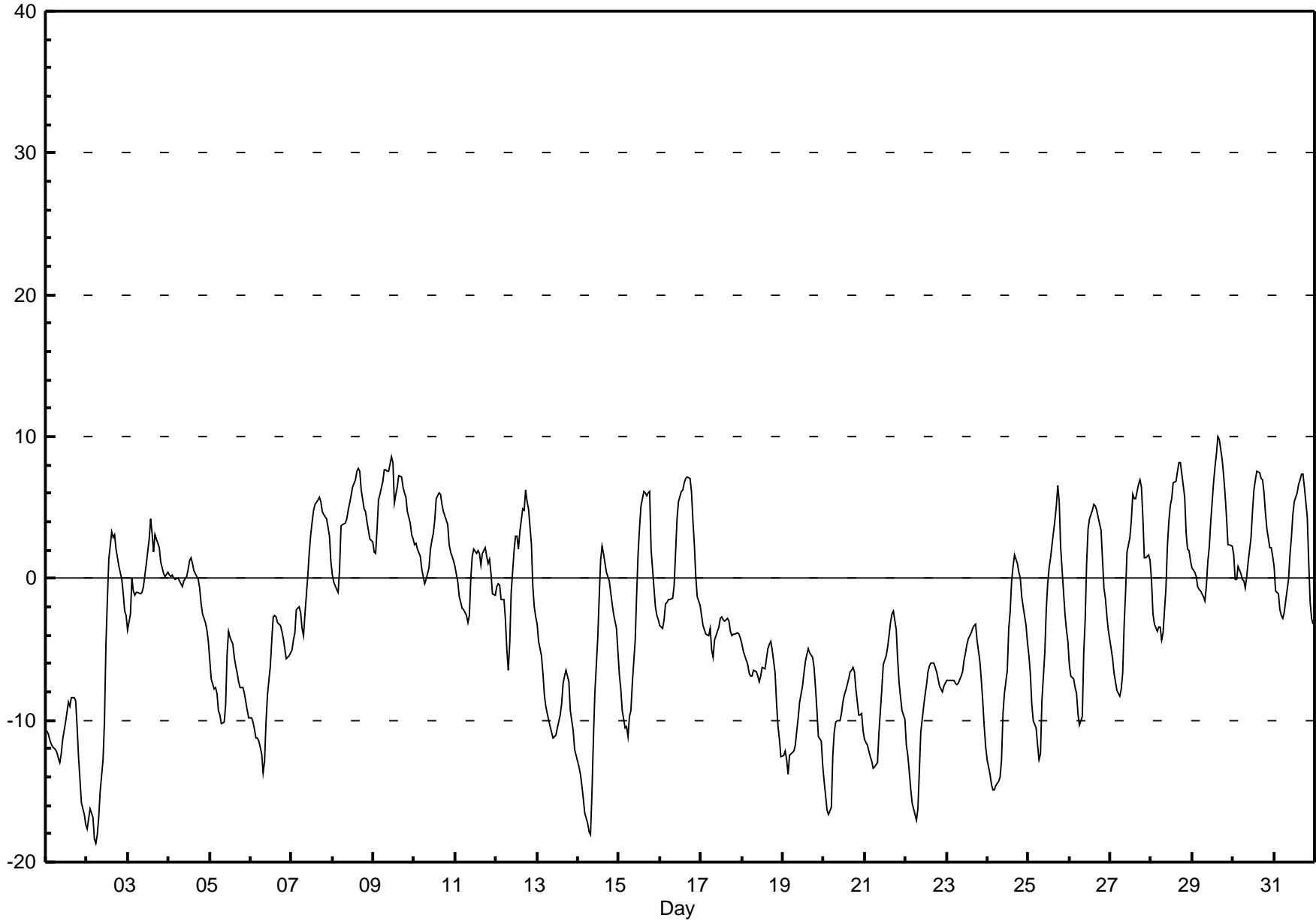
Hourly Averages

External Temperature (ET) - °C

Evergreen Park - March 2012

| | |
|--|--|
| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 | Hours in Service: 744 |
| Maximum Value: 10.0 °C on Mar 29 16:00 | Maximum Daily Average: 5.7 °C on Mar 9 |
| Minimum Value: -19 °C on Mar 2 06:00 | Hours of Data: 744 |
| Minimum Daily Average: -11.7 °C on Mar 1 | Hours of Missing Data: 0 |
| Maximum Diurnal Average: 1.5 °C at hour 17 | Hours of Calibration: 0 |
| Monthly Average: -3.02 °C | Percent Operational Time: 100.0 |
| Percentiles: P ₁ = -17.3 P ₁₀ = -11.8 Q ₁ = -7.7 Median = -2.6 Q ₃ = 1.9 P ₉₀ = 5.6 P ₉₉ = 8.1 | |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|------|-----|-----|-----|------|------|------|------|------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | -11 | -11 | -11 | -12 | -12 | -12 | -12 | -13 | -13 | -12 | -11 | -10 | -9 | -9 | -9 | -8 | -8 | -9 | -10 | -13 | -14 | -16 | -17 | -17 | -11.7 | -8.4 |
| 2-Mar | -18 | -17 | -16 | -17 | -18 | -19 | -18 | -17 | -15 | -13 | -10 | -5 | -2 | 1 | 3 | 3 | 3 | 2 | 1 | 1 | 0 | -1 | -2 | -3 | -7.3 | 3.3 |
| 3-Mar | -4 | -2 | 0 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 0 | 1 | 3 | 4 | 3 | 2 | 3 | 3 | 2 | 1 | 1 | 0 | 0 | 0 | 0.5 | 4.2 |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | -1 | -2 | -3 | -3 | -4 | -4 | -0.5 | 1.4 |
| 5-Mar | -6 | -7 | -8 | -8 | -8 | -9 | -10 | -10 | -10 | -9 | -5 | -4 | -4 | -5 | -6 | -6 | -7 | -7 | -8 | -8 | -8 | -9 | -9 | -10 | -7.5 | -3.8 |
| 6-Mar | -10 | -10 | -11 | -11 | -11 | -11 | -12 | -14 | -13 | -10 | -8 | -6 | -4 | -3 | -3 | -3 | -3 | -3 | -4 | -4 | -5 | -6 | -5 | -5 | -7.3 | -2.6 |
| 7-Mar | -5 | -4 | -4 | -2 | -2 | -2 | -4 | -4 | -3 | 0 | 2 | 3 | 4 | 5 | 5 | 6 | 6 | 5 | 5 | 4 | 4 | 4 | 3 | 1 | 1.1 | 5.7 |
| 8-Mar | 0 | 0 | -1 | -1 | 1 | 4 | 4 | 4 | 4 | 5 | 6 | 6 | 7 | 8 | 8 | 8 | 8 | 6 | 5 | 5 | 4 | 3 | 3 | 3 | 4.0 | 7.7 |
| 9-Mar | 2 | 2 | 4 | 6 | 6 | 7 | 8 | 8 | 8 | 8 | 9 | 8 | 5 | 6 | 6 | 7 | 7 | 6 | 6 | 6 | 5 | 4 | 3 | 3 | 5.7 | 8.6 |
| 10-Mar | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 4 | 6 | 6 | 6 | 5 | 5 | 4 | 4 | 2 | 2 | 2 | 1 | 2.7 | 6.1 |
| 11-Mar | 1 | 0 | -1 | -2 | -2 | -2 | -3 | -3 | -3 | 0 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 0 | -1 | -1 | 0.0 | 2.1 |
| 12-Mar | -1 | 0 | -1 | -1 | -2 | -3 | -5 | -7 | -5 | -1 | 2 | 3 | 3 | 2 | 3 | 5 | 5 | 6 | 5 | 5 | 2 | -1 | -2 | -3 | 0.5 | 6.3 |
| 13-Mar | -3 | -4 | -5 | -7 | -8 | -9 | -10 | -10 | -11 | -11 | -11 | -11 | -11 | -10 | -9 | -7 | -7 | -6 | -7 | -9 | -10 | -11 | -12 | -12 | -8.9 | -3.2 |
| 14-Mar | -13 | -14 | -15 | -16 | -17 | -17 | -18 | -18 | -15 | -11 | -8 | -4 | -1 | 1 | 2 | 2 | 0 | 0 | 0 | -1 | -2 | -3 | -4 | -5 | -7.3 | 2.3 |
| 15-Mar | -7 | -8 | -9 | -11 | -10 | -11 | -10 | -9 | -7 | -4 | -1 | 2 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 2 | -1 | -2 | -3 | -3 | -2.2 | 6.2 |
| 16-Mar | -3 | -4 | -3 | -2 | -2 | -1 | -2 | -1 | -1 | 2 | 4 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 4 | 2 | 0 | -1 | -2 | 1.8 | 7.2 |
| 17-Mar | -3 | -3 | -4 | -4 | -4 | -4 | -5 | -6 | -4 | -4 | -3 | -3 | -3 | -3 | -3 | -3 | -3 | -4 | -4 | -4 | -4 | -4 | -4 | -4 | -3.7 | -2.6 |
| 18-Mar | -5 | -5 | -6 | -6 | -7 | -7 | -7 | -6 | -7 | -7 | -7 | -7 | -6 | -6 | -6 | -5 | -5 | -4 | -5 | -7 | -9 | -10 | -11 | -13 | -6.8 | -4.5 |
| 19-Mar | -12 | -12 | -13 | -14 | -13 | -12 | -12 | -12 | -11 | -10 | -9 | -8 | -7 | -6 | -5 | -5 | -5 | -6 | -6 | -8 | -9 | -11 | -11 | -13 | -9.6 | -5.0 |
| 20-Mar | -14 | -15 | -16 | -17 | -16 | -12 | -11 | -10 | -10 | -10 | -9 | -9 | -8 | -8 | -7 | -7 | -6 | -6 | -7 | -8 | -10 | -10 | -10 | -11 | -10.3 | -6.2 |
| 21-Mar | -11 | -12 | -12 | -13 | -13 | -13 | -13 | -13 | -11 | -9 | -8 | -6 | -5 | -5 | -4 | -3 | -3 | -2 | -4 | -6 | -7 | -8 | -9 | -10 | -8.4 | -2.3 |
| 22-Mar | -12 | -12 | -14 | -15 | -16 | -17 | -17 | -16 | -14 | -11 | -9 | -8 | -8 | -7 | -6 | -6 | -6 | -6 | -7 | -7 | -8 | -8 | -8 | -7 | -10.1 | -5.9 |
| 23-Mar | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -6 | -5 | -5 | -4 | -4 | -4 | -3 | -3 | -4 | -6 | -7 | -9 | -10 | -12 | -6.4 | -3.2 |
| 24-Mar | -13 | -14 | -14 | -15 | -15 | -15 | -14 | -14 | -13 | -10 | -8 | -6 | -4 | -2 | 0 | 1 | 2 | 1 | 0 | 0 | -1 | -2 | -3 | -5 | -6.8 | 1.6 |
| 25-Mar | -5 | -7 | -9 | -10 | -11 | -12 | -13 | -12 | -9 | -5 | -2 | 0 | 1 | 1 | 2 | 4 | 5 | 7 | 5 | 2 | -1 | -3 | -4 | -4 | -3.3 | 6.6 |
| 26-Mar | -6 | -7 | -7 | -8 | -8 | -10 | -10 | -10 | -5 | -3 | 1 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 3 | 1 | -1 | -1 | -3 | -4 | -1.8 | 5.3 |
| 27-Mar | -5 | -6 | -7 | -7 | -8 | -8 | -8 | -7 | -3 | -1 | 2 | 3 | 4 | 6 | 6 | 6 | 7 | 7 | 6 | 4 | 1 | 1 | 2 | 1 | -0.1 | 6.9 |
| 28-Mar | 0 | -3 | -3 | -4 | -3 | -3 | -4 | -4 | -1 | 2 | 4 | 5 | 6 | 7 | 7 | 8 | 8 | 8 | 7 | 6 | 3 | 2 | 2 | 1 | 2.1 | 8.2 |
| 29-Mar | 1 | 0 | 0 | -1 | -1 | -1 | -1 | -2 | -1 | 1 | 2 | 4 | 7 | 8 | 9 | 10 | 10 | 8 | 7 | 6 | 4 | 2 | 2 | 2 | 3.3 | 10.0 |
| 30-Mar | 2 | 0 | 0 | 1 | 0 | 0 | 0 | -1 | 0 | 1 | 3 | 5 | 6 | 7 | 8 | 7 | 7 | 7 | 6 | 5 | 3 | 2 | 2 | 2 | 3.1 | 7.6 |
| 31-Mar | 1 | -1 | -1 | -2 | -3 | -3 | -2 | -2 | 0 | 2 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 7 | 6 | 4 | 1 | -2 | -3 | -3 | 1.7 | 7.3 |
| | -5.3 | -5.9 | -6.2 | -6.5 | -6.8 | -6.8 | -7.1 | -7.0 | -5.7 | -4.1 | -2.4 | -1.1 | -0.2 | 0.6 | 1.1 | 1.4 | 1.5 | 1.3 | 0.6 | -0.6 | -2.0 | -3.1 | -3.8 | -4.4 | Diurnal Average | |
| | 2.4 | 2.5 | 3.5 | 5.5 | 6.0 | 6.9 | 7.6 | 7.7 | 7.6 | 7.6 | 8.6 | 8.2 | 6.8 | 7.8 | 8.8 | 10.0 | 9.8 | 8.4 | 7.4 | 5.9 | 4.7 | 3.9 | 3.1 | 2.8 | Diurnal Maximum | |



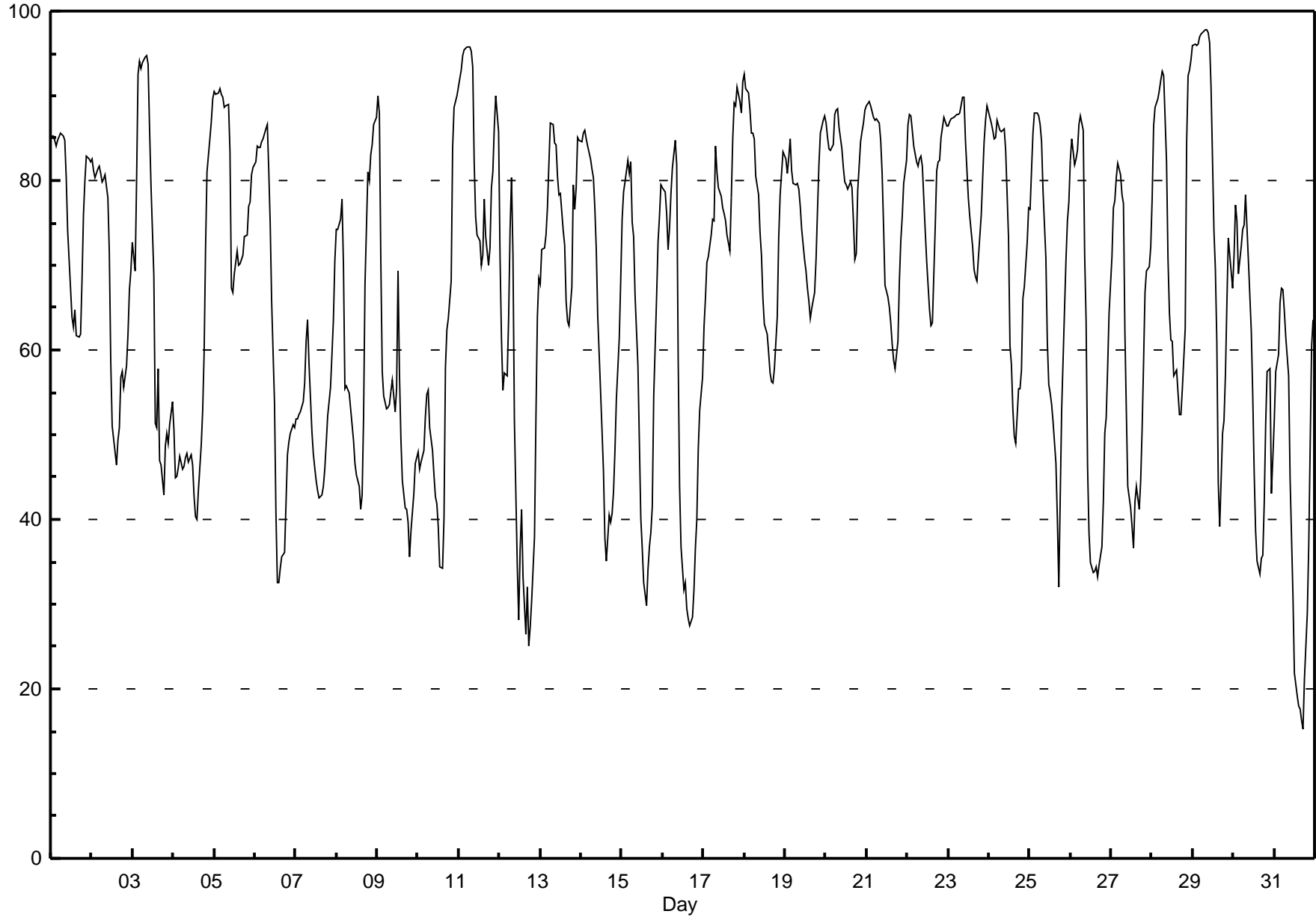
Hourly Averages

Relative Humidity (RH) - %
Evergreen Park - March 2012

| Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 97.8 % on Mar 29 08:00 Maximum Daily Average: 83.8 % on Mar 11 | | Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|-----------------|
| Minimum Value: 15 % on Mar 31 18:00 Maximum Diurnal Average: 79.3 % at hour 8 Monthly Average: 67.14 % | | Minimum Daily Average: 43.1 % on Mar 31 Minimum Diurnal Average: 49.8 % at hour 16 Percentiles: P ₁ = 24.9 P ₁₀ = 40.6 Q ₁ = 52.1 Median = 70.9 Q ₃ = 82.5 P ₉₀ = 88.0 P ₉₉ = 95.6 | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 85 | 85 | 85 | 84 | 85 | 86 | 85 | 85 | 85 | 80 | 74 | 67 | 64 | 63 | 65 | 62 | 61 | 62 | 68 | 76 | 80 | 83 | 82 | 82 | 76.4 | 85.5 |
| 2-Mar | 82 | 81 | 80 | 81 | 82 | 81 | 80 | 80 | 81 | 78 | 72 | 59 | 51 | 49 | 47 | 49 | 51 | 57 | 57 | 56 | 58 | 62 | 67 | 69 | 67.1 | 82.5 |
| 3-Mar | 73 | 69 | 80 | 93 | 94 | 93 | 94 | 95 | 95 | 94 | 86 | 80 | 69 | 51 | 51 | 58 | 47 | 46 | 43 | 49 | 50 | 49 | 51 | 54 | 69.3 | 94.7 |
| 4-Mar | 50 | 45 | 45 | 46 | 47 | 46 | 46 | 47 | 48 | 47 | 48 | 47 | 43 | 40 | 40 | 43 | 49 | 53 | 60 | 72 | 81 | 85 | 87 | 90 | 54.4 | 89.6 |
| 5-Mar | 91 | 90 | 90 | 91 | 90 | 90 | 89 | 89 | 89 | 83 | 67 | 67 | 69 | 72 | 70 | 70 | 71 | 71 | 73 | 74 | 77 | 77 | 81 | 82 | 79.7 | 90.8 |
| 6-Mar | 82 | 84 | 84 | 84 | 85 | 85 | 86 | 87 | 81 | 75 | 66 | 54 | 41 | 33 | 33 | 34 | 36 | 36 | 42 | 48 | 49 | 50 | 51 | 51 | 60.6 | 86.6 |
| 7-Mar | 52 | 52 | 52 | 53 | 54 | 56 | 61 | 64 | 58 | 51 | 48 | 46 | 45 | 43 | 43 | 43 | 44 | 46 | 49 | 52 | 56 | 59 | 64 | 70 | 52.5 | 70.4 |
| 8-Mar | 74 | 74 | 75 | 78 | 70 | 55 | 56 | 55 | 53 | 51 | 49 | 47 | 45 | 44 | 41 | 43 | 52 | 68 | 81 | 80 | 83 | 84 | 87 | 87 | 63.9 | 87.5 |
| 9-Mar | 90 | 88 | 71 | 57 | 55 | 53 | 53 | 53 | 55 | 56 | 53 | 55 | 69 | 57 | 50 | 45 | 41 | 41 | 40 | 36 | 39 | 43 | 47 | 47 | 53.9 | 90.0 |
| 10-Mar | 48 | 46 | 47 | 48 | 52 | 55 | 55 | 51 | 48 | 45 | 43 | 42 | 39 | 34 | 34 | 40 | 58 | 62 | 64 | 68 | 84 | 89 | 89 | 90 | 55.5 | 89.9 |
| 11-Mar | 91 | 93 | 95 | 95 | 96 | 96 | 96 | 95 | 93 | 82 | 76 | 74 | 73 | 70 | 71 | 78 | 73 | 70 | 72 | 79 | 81 | 86 | 90 | 86 | 83.8 | 95.8 |
| 12-Mar | 71 | 61 | 55 | 57 | 57 | 64 | 74 | 80 | 71 | 52 | 35 | 28 | 36 | 41 | 33 | 26 | 32 | 25 | 27 | 30 | 38 | 52 | 64 | 68 | 49.2 | 80.4 |
| 13-Mar | 68 | 72 | 72 | 74 | 77 | 82 | 87 | 87 | 84 | 84 | 80 | 78 | 79 | 74 | 72 | 66 | 63 | 63 | 67 | 79 | 77 | 79 | 85 | 85 | 76.4 | 86.7 |
| 14-Mar | 85 | 86 | 86 | 85 | 84 | 82 | 81 | 80 | 77 | 72 | 64 | 55 | 51 | 46 | 38 | 35 | 41 | 40 | 41 | 43 | 48 | 54 | 61 | 68 | 62.6 | 86.0 |
| 15-Mar | 75 | 79 | 80 | 82 | 81 | 82 | 75 | 73 | 66 | 58 | 49 | 40 | 37 | 32 | 30 | 34 | 37 | 38 | 42 | 55 | 66 | 73 | 76 | 79 | 60.0 | 82.4 |
| 16-Mar | 79 | 79 | 76 | 72 | 74 | 79 | 81 | 85 | 82 | 59 | 44 | 37 | 32 | 33 | 29 | 28 | 27 | 29 | 32 | 37 | 40 | 48 | 53 | 57 | 53.8 | 84.7 |
| 17-Mar | 63 | 66 | 70 | 71 | 74 | 75 | 75 | 84 | 81 | 79 | 78 | 77 | 76 | 75 | 74 | 72 | 78 | 85 | 89 | 89 | 91 | 89 | 88 | 92 | 78.8 | 91.7 |
| 18-Mar | 93 | 91 | 90 | 88 | 86 | 86 | 85 | 81 | 78 | 74 | 71 | 66 | 63 | 62 | 60 | 57 | 56 | 56 | 58 | 64 | 73 | 78 | 81 | 83 | 74.2 | 92.5 |
| 19-Mar | 83 | 81 | 83 | 85 | 81 | 80 | 79 | 80 | 79 | 77 | 74 | 71 | 69 | 67 | 66 | 64 | 65 | 67 | 71 | 76 | 82 | 86 | 87 | 88 | 76.6 | 87.6 |
| 20-Mar | 87 | 85 | 84 | 84 | 84 | 88 | 88 | 88 | 86 | 84 | 82 | 80 | 79 | 79 | 80 | 79 | 75 | 71 | 71 | 79 | 85 | 86 | 87 | 88 | 82.4 | 88.4 |
| 21-Mar | 89 | 89 | 89 | 88 | 87 | 87 | 87 | 87 | 85 | 81 | 75 | 68 | 66 | 65 | 63 | 61 | 59 | 58 | 61 | 68 | 73 | 76 | 80 | 82 | 76.0 | 89.3 |
| 22-Mar | 87 | 88 | 88 | 86 | 84 | 82 | 82 | 83 | 83 | 82 | 74 | 71 | 68 | 65 | 63 | 63 | 75 | 81 | 82 | 82 | 85 | 87 | 87 | 86 | 79.7 | 87.8 |
| 23-Mar | 86 | 87 | 87 | 87 | 88 | 88 | 88 | 88 | 90 | 90 | 85 | 81 | 78 | 76 | 72 | 69 | 69 | 68 | 71 | 76 | 80 | 85 | 87 | 89 | 81.9 | 89.9 |
| 24-Mar | 88 | 87 | 86 | 85 | 85 | 87 | 86 | 86 | 86 | 86 | 83 | 73 | 61 | 58 | 53 | 50 | 49 | 55 | 55 | 58 | 66 | 67 | 73 | 77 | 72.5 | 88.1 |
| 25-Mar | 77 | 81 | 86 | 88 | 88 | 88 | 87 | 85 | 79 | 71 | 61 | 56 | 55 | 54 | 51 | 47 | 40 | 32 | 43 | 53 | 65 | 71 | 75 | 77 | 67.0 | 88.0 |
| 26-Mar | 82 | 85 | 82 | 83 | 83 | 87 | 88 | 86 | 71 | 63 | 46 | 38 | 35 | 34 | 34 | 34 | 33 | 35 | 37 | 42 | 50 | 52 | 58 | 64 | 58.5 | 87.7 |
| 27-Mar | 71 | 77 | 78 | 80 | 82 | 81 | 78 | 77 | 62 | 53 | 44 | 41 | 39 | 37 | 42 | 44 | 41 | 45 | 51 | 59 | 67 | 69 | 70 | 72 | 60.8 | 82.1 |
| 28-Mar | 78 | 86 | 89 | 90 | 91 | 92 | 93 | 92 | 82 | 71 | 64 | 61 | 61 | 57 | 58 | 55 | 52 | 52 | 55 | 63 | 85 | 92 | 93 | 94 | 75.3 | 94.3 |
| 29-Mar | 96 | 96 | 96 | 96 | 97 | 97 | 98 | 98 | 98 | 98 | 96 | 91 | 74 | 69 | 61 | 44 | 39 | 50 | 52 | 57 | 65 | 73 | 71 | 67 | 78.3 | 97.8 |
| 30-Mar | 71 | 77 | 75 | 69 | 72 | 74 | 75 | 78 | 74 | 70 | 62 | 55 | 46 | 39 | 35 | 34 | 35 | 36 | 42 | 51 | 57 | 58 | 43 | 47 | 57.4 | 78.3 |
| 31-Mar | 52 | 58 | 59 | 66 | 67 | 67 | 65 | 62 | 57 | 45 | 38 | 31 | 22 | 19 | 18 | 18 | 16 | 15 | 21 | 29 | 37 | 49 | 61 | 64 | 43.1 | 67.2 |
| | | 77.3 | 78.0 | 77.9 | 78.3 | 78.4 | 78.8 | 79.1 | 79.3 | 76.1 | 70.7 | 64.1 | 59.2 | 55.9 | 52.8 | 50.8 | 49.8 | 50.5 | 52.0 | 55.4 | 60.6 | 66.7 | 70.7 | 73.4 | 75.4 | Diurnal Average |
| | | 95.9 | 96.1 | 95.9 | 96.2 | 96.9 | 97.4 | 97.7 | 97.8 | 97.7 | 97.5 | 96.2 | 90.9 | 79.4 | 79.1 | 79.8 | 79.2 | 77.9 | 84.9 | 89.1 | 88.9 | 90.9 | 92.4 | 93.0 | 94.3 | Diurnal Maximum |

Hourly Averages

**Relative Humidity (RH) - %
Evergreen Park - March 2012**



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - March 2012

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
|--------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|---------------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1 Spd | 7 | 7 | 8 | 6 | 5 | 3 | 3 | 1 | 2 | 4 | 4 | 4 | 7 | 7 | 10 | 10 | 8 | 7 | 5 | 3 | 0 | 1 | 1 | 1 | 3.4 | 10.2 | |
| Dir | 28 | 37 | 29 | 27 | 33 | 49 | 8 | 251 | 274 | 279 | 308 | 264 | 257 | 339 | 2 | 22 | 17 | 37 | 53 | 47 | 24 | 14 | 354 | 5 | 8.9 | 1.7 | |
| 2 Spd | 1 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 7 | 5 | 8 | 30 | 46 | 44 | 41 | 28 | 18 | 16 | 9 | 5 | 4 | 1 | 10.7 | 45.5 |
| Dir | 319 | 320 | 309 | 241 | 210 | 223 | 89 | 14 | 40 | 246 | 205 | 215 | 262 | 270 | 266 | 264 | 274 | 280 | 276 | 268 | 268 | 271 | 213 | 64 | 267.4 | 265.8 | |
| 3 Spd | 5 | 1 | 18 | 3 | 5 | 7 | 5 | 4 | 5 | 6 | 4 | 13 | 23 | 31 | 42 | 31 | 33 | 25 | 19 | 18 | 23 | 23 | 28 | 29 | 11.8 | 42.2 | |
| Dir | 61 | 274 | 261 | 68 | 177 | 177 | 145 | 134 | 160 | 169 | 210 | 227 | 255 | 323 | 336 | 325 | 291 | 278 | 284 | 265 | 254 | 251 | 258 | 261 | 277.7 | 335.9 | |
| 4 Spd | 29 | 29 | 33 | 27 | 28 | 32 | 21 | 24 | 18 | 11 | 13 | 21 | 26 | 26 | 26 | 22 | 25 | 23 | 25 | 15 | 14 | 5 | 5 | 2 | 20.1 | 32.8 | |
| Dir | 256 | 257 | 264 | 253 | 252 | 252 | 251 | 252 | 240 | 261 | 263 | 264 | 265 | 268 | 274 | 260 | 246 | 236 | 229 | 237 | 226 | 181 | 190 | 204 | 252.2 | 264.0 | |
| 5 Spd | 4 | 3 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 7 | 12 | 19 | 29 | 18 | 20 | 22 | 21 | 18 | 17 | 16 | 13 | 13 | 10 | 6 | 8.9 | 29.4 | |
| Dir | 54 | 47 | 27 | 270 | 264 | 296 | 325 | 316 | 250 | 299 | 305 | 320 | 342 | 12 | 16 | 34 | 34 | 34 | 33 | 28 | 29 | 41 | 66 | 68 | 11.5 | 341.9 | |
| 6 Spd | 2 | 4 | 5 | 7 | 4 | 3 | 5 | 3 | 1 | 8 | 12 | 17 | 26 | 31 | 36 | 36 | 43 | 45 | 39 | 36 | 21 | 20 | 22 | 25 | 15.5 | 45.3 | |
| Dir | 75 | 120 | 150 | 132 | 111 | 104 | 105 | 112 | 107 | 175 | 210 | 241 | 254 | 269 | 273 | 268 | 266 | 264 | 267 | 264 | 244 | 231 | 236 | 244 | 253.2 | 264.2 | |
| 7 Spd | 22 | 26 | 28 | 32 | 21 | 12 | 8 | 9 | 10 | 25 | 37 | 40 | 45 | 43 | 47 | 42 | 44 | 44 | 43 | 40 | 30 | 11 | 4 | 6 | 26.5 | 47.4 | |
| Dir | 243 | 247 | 253 | 260 | 267 | 308 | 325 | 268 | 287 | 274 | 269 | 268 | 266 | 267 | 265 | 265 | 266 | 263 | 263 | 273 | 274 | 306 | 24 | 76 | 267.3 | 265.2 | |
| 8 Spd | 5 | 4 | 3 | 3 | 11 | 28 | 31 | 33 | 33 | 27 | 25 | 18 | 13 | 12 | 12 | 17 | 6 | 3 | 10 | 6 | 4 | 4 | 4 | 2 | 9.0 | 33.1 | |
| Dir | 76 | 75 | 110 | 198 | 248 | 249 | 253 | 252 | 252 | 257 | 258 | 254 | 249 | 239 | 210 | 209 | 211 | 95 | 72 | 101 | 75 | 79 | 55 | 69 | 243.9 | 252.4 | |
| 9 Spd | 1 | 2 | 3 | 9 | 10 | 12 | 23 | 27 | 22 | 31 | 41 | 33 | 38 | 35 | 32 | 28 | 43 | 33 | 41 | 43 | 33 | 28 | 22 | 22 | 23.9 | 43.2 | |
| Dir | 27 | 213 | 193 | 192 | 205 | 215 | 224 | 230 | 241 | 252 | 251 | 277 | 273 | 270 | 263 | 275 | 273 | 269 | 274 | 275 | 274 | 279 | 277 | 265 | 262.1 | 275.0 | |
| 10 Spd | 21 | 26 | 25 | 18 | 7 | 2 | 12 | 17 | 11 | 4 | 7 | 13 | 12 | 10 | 12 | 12 | 10 | 5 | 11 | 10 | 3 | 3 | 5 | 6.4 | 26.4 | | |
| Dir | 255 | 256 | 259 | 265 | 272 | 239 | 206 | 222 | 223 | 252 | 251 | 207 | 222 | 178 | 145 | 131 | 139 | 135 | 84 | 112 | 120 | 148 | 82 | 116 | 211.9 | 255.5 | |
| 11 Spd | 4 | 5 | 5 | 2 | 3 | 3 | 5 | 1 | 3 | 4 | 4 | 6 | 7 | 8 | 8 | 9 | 5 | 5 | 2 | 14 | 4 | 2 | 2 | 9 | 1.2 | 14.5 | |
| Dir | 124 | 94 | 98 | 109 | 45 | 48 | 79 | 359 | 92 | 160 | 276 | 13 | 19 | 358 | 318 | 304 | 92 | 79 | 261 | 273 | 291 | 227 | 335 | 247 | 347.6 | 272.9 | |
| 12 Spd | 14 | 28 | 24 | 14 | 16 | 1 | 2 | 2 | 2 | 6 | 6 | 11 | 16 | 19 | 16 | 17 | 14 | 17 | 11 | 20 | 1 | 1 | 2 | 8 | 3.0 | 28.0 | |
| Dir | 249 | 244 | 238 | 227 | 223 | 151 | 47 | 80 | 68 | 148 | 121 | 123 | 61 | 63 | 76 | 98 | 88 | 124 | 195 | 223 | 309 | 278 | 342 | 332 | 169.8 | 243.6 | |
| 13 Spd | 14 | 20 | 12 | 18 | 27 | 21 | 18 | 19 | 17 | 18 | 18 | 16 | 17 | 16 | 14 | 10 | 12 | 7 | 5 | 3 | 5 | 2 | 4 | 3 | 12.2 | 26.5 | |
| Dir | 325 | 330 | 311 | 326 | 337 | 329 | 311 | 323 | 308 | 320 | 309 | 317 | 306 | 297 | 330 | 285 | 284 | 296 | 309 | 43 | 35 | 171 | 355 | 335 | 318.4 | 337.4 | |
| 14 Spd | 3 | 2 | 3 | 1 | 1 | 0 | 3 | 1 | 3 | 2 | 4 | 5 | 8 | 8 | 13 | 19 | 18 | 14 | 12 | 7 | 2 | 1 | 1 | 0 | 3.7 | 19.0 | |
| Dir | 341 | 211 | 211 | 320 | 23 | 255 | 211 | 254 | 11 | 312 | 267 | 343 | 358 | 28 | 50 | 59 | 65 | 77 | 75 | 88 | 62 | 41 | 15 | 132 | 50.3 | 58.8 | |
| 15 Spd | 1 | 1 | 1 | 3 | 1 | 4 | 5 | 5 | 10 | 8 | 10 | 14 | 14 | 16 | 14 | 13 | 13 | 0 | 5 | 1 | 1 | 1 | 2 | 1 | 5.0 | 16.0 | |
| Dir | 278 | 77 | 30 | 39 | 54 | 50 | 61 | 68 | 79 | 93 | 82 | 115 | 99 | 94 | 103 | 61 | 53 | 332 | 252 | 53 | 37 | 58 | 317 | 323 | 80.2 | 94.1 | |
| 16 Spd | 5 | 3 | 11 | 13 | 3 | 2 | 2 | 2 | 5 | 12 | 20 | 20 | 31 | 26 | 29 | 30 | 27 | 17 | 11 | 6 | 5 | 1 | 0 | 0 | 11.2 | 31.0 | |
| Dir | 299 | 239 | 285 | 257 | 83 | 234 | 218 | 222 | 226 | 246 | 258 | 267 | 262 | 279 | 275 | 269 | 272 | 278 | 274 | 252 | 229 | 223 | 169 | 317 | 266.5 | 261.6 | |
| 17 Spd | 1 | 1 | 2 | 3 | 3 | 4 | 9 | 14 | 16 | 24 | 23 | 21 | 22 | 23 | 24 | 24 | 21 | 18 | 17 | 15 | 5 | 6 | 7 | 9 | 11.7 | 24.3 | |
| Dir | 53 | 169 | 147 | 193 | 13 | 20 | 53 | 56 | 67 | 66 | 67 | 60 | 50 | 52 | 56 | 55 | 46 | 46 | 46 | 52 | 26 | 21 | 340 | 314 | 51.4 | 54.8 | |
| 18 Spd | 11 | 12 | 11 | 15 | 13 | 13 | 14 | 18 | 14 | 19 | 20 | 20 | 21 | 25 | 22 | 20 | 15 | 11 | 11 | 6 | 2 | 3 | 2 | 2 | 11.8 | 25.4 | |
| Dir | 319 | 324 | 264 | 270 | 281 | 276 | 274 | 303 | 314 | 318 | 291 | 285 | 337 | 339 | 336 | 342 | 338 | 325 | 330 | 338 | 29 | 52 | 49 | 349 | 313.7 | 338.5 | |
| 19 Spd | 4 | 1 | 2 | 1 | 4 | 8 | 8 | 6 | 12 | 8 | 10 | 11 | 10 | 12 | 15 | 12 | 13 | 13 | 10 | 5 | 1 | 3 | 0 | 2 | 6.5 | 14.7 | |
| Dir | 18 | 245 | 338 | 56 | 48 | 53 | 60 | 30 | 40 | 12 | 339 | 30 | 32 | 9 | 1 | 19 | 48 | 57 | 57 | 30 | 62 | 30 | 293 | 36 | 29.5 | 1.0 | |
| 20 Spd | 0 | 1 | 3 | 3 | 4 | 9 | 8 | 10 | 17 | 14 | 21 | 17 | 15 | 13 | 10 | 10 | 10 | 7 | 5 | 4 | 1 | 2 | 4 | 5 | 7.5 | 21.0 | |
| Dir | 55 | 5 | 36 | 357 | 46 | 74 | 75 | 64 | 63 | 72 | 54 | 53 | 39 | 34 | 28 | 26 | 38 | 5 | 10 | 62 | 68 | 81 | 75 | 61 | 49.0 | 54.0 | |
| 21 Spd | 5 | 8 | 6 | 5 | 6 | 9 | 10 | 9 | 11 | 12 | 8 | 10 | 13 | 12 | 12 | 10 | 9 | 14 | 15 | 10 | 9 | 8 | 4 | 4 | 8.2 | 14.6 | |
| Dir | 74 | 73 | 64 | 80 | 68 | 65 | 70 | 66 | 71 | 73 | 39 | 358 | 7 | 5 | 358 | 17 | 45 | 57 | 61 | 63 | 63 | 58 | 53 | 37 | 48.3 | 60.6 | |
| 22 Spd | 1 | 2 | 2 | 1 | 5 | 3 | 3 | 4 | 4 | 9 | 12 | 12 | 11 | 11 | 14 | 12 | 8 | 9 | 6 | 6 | 1 | 5 | 3 | 3 | 4.0 | 13.5 | |
| Dir | 338 | 308 | 244 | 261 | 219 | 240 | 234 | 276 | 299 | 328 | 21 | 23 | 8 | 5 | 343 | 351 | 37 | 37 | 34 | 25 | 295 | 225 | 310 | 221 | 353.5 | 343.2 | |

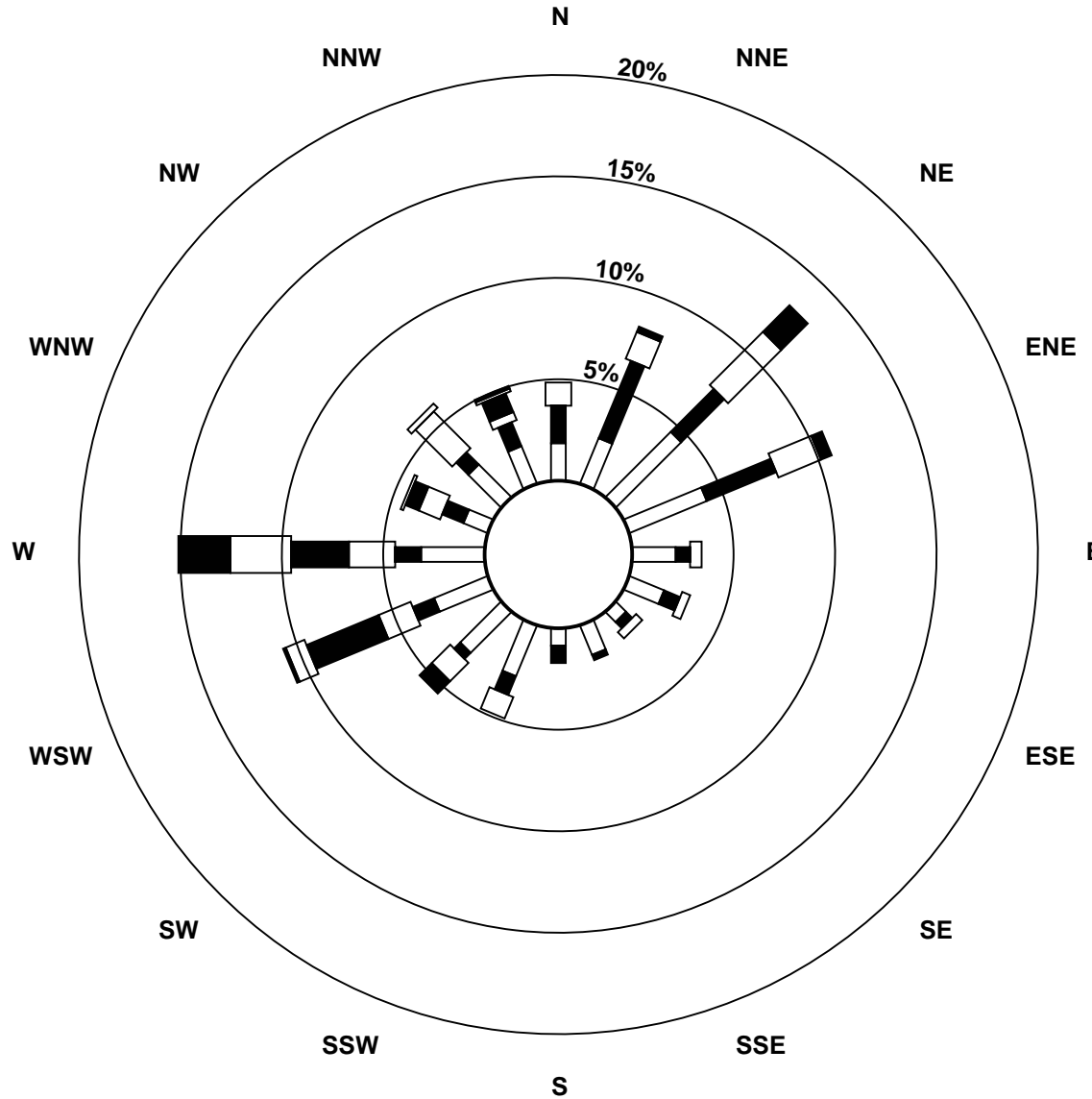
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - March 2012

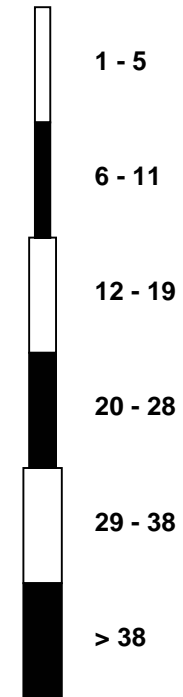
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--|-------------------------------|---|----------|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 23 Spd | 1 | 2 | 2 | 2 | 1 | 3 | 2 | 6 | 7 | 8 | 7 | 10 | 11 | 13 | 14 | 14 | 14 | 15 | 12 | 7 | 6 | 2 | 2 | 1 | 5.9 | 14.8 |
| Dir | 236 | 208 | 107 | 153 | 165 | 168 | 76 | 50 | 75 | 78 | 65 | 49 | 41 | 37 | 46 | 48 | 47 | 47 | 48 | 55 | 61 | 52 | 341 | 266 | 53.5 | 46.8 |
| 24 Spd | 1 | 1 | 1 | 0 | 2 | 2 | 2 | 2 | 4 | 4 | 5 | 10 | 10 | 15 | 11 | 10 | 9 | 10 | 8 | 7 | 6 | 1 | 3 | 3 | 3.8 | 14.8 |
| Dir | 334 | 299 | 235 | 303 | 277 | 328 | 332 | 215 | 254 | 268 | 276 | 353 | 350 | 353 | 18 | 44 | 34 | 14 | 28 | 346 | 346 | 353 | 249 | 269 | 352.5 | 352.6 |
| 25 Spd | 4 | 1 | 3 | 1 | 3 | 1 | 1 | 2 | 2 | 6 | 4 | 9 | 13 | 10 | 11 | 11 | 9 | 5 | 6 | 3 | 1 | 1 | 2 | 1 | 3.2 | 12.6 |
| Dir | 257 | 79 | 41 | 283 | 235 | 14 | 350 | 22 | 291 | 258 | 321 | 9 | 1 | 16 | 16 | 17 | 349 | 342 | 285 | 296 | 310 | 236 | 319 | 159 | 347.7 | 0.8 |
| 26 Spd | 2 | 3 | 4 | 1 | 1 | 2 | 2 | 2 | 1 | 5 | 9 | 14 | 20 | 21 | 22 | 23 | 25 | 25 | 17 | 10 | 4 | 4 | 4 | 3 | 7.5 | 24.6 |
| Dir | 305 | 202 | 289 | 283 | 278 | 219 | 55 | 349 | 223 | 237 | 51 | 54 | 47 | 57 | 52 | 53 | 53 | 53 | 53 | 51 | 43 | 6 | 339 | 212 | 48.2 | 52.6 |
| 27 Spd | 1 | 2 | 2 | 1 | 0 | 4 | 2 | 2 | 1 | 3 | 3 | 12 | 11 | 4 | 12 | 13 | 9 | 10 | 6 | 2 | 0 | 6 | 5 | 5 | 1.6 | 12.9 |
| Dir | 313 | 226 | 233 | 17 | 351 | 33 | 27 | 265 | 7 | 277 | 200 | 220 | 227 | 257 | 15 | 38 | 28 | 32 | 28 | 16 | 214 | 73 | 71 | 79 | 21.7 | 38.4 |
| 28 Spd | 3 | 1 | 1 | 3 | 3 | 2 | 1 | 2 | 4 | 8 | 9 | 6 | 12 | 13 | 17 | 16 | 20 | 16 | 11 | 4 | 31 | 11 | 4 | 9 | 4.0 | 30.8 |
| Dir | 76 | 272 | 163 | 90 | 69 | 75 | 6 | 76 | 64 | 101 | 51 | 16 | 17 | 48 | 52 | 48 | 56 | 58 | 62 | 307 | 268 | 287 | 255 | 206 | 37.6 | 268.4 |
| 29 Spd | 10 | 8 | 6 | 9 | 7 | 7 | 6 | 5 | 4 | 3 | 7 | 10 | 10 | 10 | 12 | 15 | 11 | 17 | 23 | 4 | 2 | 1 | 3 | 4 | 1.1 | 22.6 |
| Dir | 190 | 198 | 180 | 172 | 137 | 121 | 116 | 87 | 105 | 50 | 27 | 359 | 29 | 39 | 28 | 38 | 49 | 295 | 265 | 328 | 106 | 155 | 201 | 253 | 39.1 | 265.3 |
| 30 Spd | 4 | 5 | 5 | 12 | 6 | 1 | 1 | 4 | 8 | 11 | 14 | 14 | 19 | 19 | 14 | 13 | 23 | 18 | 17 | 12 | 13 | 14 | 19 | 16 | 10.3 | 23.0 |
| Dir | 253 | 206 | 280 | 261 | 280 | 258 | 243 | 217 | 251 | 261 | 277 | 281 | 274 | 284 | 296 | 283 | 264 | 255 | 212 | 193 | 209 | 215 | 236 | 240 | 253.8 | 264.3 |
| 31 Spd | 8 | 2 | 4 | 2 | 2 | 3 | 2 | 4 | 11 | 23 | 28 | 20 | 30 | 27 | 22 | 20 | 14 | 15 | 9 | 5 | 1 | 3 | 1 | 2 | 8.1 | 29.8 |
| Dir | 247 | 132 | 228 | 137 | 140 | 169 | 151 | 191 | 223 | 244 | 258 | 277 | 271 | 288 | 298 | 294 | 309 | 318 | 8 | 41 | 186 | 210 | 275 | 353 | 275.4 | 271.2 |
| Spd | 3.1 | 3.6 | 4.8 | 3.9 | 2.9 | 2.0 | 1.6 | 2.6 | 2.0 | 3.7 | 5.7 | 6.1 | 8.6 | 9.3 | 9.6 | 7.4 | 6.8 | 5.4 | 4.8 | 4.4 | 4.0 | 2.2 | 2.4 | 3.0 | Diurnal Average | |
| Dir | 272.4 | 259.2 | 259.8 | 254.4 | 264.5 | 272.0 | 259.9 | 269.3 | 273.8 | 273.3 | 284.7 | 297.7 | 305.9 | 320.6 | 326.2 | 330.6 | 320.3 | 316.3 | 300.2 | 286.2 | 271.2 | 269.8 | 273.8 | 260.6 | Diurnal Maximum | |
| Spd | 29.2 | 28.5 | 32.8 | 32.1 | 27.7 | 32.2 | 31.3 | 32.5 | 33.1 | 30.9 | 41.5 | 40.1 | 45.3 | 42.8 | 47.4 | 44.0 | 44.2 | 45.3 | 43.2 | 43.2 | 33.4 | 27.5 | 27.6 | 29.0 | Diurnal Maximum | |
| Dir | 255.8 | 257.2 | 264.0 | 260.3 | 251.7 | 252.0 | 252.9 | 252.5 | 252.4 | 252.1 | 251.5 | 268.2 | 266.3 | 267.4 | 265.2 | 264.3 | 265.7 | 264.2 | 262.6 | 275.0 | 274.1 | 279.2 | 258.4 | 261.1 | | |
| Maximum Speed Value: 47 km/h on Mar 7 15:00 | | Minimum Speed Value: 0 km/h on Mar 20 01:00 | | | | | | | | | | | | Hours in Service: 744 | | | | | | | | | | | | |
| Maximum Daily Speed Average: 26.5 km/h on Mar 7 | | Minimum Daily Speed Average: 1.1 km/h on Mar 25 | | | | | | | | | | | | Hours of Data: 744 | | | | | | | | | | | | |
| Maximum Diurnal Speed Average: 9.6 km/h at hour 15 | | Minimum Diurnal Speed Average: 1.6 km/h at hour 7 | | | | | | | | | | | | Hours of Missing Data: 0 | | | | | | | | | | | | |
| Monthly Average Velocity: 4.13 km/h 294.27 deg | | Speed Percentiles: P ₁ = 0.4 P ₁₀ = 1.4 Q ₁ = 3.1 Median = 8.3 Q ₃ = 15.8 P ₉₀ = 25.5 P ₉₉ = 43.7 | | | | | | | | | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | |
| All monthly, daily, and diurnal averages have been calculated using vector methods | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequency Distribution | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Speed Range (km/h) | | | | | | | | | | | | | | | | | | | | | | | | |
| Direction | 0 to 5 | 5 to 11 | 11 to 19 | 19 to 28 | 28 to 38 | > 38 | Total | | | | | | | | | | | | | | | | | | | |
| North | 33 | 34 | 16 | 3 | 1 | 0 | 87 | | | | | | | | | | | | | | | | | | | |
| NorthEast | 54 | 53 | 41 | 19 | 0 | 0 | 167 | | | | | | | | | | | | | | | | | | | |
| East | 42 | 22 | 12 | 0 | 0 | 0 | 76 | | | | | | | | | | | | | | | | | | | |
| SouthEast | 16 | 8 | 6 | 0 | 0 | 0 | 30 | | | | | | | | | | | | | | | | | | | |
| South | 19 | 12 | 1 | 0 | 0 | 0 | 32 | | | | | | | | | | | | | | | | | | | |
| SouthWest | 44 | 8 | 26 | 15 | 1 | 0 | 94 | | | | | | | | | | | | | | | | | | | |
| West | 41 | 21 | 26 | 38 | 32 | 19 | 177 | | | | | | | | | | | | | | | | | | | |
| NorthWest | 34 | 12 | 23 | 9 | 2 | 1 | 81 | | | | | | | | | | | | | | | | | | | |
| Total | 283 | 170 | 151 | 84 | 36 | 20 | 744 | | | | | | | | | | | | | | | | | | | |

Wind Rose

Wind Speed (WS) (km/h)
Evergreen Park - March 2012



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - March 2012

| | | |
|---|---|---------------------------------|
| Maximum Speed: 48 km/h on Mar 7 15:00 | Maximum Daily Speed Average: 28.3 km/h on Mar 7 | Hours in Service: 744 |
| Minimum Speed: 1 km/h on Mar 22 04:00 | Minimum Daily Speed Average: 5.5 km/h on Mar 1 | Hours of Data: 744 |
| Maximum Diurnal Speed Average: 20.5 km/h at hour 15 | Minimum Diurnal Speed Average: 6.8 km/h at hour 23 | Hours of Missing Data: 0 |
| Monthly Average Speed: 11.95 km/h | Percentiles: P ₁ = 1.7 P ₁₀ = 2.9 Q ₁ = 4.4 Median = 9.2 Q ₃ = 16.3 P ₉₀ = 26.0 P ₉₉ = 44.1 | Percent Operational Time: 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 7 | 7 | 8 | 6 | 5 | 3 | 4 | 2 | 3 | 5 | 6 | 5 | 7 | 9 | 11 | 11 | 9 | 8 | 5 | 3 | 2 | 2 | 1 | 1 | 5.5 | 11.5 |
| 2-Mar | 2 | 3 | 3 | 2 | 4 | 3 | 3 | 2 | 3 | 4 | 8 | 6 | 9 | 31 | 46 | 44 | 41 | 28 | 18 | 16 | 9 | 5 | 5 | 3 | 12.5 | 45.8 |
| 3-Mar | 5 | 6 | 18 | 5 | 6 | 7 | 5 | 4 | 6 | 7 | 6 | 14 | 24 | 33 | 43 | 32 | 34 | 25 | 21 | 18 | 23 | 24 | 28 | 29 | 17.5 | 43.0 |
| 4-Mar | 29 | 29 | 33 | 27 | 28 | 32 | 21 | 24 | 19 | 11 | 13 | 21 | 26 | 26 | 27 | 22 | 25 | 23 | 25 | 16 | 14 | 6 | 5 | 4 | 21.2 | 33.1 |
| 5-Mar | 4 | 4 | 4 | 5 | 5 | 4 | 3 | 6 | 6 | 8 | 13 | 20 | 30 | 20 | 21 | 23 | 22 | 18 | 17 | 17 | 14 | 13 | 10 | 6 | 12.2 | 29.8 |
| 6-Mar | 2 | 4 | 7 | 7 | 5 | 4 | 6 | 3 | 2 | 9 | 13 | 18 | 27 | 32 | 36 | 37 | 44 | 46 | 39 | 36 | 21 | 20 | 22 | 25 | 19.3 | 45.7 |
| 7-Mar | 23 | 26 | 29 | 32 | 21 | 14 | 8 | 9 | 11 | 25 | 37 | 40 | 46 | 43 | 48 | 42 | 44 | 44 | 44 | 40 | 31 | 13 | 5 | 6 | 28.3 | 47.7 |
| 8-Mar | 5 | 5 | 4 | 6 | 14 | 28 | 31 | 33 | 33 | 28 | 25 | 18 | 13 | 12 | 12 | 17 | 10 | 9 | 11 | 7 | 4 | 4 | 5 | 3 | 14.1 | 33.3 |
| 9-Mar | 2 | 5 | 5 | 9 | 11 | 12 | 23 | 27 | 22 | 31 | 42 | 34 | 38 | 35 | 33 | 28 | 43 | 33 | 41 | 43 | 34 | 28 | 23 | 24 | 26.1 | 43.4 |
| 10-Mar | 22 | 27 | 25 | 18 | 10 | 5 | 12 | 17 | 15 | 6 | 9 | 14 | 12 | 12 | 13 | 14 | 13 | 10 | 5 | 12 | 10 | 4 | 3 | 5 | 12.1 | 26.6 |
| 11-Mar | 5 | 5 | 5 | 3 | 3 | 3 | 6 | 3 | 4 | 6 | 5 | 7 | 8 | 9 | 9 | 11 | 6 | 5 | 8 | 16 | 6 | 5 | 4 | 9 | 6.3 | 16.3 |
| 12-Mar | 14 | 28 | 24 | 14 | 16 | 6 | 3 | 4 | 4 | 7 | 7 | 13 | 17 | 19 | 17 | 18 | 16 | 17 | 14 | 20 | 3 | 3 | 4 | 9 | 12.5 | 28.3 |
| 13-Mar | 14 | 21 | 13 | 18 | 27 | 22 | 20 | 20 | 18 | 18 | 19 | 17 | 18 | 18 | 16 | 12 | 12 | 8 | 6 | 4 | 7 | 4 | 4 | 3 | 14.2 | 26.9 |
| 14-Mar | 4 | 3 | 4 | 2 | 2 | 2 | 4 | 3 | 4 | 4 | 5 | 6 | 9 | 9 | 13 | 20 | 18 | 14 | 12 | 8 | 4 | 2 | 2 | 2 | 6.5 | 19.5 |
| 15-Mar | 2 | 4 | 2 | 3 | 4 | 4 | 6 | 6 | 10 | 9 | 10 | 15 | 15 | 17 | 15 | 14 | 13 | 8 | 8 | 3 | 4 | 2 | 4 | 3 | 7.6 | 16.8 |
| 16-Mar | 6 | 5 | 12 | 13 | 4 | 3 | 5 | 3 | 6 | 12 | 21 | 20 | 32 | 27 | 30 | 30 | 28 | 18 | 11 | 6 | 5 | 3 | 1 | 2 | 12.7 | 32.1 |
| 17-Mar | 3 | 3 | 3 | 4 | 4 | 5 | 9 | 14 | 16 | 24 | 24 | 22 | 23 | 24 | 24 | 25 | 21 | 19 | 17 | 15 | 7 | 8 | 8 | 9 | 13.8 | 25.0 |
| 18-Mar | 12 | 13 | 12 | 15 | 13 | 13 | 15 | 19 | 15 | 20 | 23 | 23 | 21 | 26 | 23 | 21 | 16 | 14 | 12 | 7 | 5 | 4 | 3 | 3 | 14.5 | 25.8 |
| 19-Mar | 4 | 4 | 4 | 3 | 5 | 9 | 9 | 6 | 13 | 10 | 11 | 12 | 12 | 14 | 16 | 13 | 13 | 14 | 10 | 6 | 3 | 4 | 2 | 3 | 8.3 | 15.5 |
| 20-Mar | 4 | 3 | 4 | 3 | 5 | 9 | 8 | 10 | 18 | 15 | 21 | 18 | 16 | 14 | 11 | 11 | 11 | 8 | 6 | 4 | 3 | 3 | 5 | 5 | 8.8 | 21.3 |
| 21-Mar | 5 | 8 | 6 | 5 | 6 | 9 | 11 | 10 | 11 | 13 | 10 | 11 | 14 | 12 | 12 | 11 | 10 | 15 | 15 | 11 | 9 | 8 | 5 | 6 | 9.7 | 15.0 |
| 22-Mar | 2 | 2 | 2 | 1 | 5 | 3 | 3 | 4 | 5 | 10 | 13 | 13 | 12 | 13 | 15 | 13 | 9 | 10 | 7 | 7 | 2 | 5 | 3 | 3 | 6.8 | 15.0 |
| 23-Mar | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 6 | 8 | 9 | 8 | 10 | 11 | 13 | 15 | 15 | 14 | 15 | 12 | 7 | 6 | 3 | 3 | 2 | 7.4 | 15.3 |
| 24-Mar | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 4 | 4 | 7 | 11 | 11 | 15 | 12 | 11 | 10 | 12 | 10 | 8 | 7 | 4 | 5 | 5 | 6.4 | 15.1 |
| 25-Mar | 4 | 2 | 3 | 2 | 5 | 2 | 3 | 3 | 4 | 6 | 7 | 10 | 13 | 12 | 12 | 12 | 10 | 6 | 6 | 5 | 4 | 4 | 4 | 3 | 5.9 | 13.3 |
| 26-Mar | 4 | 4 | 5 | 3 | 4 | 3 | 4 | 3 | 2 | 6 | 11 | 15 | 20 | 22 | 22 | 24 | 25 | 25 | 18 | 10 | 4 | 4 | 4 | 4 | 10.2 | 24.9 |
| 27-Mar | 1 | 2 | 4 | 4 | 2 | 4 | 4 | 5 | 2 | 4 | 5 | 12 | 12 | 7 | 15 | 14 | 9 | 11 | 6 | 3 | 2 | 6 | 6 | 5 | 6.0 | 14.8 |
| 28-Mar | 4 | 2 | 2 | 3 | 4 | 3 | 2 | 4 | 5 | 10 | 11 | 9 | 14 | 14 | 17 | 16 | 21 | 16 | 11 | 11 | 31 | 14 | 13 | 10 | 10.2 | 31.2 |
| 29-Mar | 10 | 8 | 7 | 10 | 7 | 7 | 7 | 6 | 5 | 6 | 8 | 10 | 11 | 10 | 13 | 16 | 13 | 19 | 23 | 6 | 4 | 3 | 4 | 6 | 9.1 | 23.5 |
| 30-Mar | 4 | 5 | 7 | 12 | 7 | 4 | 5 | 5 | 9 | 11 | 14 | 14 | 20 | 20 | 16 | 14 | 24 | 18 | 19 | 13 | 14 | 14 | 19 | 16 | 12.6 | 23.7 |
| 31-Mar | 8 | 3 | 5 | 5 | 3 | 3 | 7 | 5 | 11 | 23 | 29 | 22 | 31 | 28 | 24 | 22 | 17 | 17 | 12 | 5 | 3 | 3 | 2 | 3 | 12.2 | 31.0 |
| | 7.0 | 7.9 | 8.5 | 8.0 | 7.8 | 7.6 | 8.1 | 8.6 | 9.5 | 11.7 | 14.2 | 15.5 | 18.5 | 19.2 | 20.5 | 19.7 | 19.5 | 17.3 | 15.2 | 12.3 | 9.4 | 7.3 | 6.8 | 7.0 | Diurnal Average | |
| | 29.3 | 28.7 | 33.1 | 32.4 | 27.8 | 32.3 | 31.4 | 32.7 | 33.3 | 31.1 | 41.7 | 40.4 | 45.6 | 43.1 | 47.7 | 44.2 | 44.5 | 45.7 | 43.5 | 43.4 | 33.7 | 27.9 | 27.7 | 29.1 | Diurnal Maximum | |

All monthly, daily, and diurnal averages have been calculated using scalar methods

Hourly Standard Deviations

Wind Direction (WD) - deg
Evergreen Park - March 2012

| Maximum Value: 98.4 deg on Mar 27 21:00 | | | | | | | | | | | | | | | | | | | | | | Hours in Service: | 744 | | |
|---|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------------------|-------|----|---------------|
| Minimum Value: 4.9 deg on Mar 6 22:00 | | | | | | | | | | | | | | | | | | | | | | Hours of Data: | 744 | | |
| Percentiles: P ₁ = 5.3 P ₁₀ = 8.2 Q ₁ = 14.4 Median = 25.1 Q ₃ = 50.6 P ₉₀ = 76.5 P ₉₉ = 93.0 | | | | | | | | | | | | | | | | | | | | | | Hours of Missing Data: | 0 | | |
| | | | | | | | | | | | | | | | | | | | | | | Hours of Calibration: | 0 | | |
| | | | | | | | | | | | | | | | | | | | | | | Percent Operational Time: | 100.0 | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| 1-Mar | 17 | 15 | 10 | 19 | 16 | 19 | 56 | 57 | 77 | 41 | 46 | 56 | 28 | 46 | 29 | 28 | 24 | 15 | 21 | 32 | 91 | 59 | 58 | 74 | 90.9 |
| 2-Mar | 62 | 37 | 40 | 50 | 73 | 96 | 82 | 91 | 87 | 78 | 42 | 66 | 37 | 11 | 6 | 6 | 9 | 13 | 17 | 8 | 31 | 22 | 82 | 85 | 96.1 |
| 3-Mar | 16 | 88 | 11 | 69 | 44 | 21 | 36 | 31 | 35 | 33 | 71 | 17 | 14 | 23 | 11 | 19 | 15 | 12 | 24 | 7 | 5 | 6 | 6 | 6 | 88.2 |
| 4-Mar | 6 | 7 | 7 | 5 | 6 | 5 | 7 | 5 | 6 | 23 | 9 | 8 | 8 | 12 | 17 | 11 | 8 | 7 | 7 | 7 | 12 | 30 | 32 | 73 | 72.7 |
| 5-Mar | 47 | 43 | 69 | 77 | 53 | 53 | 32 | 54 | 55 | 33 | 23 | 19 | 10 | 22 | 19 | 12 | 12 | 12 | 12 | 14 | 16 | 11 | 22 | 28 | 77.0 |
| 6-Mar | 47 | 34 | 24 | 15 | 27 | 41 | 15 | 21 | 90 | 25 | 16 | 19 | 14 | 13 | 9 | 9 | 6 | 7 | 7 | 8 | 8 | 5 | 5 | 5 | 89.5 |
| 7-Mar | 6 | 6 | 8 | 8 | 9 | 34 | 14 | 9 | 16 | 8 | 8 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 6 | 8 | 35 | 24 | 24 | 35.4 |
| 8-Mar | 27 | 48 | 56 | 71 | 88 | 6 | 5 | 6 | 6 | 7 | 7 | 9 | 14 | 15 | 12 | 14 | 77 | 74 | 23 | 48 | 38 | 35 | 34 | 50 | 87.7 |
| 9-Mar | 76 | 90 | 76 | 16 | 14 | 11 | 5 | 6 | 7 | 6 | 7 | 16 | 11 | 9 | 7 | 10 | 10 | 9 | 6 | 7 | 8 | 10 | 11 | 18 | 90.2 |
| 10-Mar | 12 | 7 | 5 | 12 | 40 | 85 | 9 | 7 | 76 | 68 | 45 | 15 | 31 | 40 | 28 | 29 | 16 | 22 | 19 | 25 | 17 | 49 | 36 | 19 | 85.2 |
| 11-Mar | 47 | 27 | 20 | 50 | 25 | 29 | 24 | 69 | 45 | 61 | 44 | 36 | 37 | 31 | 38 | 37 | 40 | 34 | 90 | 29 | 50 | 71 | 71 | 19 | 90.0 |
| 12-Mar | 12 | 8 | 7 | 10 | 10 | 85 | 59 | 77 | 68 | 47 | 47 | 30 | 17 | 11 | 21 | 21 | 31 | 16 | 39 | 7 | 71 | 78 | 72 | 48 | 85.1 |
| 13-Mar | 14 | 23 | 23 | 15 | 10 | 24 | 26 | 18 | 23 | 15 | 18 | 23 | 22 | 25 | 24 | 33 | 21 | 30 | 37 | 30 | 38 | 75 | 47 | 49 | 74.8 |
| 14-Mar | 44 | 88 | 69 | 84 | 79 | 97 | 73 | 82 | 58 | 64 | 37 | 24 | 25 | 26 | 20 | 14 | 12 | 13 | 11 | 21 | 61 | 72 | 77 | 84 | 97.4 |
| 15-Mar | 64 | 75 | 81 | 20 | 94 | 55 | 31 | 16 | 12 | 21 | 19 | 21 | 24 | 19 | 20 | 16 | 15 | 96 | 71 | 78 | 73 | 75 | 66 | 66 | 95.7 |
| 16-Mar | 43 | 61 | 28 | 16 | 53 | 68 | 88 | 71 | 52 | 9 | 12 | 15 | 17 | 14 | 11 | 11 | 12 | 12 | 10 | 30 | 29 | 88 | 92 | 86 | 91.7 |
| 17-Mar | 87 | 63 | 59 | 81 | 80 | 47 | 16 | 8 | 18 | 14 | 14 | 13 | 14 | 13 | 12 | 14 | 13 | 11 | 11 | 12 | 68 | 44 | 37 | 21 | 86.7 |
| 18-Mar | 20 | 20 | 12 | 7 | 11 | 13 | 19 | 16 | 15 | 21 | 30 | 30 | 15 | 11 | 19 | 20 | 20 | 40 | 28 | 32 | 70 | 48 | 72 | 69 | 71.5 |
| 19-Mar | 29 | 77 | 64 | 80 | 47 | 12 | 14 | 19 | 15 | 34 | 22 | 24 | 34 | 29 | 19 | 27 | 26 | 21 | 20 | 34 | 93 | 63 | 88 | 85 | 93.2 |
| 20-Mar | 92 | 81 | 36 | 25 | 29 | 9 | 15 | 18 | 13 | 20 | 11 | 17 | 21 | 20 | 24 | 24 | 23 | 33 | 40 | 11 | 90 | 45 | 24 | 18 | 92.2 |
| 21-Mar | 18 | 11 | 27 | 45 | 13 | 8 | 8 | 10 | 16 | 23 | 38 | 23 | 21 | 19 | 17 | 22 | 23 | 14 | 12 | 14 | 14 | 13 | 25 | 53 | 53.2 |
| 22-Mar | 53 | 51 | 55 | 72 | 23 | 34 | 41 | 36 | 30 | 23 | 20 | 29 | 30 | 33 | 29 | 23 | 28 | 23 | 19 | 15 | 62 | 20 | 30 | 42 | 72.1 |
| 23-Mar | 70 | 52 | 51 | 59 | 91 | 64 | 30 | 33 | 26 | 24 | 36 | 20 | 22 | 24 | 24 | 20 | 18 | 16 | 14 | 14 | 8 | 41 | 49 | 70 | 91.0 |
| 24-Mar | 63 | 78 | 74 | 98 | 39 | 58 | 55 | 63 | 23 | 34 | 38 | 34 | 43 | 12 | 31 | 25 | 29 | 25 | 41 | 44 | 25 | 84 | 72 | 74 | 97.8 |
| 25-Mar | 49 | 83 | 36 | 70 | 82 | 68 | 89 | 71 | 75 | 22 | 60 | 32 | 20 | 30 | 21 | 27 | 33 | 37 | 32 | 63 | 92 | 94 | 80 | 77 | 94.1 |
| 26-Mar | 71 | 64 | 40 | 77 | 91 | 91 | 81 | 60 | 91 | 38 | 37 | 19 | 13 | 15 | 15 | 13 | 10 | 8 | 11 | 12 | 19 | 19 | 41 | 80 | 91.4 |
| 27-Mar | 70 | 78 | 85 | 80 | 86 | 26 | 70 | 74 | 59 | 42 | 68 | 18 | 21 | 62 | 32 | 23 | 23 | 19 | 17 | 68 | 98 | 20 | 33 | 20 | 98.4 |
| 28-Mar | 67 | 95 | 73 | 40 | 80 | 63 | 66 | 65 | 34 | 30 | 39 | 73 | 25 | 22 | 18 | 13 | 14 | 14 | 15 | 61 | 9 | 45 | 79 | 17 | 95.2 |
| 29-Mar | 11 | 13 | 28 | 15 | 28 | 29 | 25 | 31 | 48 | 58 | 32 | 25 | 31 | 21 | 21 | 16 | 45 | 30 | 15 | 37 | 56 | 83 | 35 | 43 | 82.9 |
| 30-Mar | 25 | 46 | 55 | 8 | 47 | 93 | 84 | 37 | 26 | 10 | 13 | 16 | 20 | 20 | 25 | 19 | 18 | 11 | 24 | 12 | 17 | 8 | 7 | 8 | 93.1 |
| 31-Mar | 35 | 45 | 31 | 56 | 51 | 53 | 70 | 58 | 10 | 10 | 14 | 25 | 16 | 17 | 27 | 24 | 38 | 31 | 39 | 20 | 76 | 27 | 56 | 77 | 77.5 |
| 92.2 | 95.2 | 85.4 | 97.8 | 93.7 | 97.4 | 88.9 | 91.3 | 90.5 | 77.6 | 71.0 | 72.7 | 42.8 | 62.5 | 37.8 | 36.6 | 76.6 | 95.7 | 90.0 | 77.6 | 98.4 | 94.1 | 91.7 | 86.0 | | |

PAZA

Smoky Heights Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

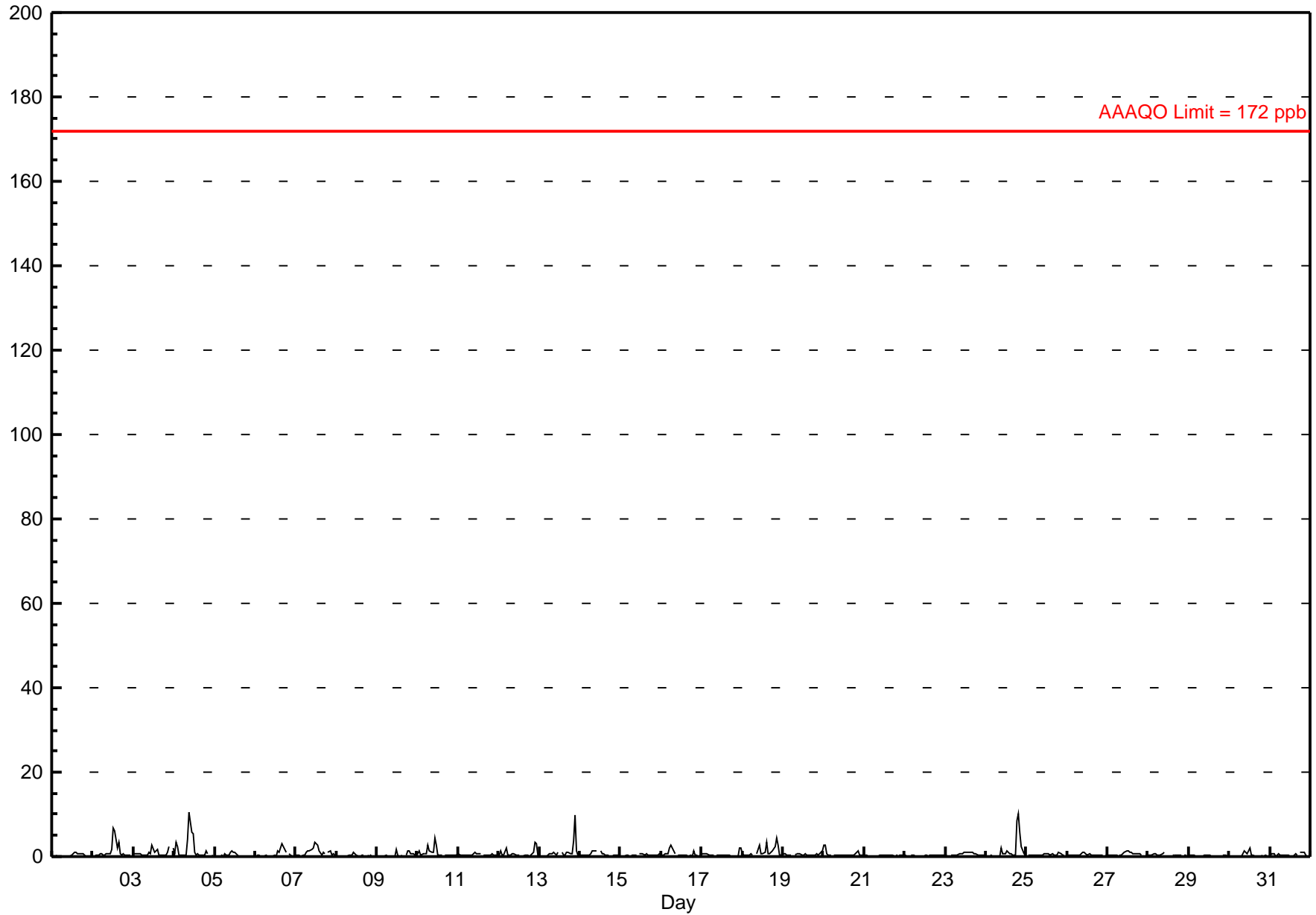
Sulphur Dioxide (SO₂) - ppb

Smoky Heights - March 2012

| | | | | |
|---|--|----------|---------------------------|-------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 10.6 ppb on Mar 4 10:00 | Maximum Daily Average: 1.8 ppb on Mar 4 | | Hours of Data: | 707 |
| Minimum Value: 0 ppb on Mar 5 23:00 | Minimum Daily Average: 0.1 ppb on Mar 29 | | Hours of Missing Data: | 37 |
| Maximum Diurnal Average: 1.1 ppb at hour 12 | Minimum Diurnal Average: 0.3 ppb at hour 4 | | Hours of Calibration: | 37 |
| Monthly Average: 0.64 ppb | Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.4 Q ₃ = 0.6 P ₉₀ = 1.3 P ₉₉ = 5.6 | | Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
|--------|-------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---------------|---------------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.1 | |
| 2-Mar | A | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 2 | 7 | 6 | 2 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1.3 | 6.9 | |
| 3-Mar | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | A | 2 | 0.9 | 2.6 | |
| 4-Mar | 1 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 11 | 6 | 6 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | A | 0 | 0 | 1.8 | 10.6 | |
| 5-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.3 | 1.2 | |
| 6-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 2 | 1 | A | 1 | 0 | 0 | 0 | 0 | 0.5 | 2.9 | |
| 7-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 1 | 0 | 1 | 1 | A | 1 | 1 | 0 | 1 | 0 | 1.0 | 3.3 | |
| 8-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1.1 | |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 0 | 1 | 0.4 | 1.8 | |
| 10-Mar | 1 | 1 | 0 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 4 | 3 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.9 | 4.3 | |
| 11-Mar | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0.4 | 0.9 | |
| 12-Mar | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 3 | 0 | 0.7 | 3.5 | |
| 13-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | A | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 4 | 10 | 1 | 0 | 1.1 | 10.0 | |
| 14-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 1.5 | |
| 15-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.4 | 0.7 | |
| 16-Mar | 0 | 0 | 1 | 1 | 1 | 2 | 3 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0.6 | 2.6 | |
| 17-Mar | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0.4 | 2.1 | |
| 18-Mar | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 3 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 2 | 5 | 3 | 0 | 0 | 1.2 | 4.6 |
| 19-Mar | 1 | 1 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0.5 | 1.2 | |
| 20-Mar | 3 | 3 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0.6 | 2.7 | |
| 21-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.4 | |
| 22-Mar | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.5 | |
| 23-Mar | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0.6 | 1.2 | |
| 24-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 8 | 10 | 6 | 2 | 1 | 1 | 1.6 | 10.2 |
| 25-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | A | 0.5 | 0.9 | |
| 26-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.4 | 0.9 | |
| 27-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | A | 0 | 1 | 0.6 | 1.3 | |
| 28-Mar | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | C | C | C | C | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.4 | 1.0 | |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.1 | 0.4 | |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.4 | 2.2 | |
| 31-Mar | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | A | 1 | 1 | 1 | 0 | 0 | 0 | 0.4 | 1.0 | |

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb



Hourly Maximums

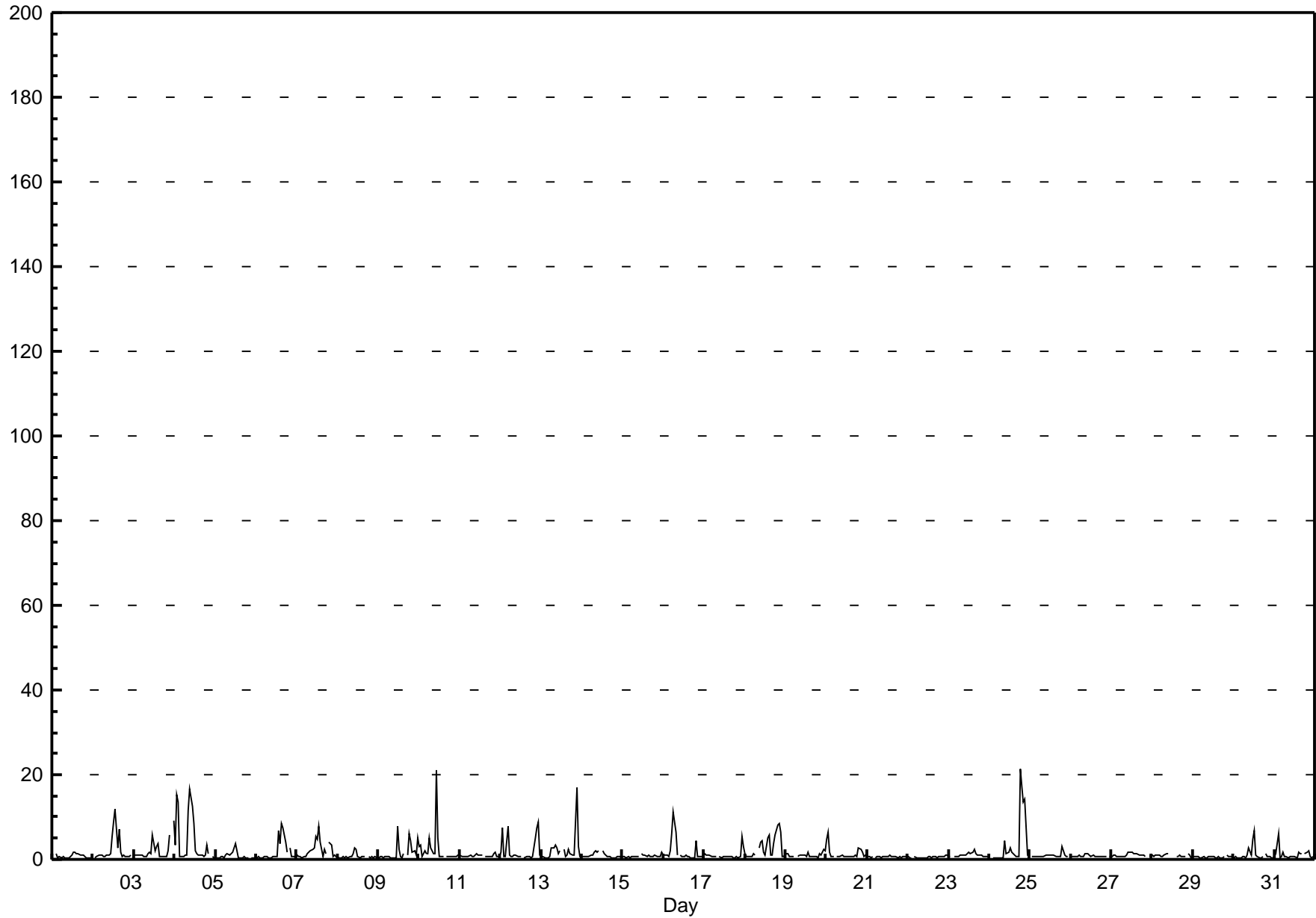
Sulphur Dioxide (SO₂) - ppb

Smoky Heights - March 2012

| Maximum Value: 21.4 ppb on Mar 24 19:00 | | Maximum Daily Average: 4.3 ppb on Mar 4 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|---|------|---------------------------------|-----|-----|-----|------|-----|------|------|------|-----|-----|------|-----|-----|-----|-----|------|------|------|------|-----|---------------|-----------------|--|
| Minimum Value: 0 ppb on Mar 13 05:00 | | Minimum Daily Average: 0.5 ppb on Mar 29 | | Hours of Data: 707 | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 2.4 ppb at hour 22 | | Minimum Diurnal Average: 0.7 ppb at hour 4 | | Hours of Missing Data: 37 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 1.53 ppb | | Percentiles: P ₁ = 0.3 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.8 Q ₃ = 1.3 P ₉₀ = 2.9 P ₉₉ = 13.9 | | Hours of Calibration: 37 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 0 | A | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0.8 | 1.6 | |
| 2-Mar | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 9 | 12 | 3 | 7 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 2.3 | 11.7 | |
| 3-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 6 | 2 | 3 | 4 | 1 | 1 | 1 | 1 | 1 | 2 | 6 | A | 9 | 2.0 | 9.0 | |
| 4-Mar | 3 | 15 | 14 | 1 | 1 | 1 | 1 | 1 | 11 | 17 | 12 | 9 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | A | 1 | 0 | 4.3 | 16.5 | |
| 5-Mar | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 3 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0.9 | 3.6 | |
| 6-Mar | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 7 | 4 | 8 | 7 | 4 | 2 | A | 3 | 1 | 1 | 0 | 1.8 | 8.4 | |
| 7-Mar | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 5 | 5 | 8 | 4 | 1 | 2 | 1 | A | 4 | 3 | 1 | 1 | 1 | 2.2 | 7.7 | |
| 8-Mar | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 3 | 2 | 1 | 0 | 1 | 1 | 1 | A | 1 | 0 | 1 | 0 | 1 | 0 | 0.7 | 2.7 | |
| 9-Mar | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 8 | 2 | 1 | 0 | 1 | 1 | A | 1 | 6 | 4 | 2 | 2 | 1 | 5 | 1.7 | 7.7 | |
| 10-Mar | 3 | 4 | 1 | 2 | 1 | 1 | 5 | 3 | 1 | 1 | 21 | 5 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2.4 | 21.0 | |
| 11-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 0.9 | 1.6 | |
| 12-Mar | 2 | 7 | 1 | 1 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 0 | 1 | 1 | 1 | 0 | 1 | 5 | 7 | 9 | 1 | 2.2 | 8.8 | |
| 13-Mar | 1 | 1 | 0 | 0 | 0 | 1 | 3 | 3 | 3 | 3 | 1 | 2 | A | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 9 | 17 | 3 | 1 | 2.5 | 17.1 | |
| 14-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | A | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1.0 | 2.0 | |
| 15-Mar | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0.8 | 1.7 | |
| 16-Mar | 1 | 1 | 1 | 1 | 2 | 6 | 11 | 6 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 4 | 1 | 1 | 1 | 1 | 1.9 | 11.2 | |
| 17-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 5 | 3 | 1.0 | 5.4 | |
| 18-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | A | 3 | 4 | 4 | 2 | 1 | 5 | 6 | 1 | 1 | 4 | 6 | 8 | 6 | 1 | 1 | 2.9 | 8.3 | |
| 19-Mar | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 2 | 2 | 1.0 | 2.5 | |
| 20-Mar | 5 | 7 | 2 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | 2 | 1 | 1 | 1.4 | 6.6 | |
| 21-Mar | 1 | 1 | 0 | 1 | A | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0.6 | 0.9 | |
| 22-Mar | 1 | 0 | 0 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.9 | |
| 23-Mar | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 2.2 | |
| 24-Mar | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 21 | 17 | 14 | 14 | 1 | 1 | 3.8 | 21.4 | |
| 25-Mar | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | A | 0.9 | 2.9 | |
| 26-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0.8 | 1.3 | |
| 27-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1.0 | 1.7 | |
| 28-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | C | C | C | C | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 0 | 0.9 | 1.4 | |
| 29-Mar | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | A | 1 | 1 | 1 | 1 | 0.5 | 0.9 | |
| 30-Mar | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 3 | 1 | 5 | 7 | 1 | 1 | 0 | 0 | 1 | A | 1 | 1 | 1 | 0 | 0 | 1.1 | 6.8 | |
| 31-Mar | 1 | 2 | 6 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 2 | 1 | 1 | 1 | A | 1 | 2 | 2 | 1 | 0 | 1 | 1.2 | 6.3 | |
| | | 1.1 | 1.8 | 1.3 | 0.7 | 0.9 | 0.9 | 1.3 | 1.1 | 1.4 | 1.8 | 2.3 | 2.3 | 1.8 | 2.0 | 1.3 | 1.3 | 1.1 | 1.0 | 1.9 | 2.2 | 2.3 | 2.4 | 1.3 | 1.3 | Diurnal Average | |
| | | 4.6 | 15.2 | 13.6 | 2.0 | 7.7 | 6.1 | 11.2 | 6.3 | 11.4 | 16.5 | 21.0 | 8.6 | 9.0 | 11.7 | 5.9 | 8.4 | 7.3 | 4.0 | 21.4 | 17.2 | 13.6 | 17.1 | 8.8 | 9.0 | Diurnal Maximum | |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | | |

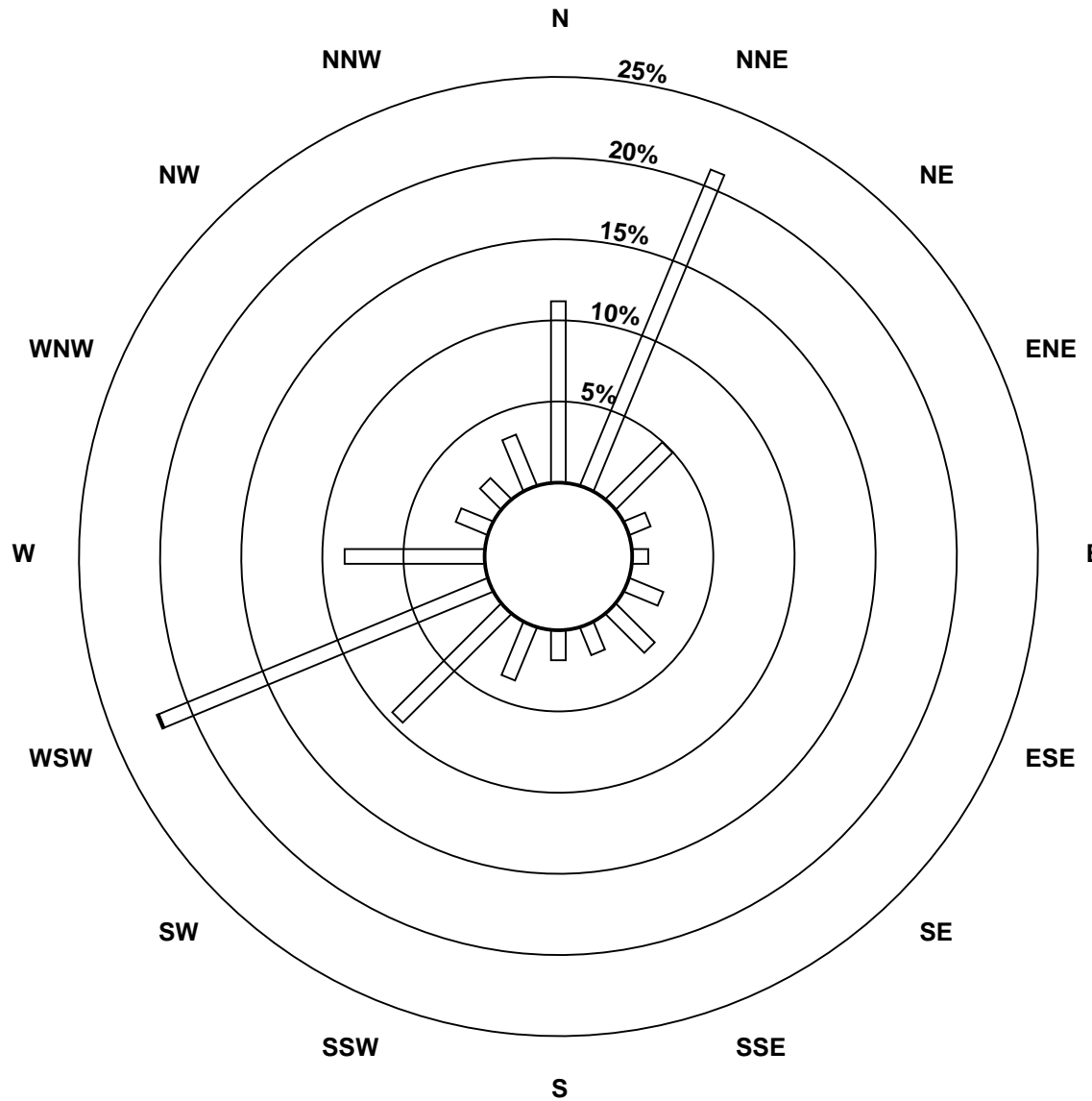
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - March 2012

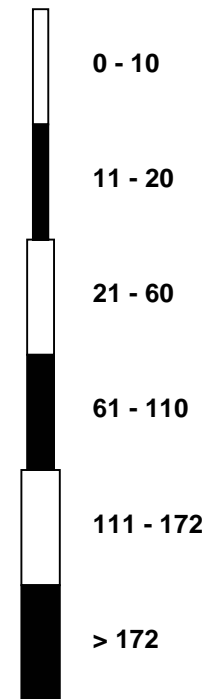


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - March 2012

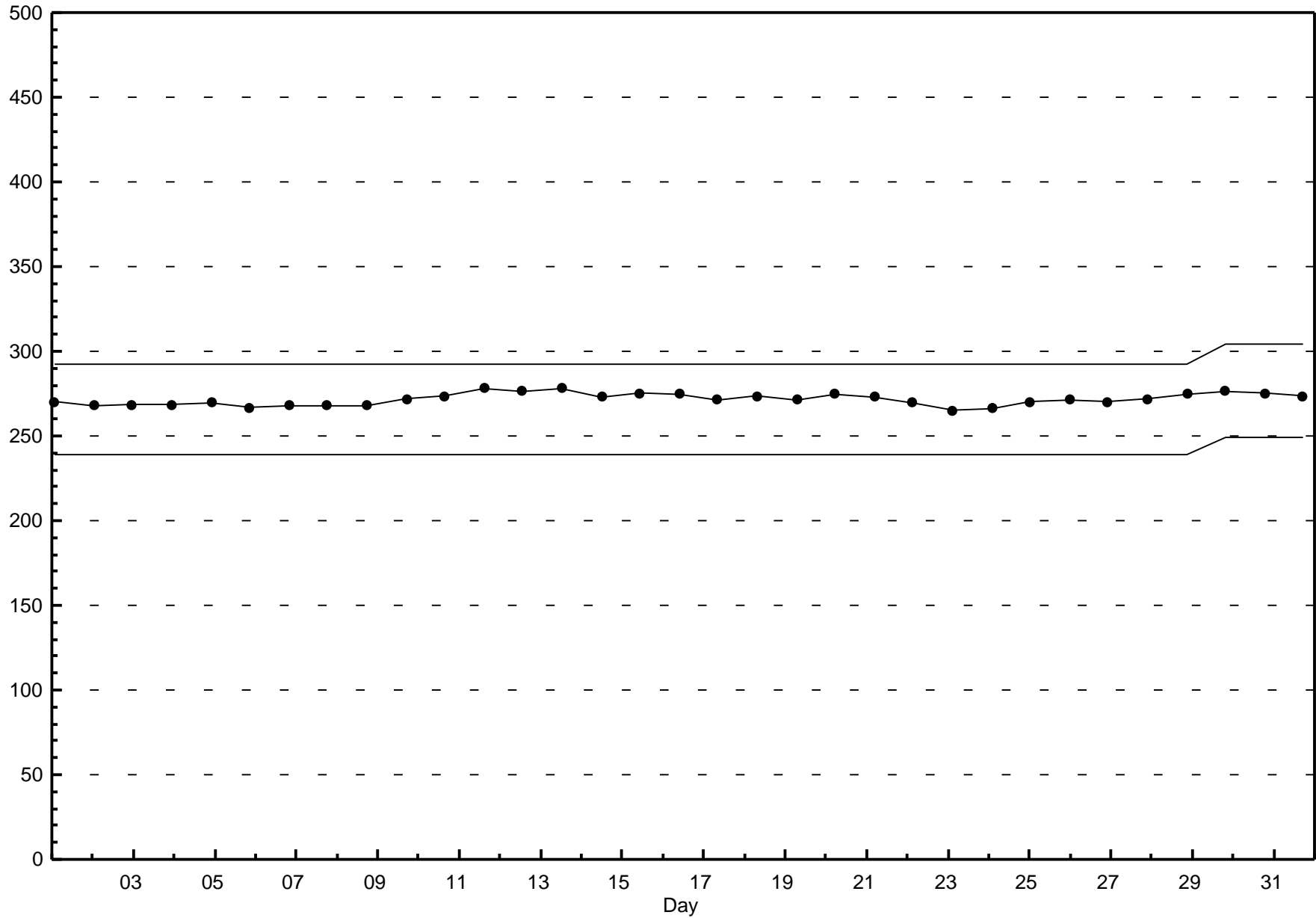


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Smoky Heights - March 2012



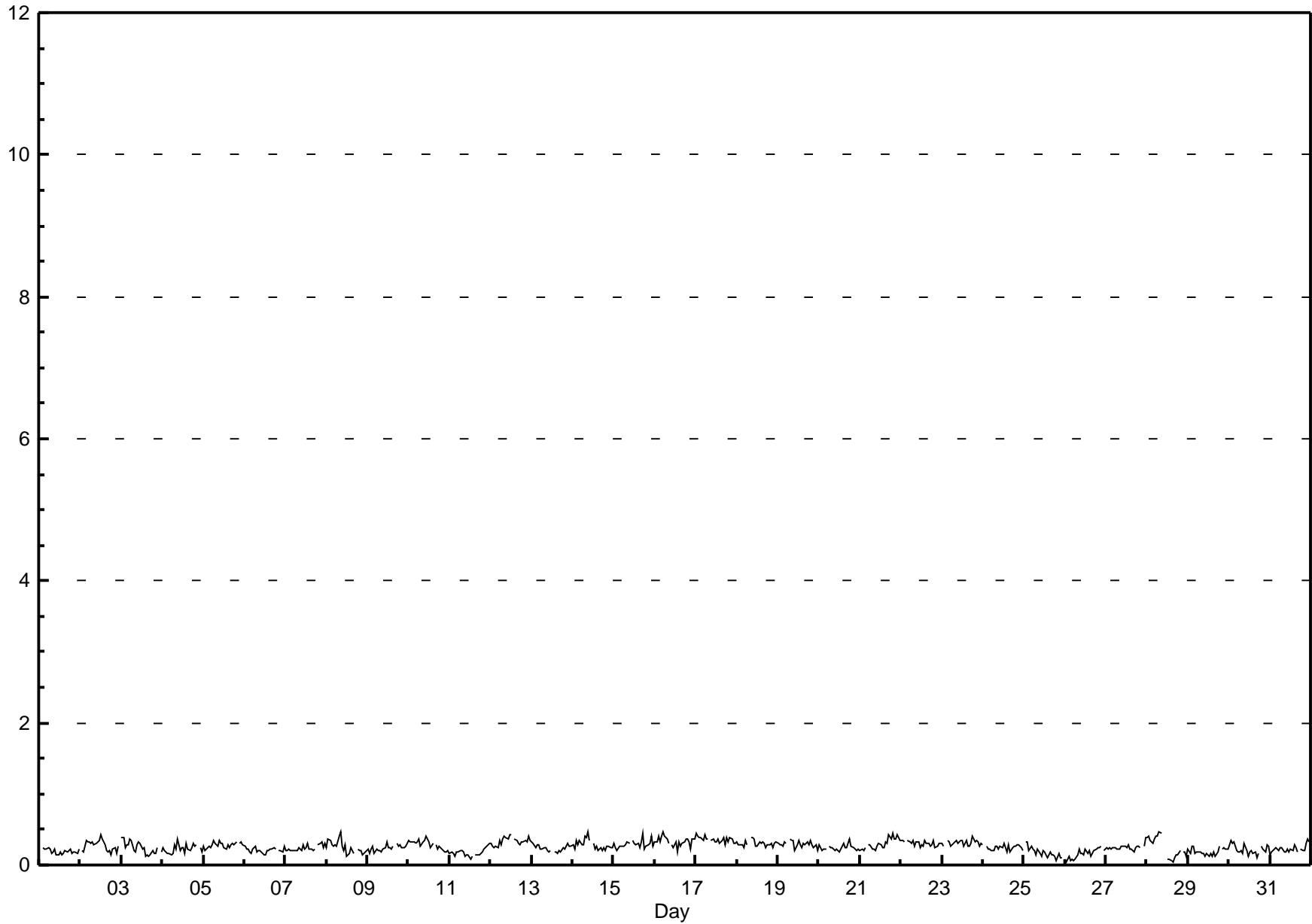
Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - March 2012

| Number of Exceedences (AAAQO): | | 1-hr: 0 | | 24-hr: 0 | | Hours in Service: | | 744 | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|---|-----|--|-----|---------------------------|-----|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|---------------|-----|
| Maximum Value: 0.5 ppb on Mar 28 08:00 | | Maximum Daily Average: 0.4 ppb on Mar 17 | | Hours of Data: | | 708 | | Hours of Missing Data: 36 | | | | | | | | | | | | | | | | | | | |
| Minimum Value: 0 ppb on Mar 26 02:00 | | Minimum Daily Average: 0.2 ppb on Mar 26 | | Hours of Calibration: 36 | | Hours of Missing Data: 36 | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 0.3 ppb at hour 1 | | Minimum Diurnal Average: 0.2 ppb at hour 17 | | Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.3 P ₉₀ = 0.4 P ₉₉ = 0.4 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 0.26 ppb | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 2-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.2 | 0.4 | |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.2 | 0.4 | |
| 5-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.3 | 0.3 | |
| 6-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 7-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 8-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.5 | |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 10-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 11-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 12-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 13-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 14-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.5 | |
| 15-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 16-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.5 | |
| 17-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.4 | |
| 18-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 19-Mar | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 20-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.4 | |
| 21-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 22-Mar | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 23-Mar | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 24-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 25-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 26-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.2 | 0.3 | |
| 27-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.2 | 0.4 | |
| 28-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | C | C | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.5 | |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.4 | |
| | | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | Diurnal Average | | |
| | | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | Diurnal Maximum | | |

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

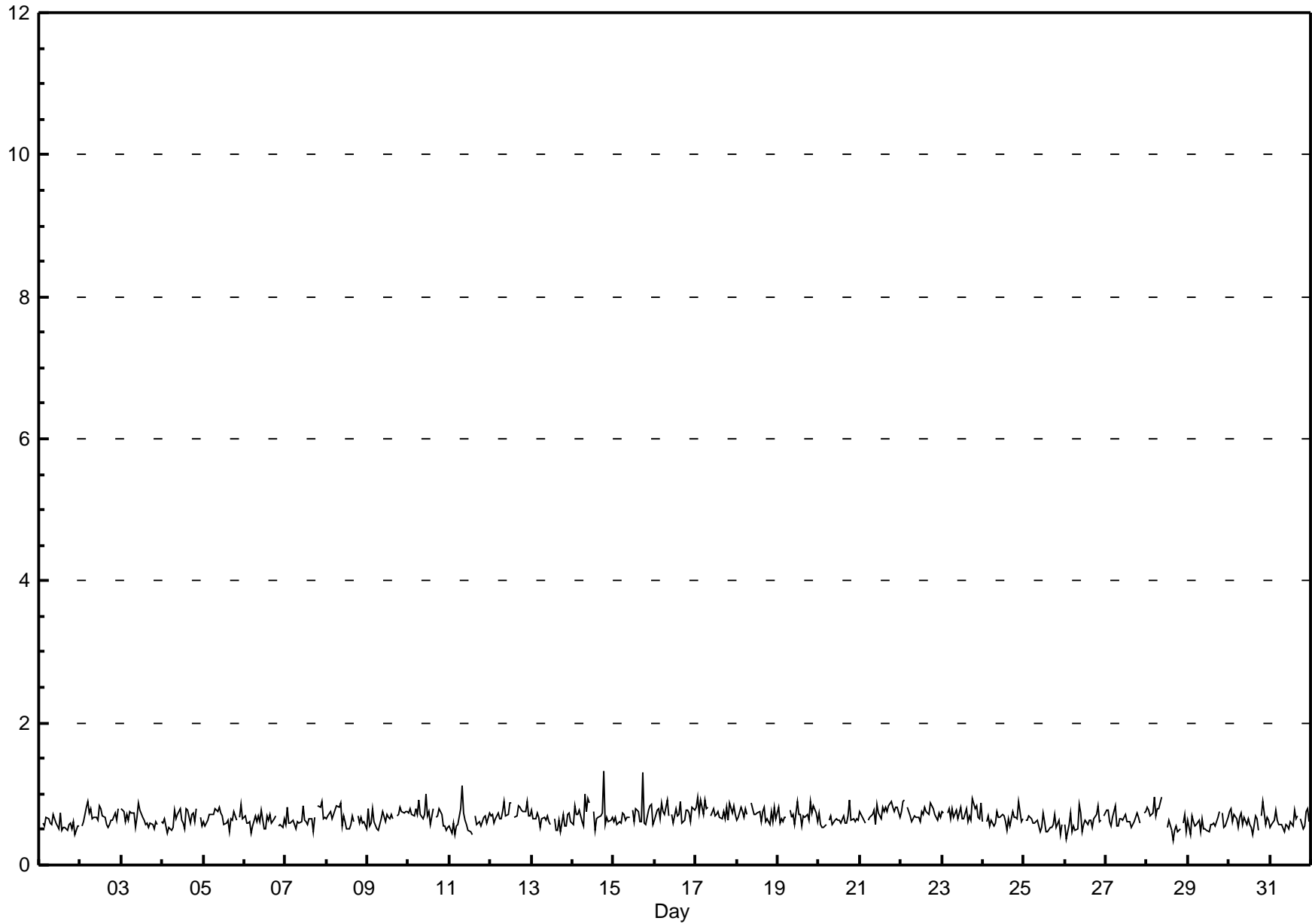


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

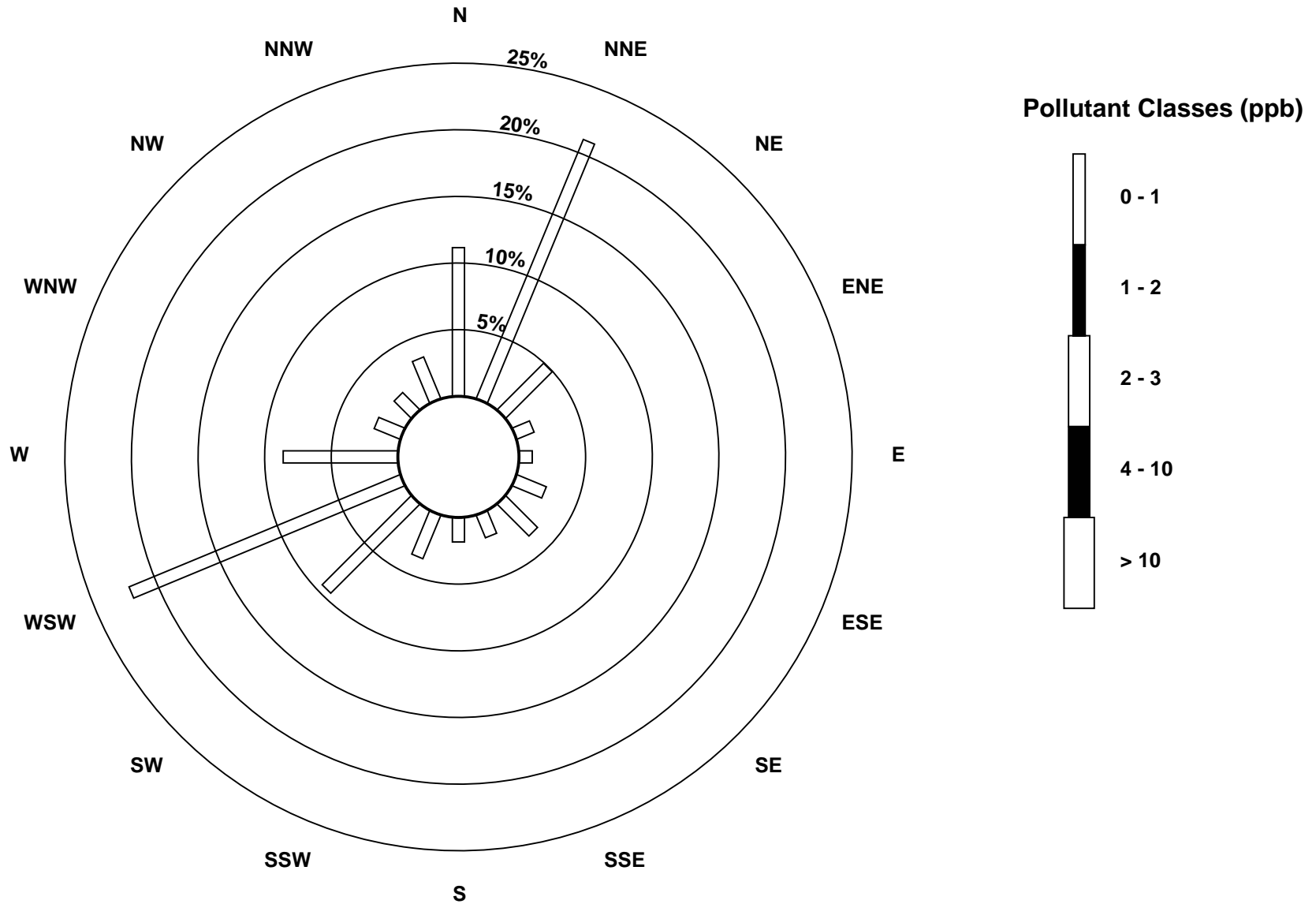
Smoky Heights - March 2012

| Maximum Value: 1.3 ppb on Mar 14 19:00 | | Maximum Daily Average: 0.8 ppb on Mar 17 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|-----|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|-----------------|
| Minimum Value: 0 ppb on Mar 28 16:00 | | Minimum Daily Average: 0.6 ppb on Mar 1 | | Hours of Data: 708 | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 0.7 ppb at hour 19 | | Minimum Diurnal Average: 0.6 ppb at hour 14 | | Hours of Missing Data: 36 | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 0.67 ppb | | Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.7 Q ₃ = 0.7 P ₉₀ = 0.8 P ₉₉ = 0.9 | | Hours of Calibration: 36 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0.6 | 0.7 |
| 2-Mar | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 3-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0.7 | 0.9 |
| 4-Mar | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 0.6 | 0.8 |
| 5-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 0.7 | 0.8 |
| 6-Mar | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0.6 | 0.8 |
| 7-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 8-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | A | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 9-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.8 |
| 10-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0.7 | 1.0 |
| 11-Mar | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1.1 |
| 12-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 13-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.8 |
| 14-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.3 |
| 15-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.3 |
| 16-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 17-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 0.9 |
| 18-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 19-Mar | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 20-Mar | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.9 |
| 21-Mar | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 22-Mar | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 23-Mar | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 24-Mar | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 25-Mar | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | A | 0.6 | 0.7 |
| 26-Mar | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0.6 | 0.8 |
| 27-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 0.7 | 0.8 |
| 28-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | C | C | C | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0.6 | 1.0 |
| 29-Mar | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0.6 | 0.8 |
| 30-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | A | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.9 |
| 31-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.8 |
| | | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | Diurnal Average |
| | | 0.8 | 0.9 | 0.9 | 0.9 | 1.0 | 0.9 | 0.9 | 1.1 | 1.0 | 0.9 | 1.0 | 0.9 | 0.9 | 0.8 | 0.8 | 0.9 | 0.8 | 1.3 | 1.3 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | Diurnal Maximum |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | |



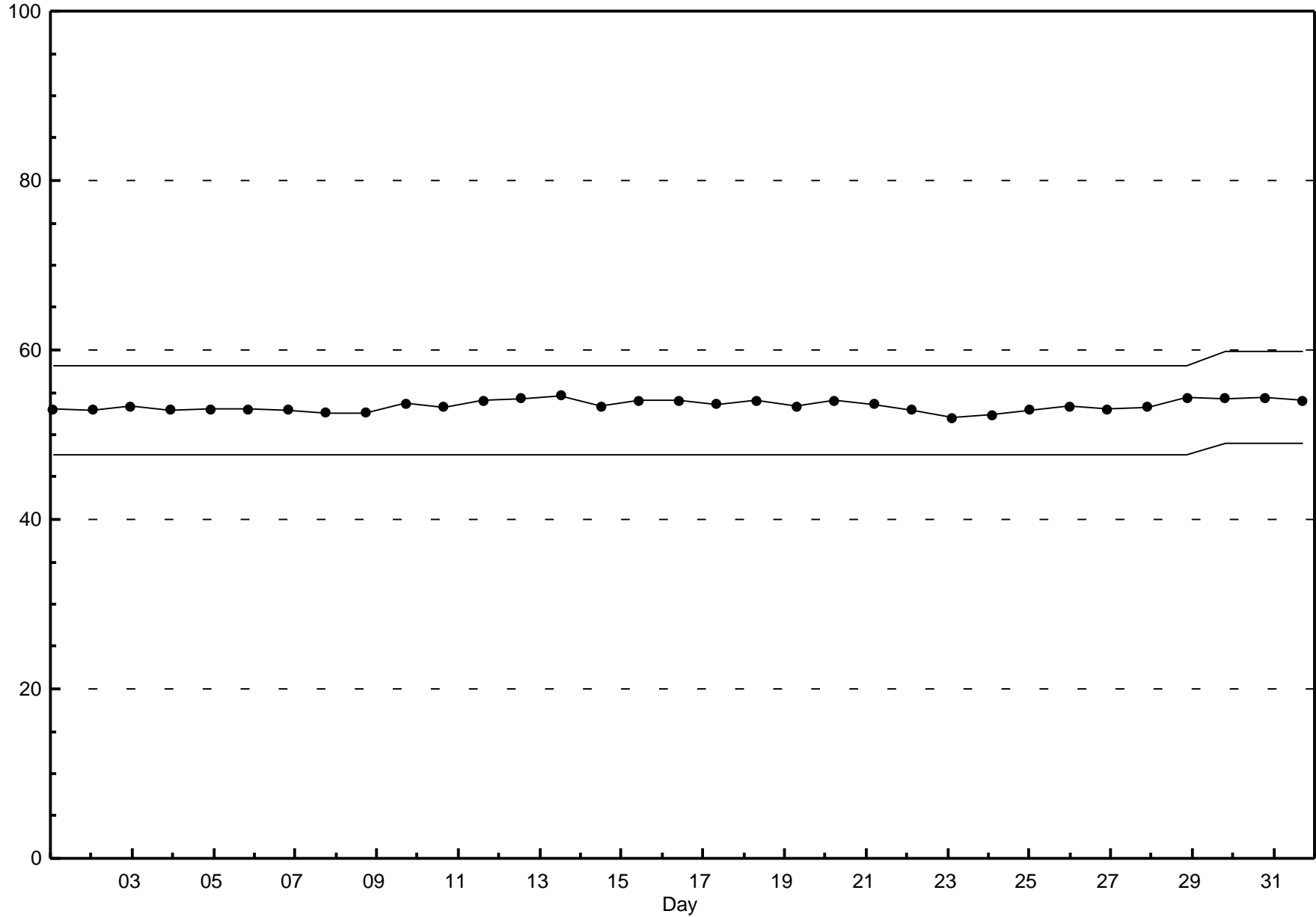
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - March 2012



Span Responses

**Total Reduced Sulphur (TRS)
Smoky Heights - March 2012**



Hourly Averages

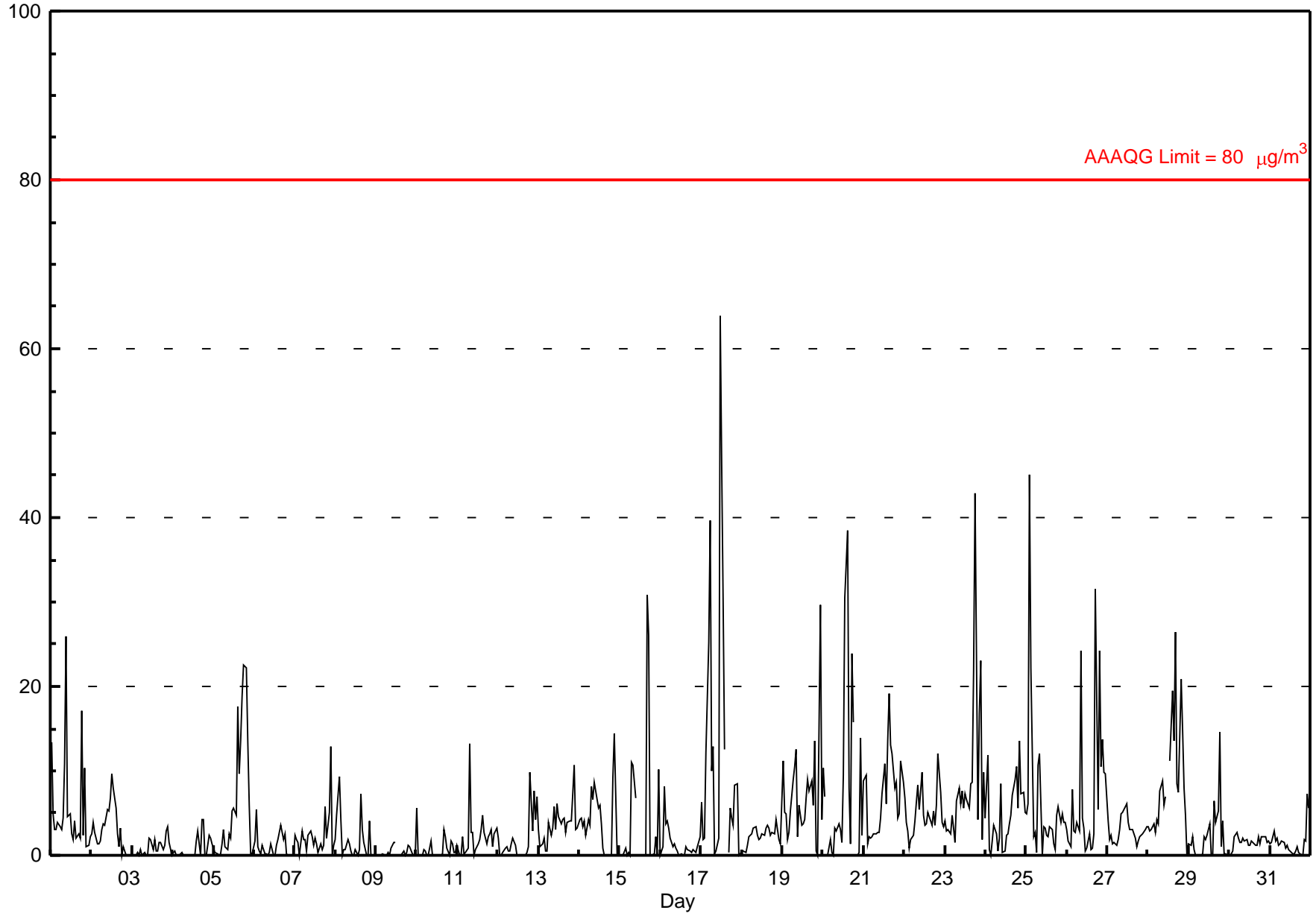
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Smoky Heights - March 2012

| | |
|---|---|
| Number of Exceedences: 1-hr: 0 24-hr: 0 | Hours in Service: 744 |
| Maximum Value: 63.9 µg/m ³ on Mar 17 12:00 | Maximum Daily Average: 12.9 µg/m ³ on Mar 17 |
| Minimum Value: 0 µg/m ³ on Mar 2 19:00 | Hours of Data: 736 |
| Maximum Diurnal Average: 6.7 µg/m ³ at hour 18 | Hours of Missing Data: 8 |
| Monthly Average: 4.06 µg/m ³ | Hours of Calibration: 0 |
| Minimum Daily Average: 0.3 µg/m ³ on Mar 9 | Percent Operational Time: 98.9 |
| Minimum Diurnal Average: 2.2 µg/m ³ at hour 7 | |
| Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.5 Median = 2.2 Q ₃ = 4.7 P ₉₀ = 9.7 P ₉₉ = 25.6 | |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 13 | 5 | 3 | 3 | 4 | 3 | 3 | 4 | 11 | 26 | 5 | 5 | 3 | 2 | 4 | 2 | 3 | 2 | 17 | 2 | 10 | 1 | 1 | 2 | 5.6 | 25.9 |
| 2-Mar | 2 | 4 | 3 | 1 | 1 | 2 | 3 | 4 | 4 | 5 | 5 | 7 | 10 | 8 | 6 | 3 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 3.0 | 9.7 |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 2 | 1 | 0 | 2 | 2 | 1 | 1 | 3 | 3 | 1 | 0 | 0.9 | 3.3 |
| 4-Mar | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 4 | 4 | 0 | 0 | 2 | 2 | 1 | 0.8 | 4.3 |
| 5-Mar | 1 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 1 | 3 | 2 | 5 | 6 | 5 | 18 | 10 | 13 | 19 | 23 | 22 | 13 | 6 | 0 | 0 | 6.3 | 22.6 |
| 6-Mar | 2 | 5 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 3 | 4 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 1.1 | 5.5 |
| 7-Mar | 2 | 2 | 2 | 0 | 3 | 2 | 2 | 1 | 2 | 3 | 2 | 1 | 2 | 1 | 0 | 1 | 1 | 1 | 6 | 2 | 5 | 13 | 0 | 1 | 2.3 | 13.0 |
| 8-Mar | 2 | 5 | 9 | 4 | 0 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 7 | 3 | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 1.8 | 9.4 |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | N | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0.3 | 1.6 |
| 10-Mar | 6 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 1 | 0 | 2 | 1 | 0 | 0 | 0.8 | 5.6 |
| 11-Mar | 1 | 0 | 0 | 2 | 0 | 0 | 1 | 13 | 3 | 3 | 0 | 1 | 1 | 2 | 3 | 5 | 3 | 1 | 2 | 2 | 3 | 1 | 3 | 3 | 2.2 | 13.2 |
| 12-Mar | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | N | 0 | 0 | 0 | 0 | 1 | 10 | 3 | 8 | 4 | 7 | 1.9 | 9.8 |
| 13-Mar | 3 | 1 | 1 | 2 | 1 | 1 | 4 | 2 | 3 | 6 | 3 | 6 | 5 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 7 | 11 | 3 | 3 | 3.7 | 10.7 |
| 14-Mar | 4 | 4 | 3 | 4 | 2 | 4 | 4 | 8 | 7 | 9 | 8 | 6 | 6 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | 14 | 0 | 0 | 4.0 | 14.4 |
| 15-Mar | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 11 | 11 | 7 | N | 0 | 0 | 0 | 0 | 0 | 31 | 26 | 0 | 0 | 0 | 2 | 0 | 10 | 4.3 | 30.9 |
| 16-Mar | 0 | 1 | 8 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 1.4 | 8.1 |
| 17-Mar | 6 | 2 | 2 | 12 | 25 | 40 | 10 | 13 | 0 | 1 | 2 | 64 | 47 | 30 | 13 | N | 0 | 6 | 4 | 3 | 8 | 8 | 0 | 0 | 12.9 | 63.9 |
| 18-Mar | 1 | 1 | 0 | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 4 | 3 | 2 | 3 | 2 | 4 | 3 | 2 | 1 | 2.3 | 4.3 |
| 19-Mar | 11 | 5 | 5 | 2 | 3 | 5 | 9 | 10 | 13 | 2 | 6 | 4 | 4 | 4 | 7 | 9 | 8 | 9 | 6 | 14 | 0 | 0 | 30 | 4 | 7.0 | 29.7 |
| 20-Mar | 10 | 7 | N | 0 | 2 | 0 | 0 | 3 | 3 | 4 | 3 | 2 | 9 | 31 | 39 | 8 | 1 | 24 | 16 | N | 0 | 0 | 14 | 2 | 8.1 | 38.5 |
| 21-Mar | 9 | 9 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 7 | 11 | 6 | 14 | 19 | 13 | 12 | 8 | 9 | 4 | 5 | 11 | 9 | 7.0 | 19.2 |
| 22-Mar | 7 | 4 | 3 | 1 | 2 | 2 | 4 | 6 | 8 | 5 | 10 | 5 | 3 | 4 | 5 | 4 | 4 | 5 | 4 | 6 | 12 | 7 | 4 | 3 | 5.0 | 12.0 |
| 23-Mar | 4 | 3 | 3 | 3 | 5 | 3 | 2 | 6 | 8 | 6 | 8 | 6 | 7 | 7 | 6 | 8 | 9 | 22 | 43 | 4 | 17 | 23 | 2 | 10 | 8.9 | 43.0 |
| 24-Mar | 4 | 12 | 1 | 0 | 2 | 4 | 3 | 0 | 2 | 8 | 0 | 1 | 2 | 3 | 4 | 5 | 7 | 9 | 10 | 6 | 13 | 7 | 7 | 5 | 4.8 | 13.5 |
| 25-Mar | 5 | 6 | 45 | 22 | 2 | 3 | 0 | 11 | 12 | 0 | 3 | 3 | 2 | 2 | 3 | 3 | 1 | 1 | 5 | 6 | 4 | 5 | 4 | 4 | 6.4 | 45.1 |
| 26-Mar | 3 | 2 | 1 | 8 | 3 | 3 | 4 | 3 | 24 | 4 | 3 | 1 | 1 | 3 | 1 | 1 | 2 | 32 | 5 | 24 | 10 | 14 | 10 | 10 | 7.1 | 31.5 |
| 27-Mar | 4 | 2 | 2 | 1 | 1 | 1 | 2 | 3 | 5 | 5 | 5 | 6 | 4 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 2.9 | 6.1 |
| 28-Mar | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 8 | 9 | 6 | 7 | M | M | 11 | 19 | 14 | 27 | 8 | 8 | 21 | 15 | 8 | 5 | 0 | 8.6 | 26.5 |
| 29-Mar | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 4 | 0 | 0 | 6 | 4 | 5 | 15 | 1 | 4 | 0 | 0 | 0 | 2.1 | 14.6 |
| 30-Mar | 0 | 0 | 1 | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1.6 | 2.8 |
| 31-Mar | 1 | 2 | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 2 | 7 | 6 | 1.5 | 7.3 |
| | 3.5 | 2.8 | 3.4 | 2.7 | 2.4 | 3.0 | 2.2 | 3.9 | 4.5 | 3.8 | 3.0 | 4.6 | 4.6 | 4.5 | 5.1 | 4.2 | 4.8 | 6.7 | 6.2 | 4.9 | 5.2 | 4.9 | 3.7 | 2.9 | Diurnal Average | |
| | 13.4 | 11.8 | 45.1 | 22.2 | 25.2 | 39.6 | 10.0 | 13.2 | 24.2 | 25.9 | 9.8 | 63.9 | 46.7 | 30.6 | 38.5 | 19.2 | 30.9 | 31.5 | 43.0 | 24.3 | 16.8 | 23.0 | 29.7 | 10.2 | Diurnal Maximum | |

M - Maintenance N - Not Valid
 Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³

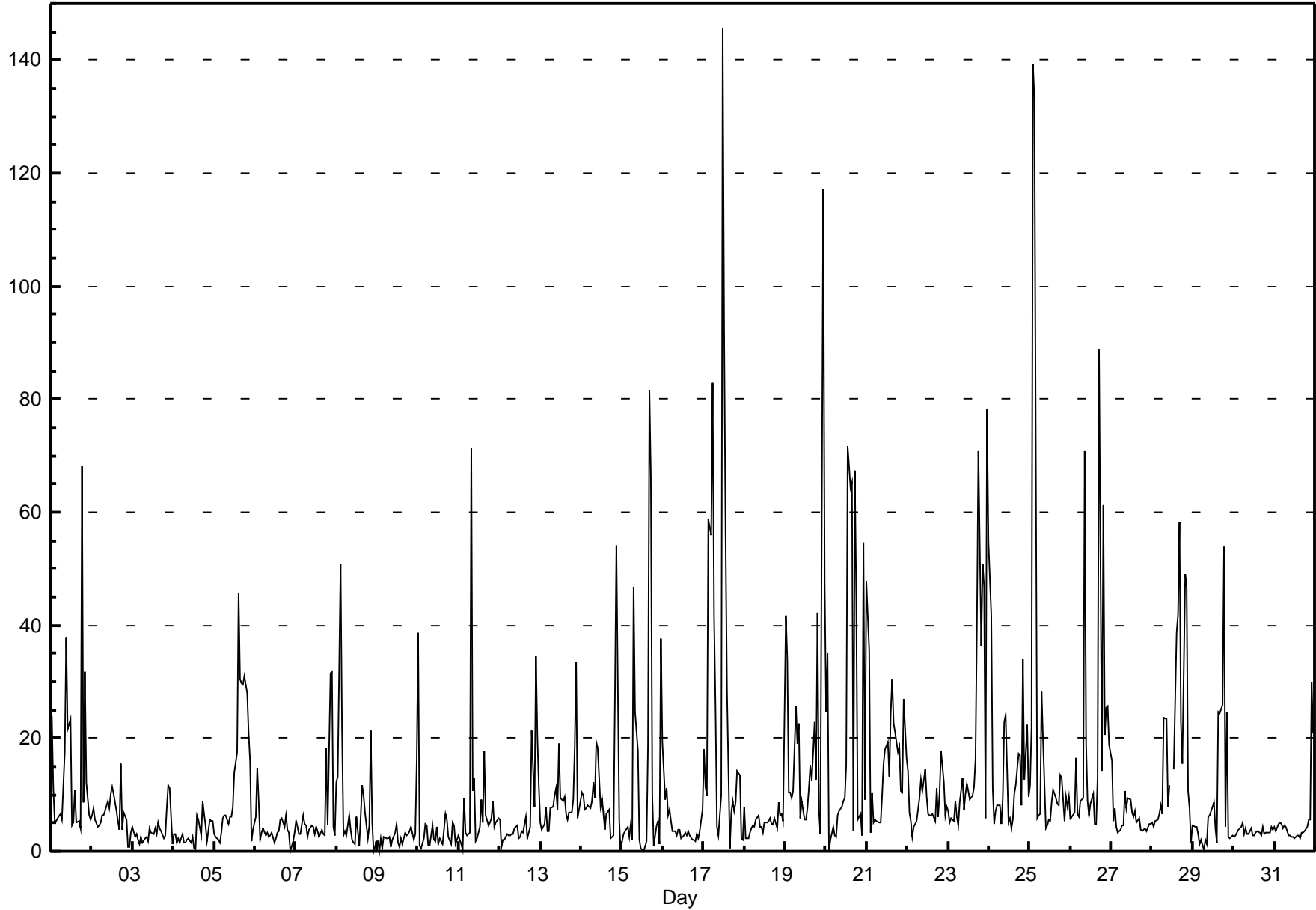


Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - µg/m³

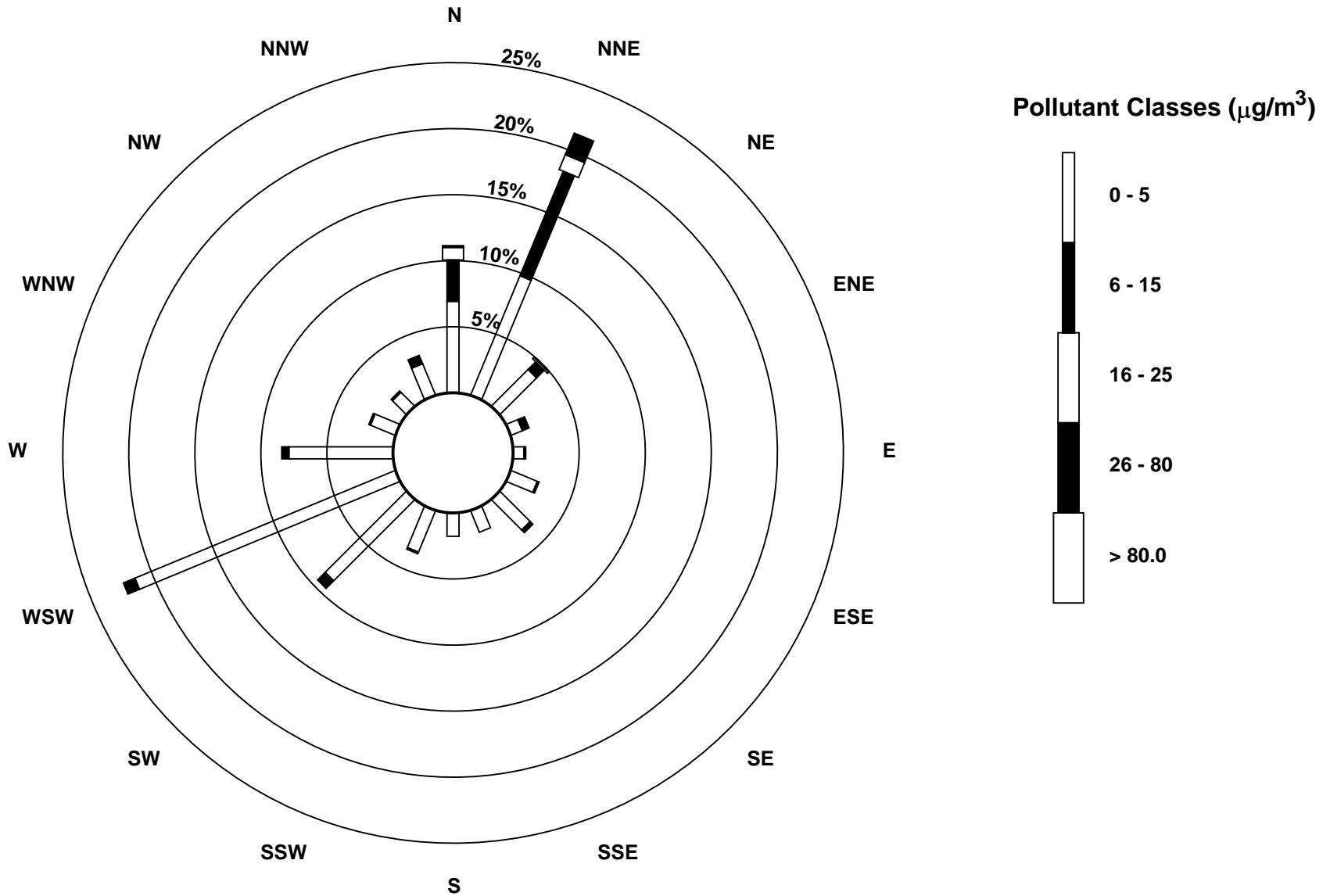
Smoky Heights - March 2012

| Maximum Value: 145.7 µg/m ³ on Mar 17 12:00 | | Maximum Daily Average: 29.5 µg/m ³ on Mar 17 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|---|------|--------------------------------|-------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|-------|---------------|-----------------|--|
| Minimum Value: 0 µg/m ³ on Mar 6 22:00 | | Minimum Daily Average: 2.9 µg/m ³ on Mar 9 | | Hours of Data: 742 | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 16.8 µg/m ³ at hour 18 | | Minimum Diurnal Average: 6.3 µg/m ³ at hour 5 | | Hours of Missing Data: 2 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 11.04 µg/m ³ | | Percentiles: P ₁ = 0.3 P ₁₀ = 2.0 Q ₁ = 3.2 Median = 5.6 Q ₃ = 10.5 P ₉₀ = 24.5 P ₉₉ = 77.4 | | Hours of Calibration: 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 99.7 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 24 | 12 | 5 | 5 | 6 | 7 | 6 | 12 | 18 | 38 | 21 | 23 | 5 | 5 | 11 | 5 | 5 | 4 | 68 | 9 | 32 | 12 | 6 | 6 | 14.3 | 68.2 | |
| 2-Mar | 6 | 8 | 6 | 4 | 5 | 5 | 6 | 6 | 7 | 9 | 8 | 10 | 11 | 10 | 7 | 5 | 4 | 16 | 4 | 7 | 6 | 1 | 1 | 3 | 6.4 | 15.6 | |
| 3-Mar | 4 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 3 | 4 | 3 | 5 | 4 | 3 | 2 | 3 | 8 | 12 | 11 | 1 | 3.8 | 11.8 | |
| 4-Mar | 3 | 3 | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 0 | 6 | 6 | 3 | 9 | 7 | 4 | 2 | 6 | 5 | 5 | 3.3 | 8.9 | |
| 5-Mar | 3 | 2 | 2 | 1 | 3 | 6 | 6 | 6 | 5 | 6 | 6 | 8 | 14 | 18 | 46 | 31 | 30 | 29 | 31 | 28 | 21 | 16 | 2 | 4 | 13.5 | 45.7 | |
| 6-Mar | 6 | 15 | 9 | 2 | 3 | 4 | 3 | 3 | 2 | 3 | 3 | 1 | 2 | 3 | 4 | 6 | 6 | 4 | 6 | 4 | 3 | 0 | 2 | 3 | 4.1 | 14.7 | |
| 7-Mar | 5 | 4 | 3 | 3 | 6 | 5 | 5 | 2 | 4 | 5 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 3 | 18 | 5 | 31 | 32 | 4 | 3 | 6.8 | 31.8 | |
| 8-Mar | 12 | 13 | 51 | 22 | 3 | 4 | 3 | 6 | 4 | 2 | 2 | 1 | 6 | 1 | 6 | 12 | 10 | 7 | 2 | 5 | 21 | 5 | 0 | 2 | 8.3 | 50.8 | |
| 9-Mar | 2 | 0 | 2 | 0 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 5 | 1 | 1 | 2 | 1 | 3 | 3 | 3 | 3 | 4 | 2 | 3 | 16 | 2.9 | 16.1 | |
| 10-Mar | 39 | 1 | 1 | 2 | 5 | 5 | 1 | 1 | 5 | 2 | 2 | 4 | 1 | 2 | 1 | 4 | 7 | 5 | 2 | 1 | 5 | 5 | 1 | 2 | 4.3 | 38.6 | |
| 11-Mar | 3 | 1 | 0 | 9 | 3 | 3 | 3 | 71 | 11 | 13 | 2 | 2 | 4 | 9 | 5 | 18 | 6 | 4 | 5 | 6 | 9 | 4 | 5 | 6 | 8.5 | 71.3 | |
| 12-Mar | 6 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 2 | 2 | 4 | 3 | 6 | 2 | 3 | 4 | 21 | 8 | 35 | 20 | 12 | 6.6 | 34.7 | |
| 13-Mar | 5 | 4 | 5 | 8 | 4 | 4 | 8 | 8 | 10 | 11 | 7 | 19 | 9 | 9 | 10 | 7 | 6 | 7 | 7 | 9 | 18 | 34 | 6 | 7 | 9.2 | 33.7 | |
| 14-Mar | 11 | 10 | 7 | 8 | 8 | 8 | 9 | 12 | 10 | 19 | 18 | 8 | 10 | 7 | 4 | 7 | 7 | 2 | 2 | 3 | 28 | 54 | 5 | 0 | 10.7 | 54.3 | |
| 15-Mar | 2 | 3 | 4 | 4 | 2 | 5 | 2 | 47 | 25 | 18 | 2 | 0 | 0 | 0 | 2 | 19 | 82 | 66 | 10 | 1 | 5 | 5 | 1 | 38 | 14.3 | 81.6 | |
| 16-Mar | 19 | 9 | 11 | 6 | 7 | 5 | 4 | 4 | 3 | 4 | 4 | 2 | 3 | 3 | 3 | 4 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 7 | 4.8 | 19.3 | |
| 17-Mar | 18 | 12 | 10 | 59 | 56 | 83 | 42 | 25 | 4 | 3 | 10 | 146 | 93 | 56 | 28 | 1 | 7 | 9 | 7 | 9 | 14 | 13 | 2 | 2 | 29.5 | 145.7 | |
| 18-Mar | 8 | 2 | 2 | 3 | 4 | 5 | 4 | 5 | 6 | 4 | 4 | 3 | 5 | 5 | 5 | 6 | 5 | 5 | 6 | 4 | 9 | 6 | 7 | 5 | 5.0 | 8.6 | |
| 19-Mar | 42 | 34 | 11 | 11 | 10 | 11 | 26 | 19 | 23 | 6 | 9 | 6 | 6 | 8 | 11 | 15 | 12 | 23 | 13 | 42 | 7 | 3 | 117 | 47 | 21.2 | 117.3 | |
| 20-Mar | 25 | 35 | 0 | 2 | 4 | 3 | 2 | 6 | 7 | 8 | 9 | 10 | 15 | 72 | 64 | 65 | 4 | 67 | 44 | 6 | 7 | 3 | 55 | 9 | 21.7 | 71.8 | |
| 21-Mar | 48 | 36 | 3 | 11 | 5 | 6 | 5 | 5 | 5 | 10 | 15 | 18 | 19 | 13 | 25 | 31 | 23 | 21 | 18 | 19 | 11 | 11 | 27 | 17 | 16.6 | 47.7 | |
| 22-Mar | 14 | 7 | 5 | 3 | 4 | 5 | 7 | 9 | 13 | 11 | 14 | 10 | 7 | 6 | 6 | 7 | 5 | 11 | 6 | 10 | 18 | 12 | 6 | 8 | 8.6 | 17.8 | |
| 23-Mar | 7 | 5 | 6 | 5 | 9 | 6 | 4 | 9 | 13 | 7 | 10 | 12 | 11 | 9 | 10 | 12 | 16 | 41 | 71 | 36 | 51 | 47 | 6 | 78 | 20.0 | 78.2 | |
| 24-Mar | 55 | 42 | 11 | 5 | 7 | 8 | 8 | 5 | 9 | 23 | 24 | 5 | 6 | 4 | 6 | 10 | 12 | 17 | 17 | 8 | 34 | 13 | 23 | 10 | 15.1 | 55.0 | |
| 25-Mar | 12 | 22 | 139 | 133 | 6 | 6 | 7 | 28 | 20 | 4 | 5 | 6 | 5 | 9 | 11 | 9 | 8 | 8 | 13 | 13 | 5 | 10 | 8 | 10 | 20.7 | 139.4 | |
| 26-Mar | 6 | 6 | 7 | 17 | 7 | 6 | 9 | 9 | 71 | 19 | 9 | 6 | 8 | 10 | 5 | 5 | 13 | 89 | 14 | 61 | 21 | 25 | 26 | 19 | 19.5 | 88.7 | |
| 27-Mar | 16 | 5 | 8 | 4 | 3 | 4 | 5 | 4 | 11 | 8 | 9 | 9 | 7 | 6 | 7 | 5 | 6 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 6.0 | 15.9 | |
| 28-Mar | 5 | 4 | 5 | 6 | 7 | 8 | 7 | 24 | 23 | 8 | 12 | M | M | 15 | 39 | 42 | 58 | 23 | 16 | 49 | 47 | 11 | 8 | 1 | 18.9 | 58.2 | |
| 29-Mar | 5 | 4 | 4 | 3 | 1 | 2 | 0 | 2 | 1 | 6 | 6 | 7 | 9 | 4 | 1 | 25 | 24 | 26 | 54 | 4 | 25 | 2 | 2 | 3 | 9.3 | 54.0 | |
| 30-Mar | 2 | 3 | 3 | 4 | 4 | 5 | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 3.5 | 5.1 | |
| 31-Mar | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 4 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 4 | 4 | 6 | 6 | 30 | 21 | 5.6 | 30.0 | |
| | | 13.4 | 10.0 | 10.7 | 11.4 | 6.3 | 7.4 | 6.4 | 11.2 | 10.4 | 8.5 | 7.6 | 11.3 | 9.1 | 9.8 | 11.0 | 12.1 | 12.3 | 16.8 | 15.0 | 12.4 | 14.9 | 12.7 | 13.0 | 11.4 | Diurnal Average | |
| | | 55.0 | 41.6 | 139.4 | 133.2 | 55.9 | 82.8 | 41.6 | 71.3 | 70.9 | 37.9 | 24.3 | 145.7 | 92.8 | 71.8 | 64.3 | 65.2 | 81.6 | 88.7 | 70.9 | 61.3 | 50.8 | 54.3 | 117.3 | 78.2 | Diurnal Maximum | |
| M - Maintenance | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Smoky Heights - March 2012

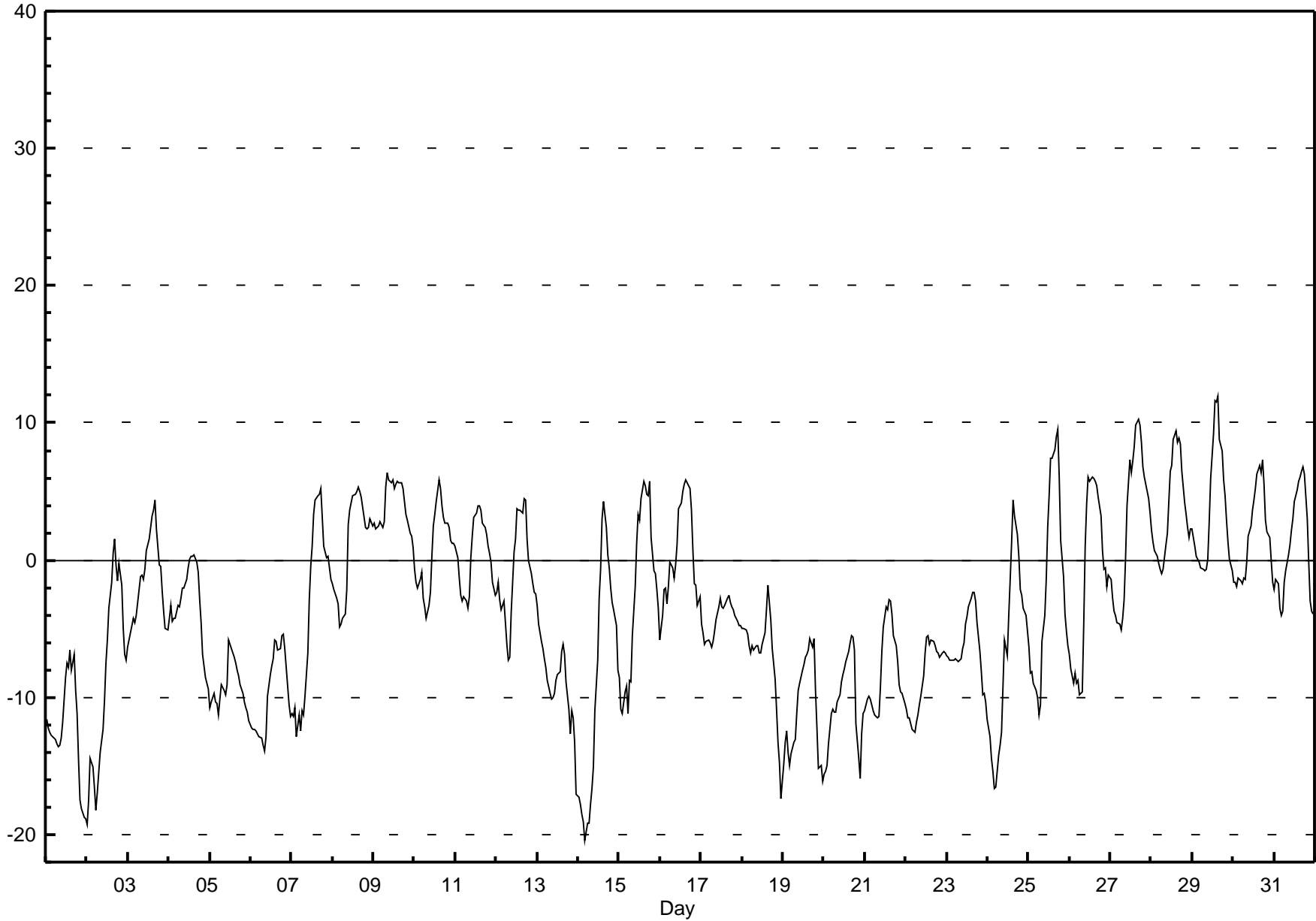


Hourly Averages

External Temperature (ET) - °C

Smoky Heights - March 2012

| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 11.9 °C on Mar 29 16:00 Maximum Daily Average: 3.9 °C on Mar 9 | | | | | | | | | | | | | | | | | | | Hours in Service: 744 Hours of Data: 744 | | | | | | | |
|--|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|-----|--|-----|-----|-----|-----|-----------------|---------------|---------------|
| Minimum Value: -20 °C on Mar 14 05:00 Minimum Daily Average: -12.2 °C on Mar 1 Maximum Diurnal Average: 1.7 °C at hour 16 Minimum Diurnal Average: -7.8 °C at hour 6 Monthly Average: -3.73 °C Percentiles: P ₁ = -18.6 P ₁₀ = -12.4 Q ₁ = -8.6 Median = -3.5 Q ₃ = 1.3 P ₉₀ = 4.9 P ₉₉ = 9.2 | | | | | | | | | | | | | | | | | | | Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0 | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | -12 | -12 | -13 | -13 | -13 | -13 | -13 | -14 | -14 | -13 | -12 | -9 | -8 | -8 | -7 | -8 | -7 | -10 | -11 | -15 | -17 | -18 | -19 | -19 | -12.2 | -6.5 |
| 2-Mar | -19 | -17 | -14 | -15 | -17 | -18 | -17 | -15 | -14 | -12 | -10 | -8 | -6 | -4 | -2 | 0 | 2 | 0 | -2 | 0 | -2 | -5 | -7 | -7 | -8.7 | 1.5 |
| 3-Mar | -6 | -5 | -5 | -4 | -5 | -4 | -3 | -1 | -1 | -1 | -1 | 1 | 2 | 2 | 3 | 4 | 4 | 2 | 0 | 0 | -2 | -4 | -5 | -5 | -1.5 | 4.4 |
| 4-Mar | -4 | -3 | -4 | -4 | -4 | -3 | -3 | -3 | -2 | -2 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | -1 | -3 | -5 | -7 | -9 | -9 | -9 | -3.2 | 0.3 |
| 5-Mar | -11 | -10 | -10 | -10 | -10 | -11 | -10 | -9 | -9 | -10 | -9 | -6 | -6 | -7 | -7 | -7 | -8 | -8 | -9 | -10 | -10 | -11 | -11 | -12 | -9.3 | -5.8 |
| 6-Mar | -12 | -12 | -12 | -12 | -13 | -13 | -13 | -13 | -14 | -13 | -10 | -8 | -8 | -7 | -6 | -6 | -7 | -6 | -5 | -5 | -6 | -8 | -11 | -11 | -9.7 | -5.4 |
| 7-Mar | -11 | -11 | -11 | -13 | -11 | -12 | -11 | -11 | -10 | -7 | -3 | -1 | 1 | 3 | 4 | 5 | 5 | 5 | 3 | 1 | 0 | 0 | -1 | -1 | -3.6 | 5.2 |
| 8-Mar | -2 | -2 | -3 | -3 | -5 | -5 | -4 | -4 | -2 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 1.1 | 5.4 |
| 9-Mar | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 4 | 5 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 5 | 4 | 3 | 3 | 2 | 2 | 1 | 3.9 | 6.4 |
| 10-Mar | -1 | -2 | -2 | -1 | -1 | -3 | -3 | -4 | -3 | -2 | 0 | 2 | 3 | 4 | 6 | 5 | 4 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 0.7 | 5.9 |
| 11-Mar | 1 | 0 | -1 | -3 | -3 | -3 | -3 | -3 | -3 | 0 | 2 | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 1 | 1 | 0 | -2 | -3 | 0.3 | 4.0 |
| 12-Mar | -2 | -2 | -3 | -4 | -3 | -5 | -6 | -7 | -7 | -4 | 1 | 2 | 4 | 4 | 4 | 3 | 5 | 4 | 2 | 0 | -1 | -2 | -2 | -2 | -0.9 | 4.5 |
| 13-Mar | -3 | -5 | -6 | -6 | -7 | -8 | -9 | -10 | -10 | -10 | -10 | -9 | -8 | -8 | -7 | -6 | -7 | -9 | -11 | -13 | -11 | -12 | -13 | -17 | -8.9 | -3.3 |
| 14-Mar | -17 | -18 | -19 | -19 | -20 | -19 | -19 | -18 | -17 | -15 | -11 | -7 | -3 | -1 | 3 | 4 | 2 | 0 | -1 | -2 | -3 | -4 | -5 | -8 | -8.9 | 4.3 |
| 15-Mar | -9 | -11 | -11 | -10 | -9 | -11 | -9 | -9 | -5 | -2 | 1 | 3 | 3 | 5 | 6 | 5 | 5 | 5 | 6 | 2 | -1 | -1 | -2 | -4 | -2.2 | 5.7 |
| 16-Mar | -6 | -4 | -2 | -2 | -3 | -2 | 0 | -1 | -1 | 0 | 1 | 4 | 4 | 5 | 5 | 6 | 6 | 5 | 4 | 1 | -2 | -2 | -3 | -3 | 0.4 | 5.8 |
| 17-Mar | -5 | -5 | -6 | -6 | -6 | -6 | -6 | -6 | -5 | -4 | -3 | -3 | -3 | -4 | -3 | -3 | -3 | -3 | -4 | -4 | -4 | -5 | -5 | -5 | -4.4 | -2.6 |
| 18-Mar | -5 | -5 | -5 | -5 | -6 | -7 | -6 | -7 | -6 | -6 | -7 | -7 | -6 | -5 | -4 | -2 | -3 | -4 | -6 | -9 | -11 | -13 | -15 | -17 | -7.0 | -1.9 |
| 19-Mar | -15 | -13 | -12 | -14 | -15 | -14 | -13 | -13 | -11 | -10 | -9 | -8 | -8 | -7 | -7 | -7 | -6 | -6 | -6 | -9 | -12 | -15 | -15 | -16 | -10.9 | -5.7 |
| 20-Mar | -16 | -15 | -15 | -13 | -11 | -11 | -11 | -11 | -10 | -10 | -9 | -8 | -8 | -7 | -7 | -6 | -5 | -6 | -7 | -12 | -14 | -16 | -13 | -11 | -10.5 | -5.5 |
| 21-Mar | -11 | -10 | -10 | -10 | -10 | -11 | -11 | -11 | -11 | -9 | -7 | -5 | -3 | -4 | -3 | -3 | -4 | -6 | -6 | -7 | -9 | -10 | -10 | -10 | -8.0 | -2.9 |
| 22-Mar | -11 | -11 | -11 | -12 | -12 | -13 | -12 | -11 | -11 | -10 | -8 | -7 | -6 | -5 | -6 | -6 | -6 | -6 | -7 | -7 | -7 | -7 | -7 | -7 | -8.6 | -5.5 |
| 23-Mar | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -6 | -6 | -5 | -4 | -3 | -3 | -2 | -2 | -3 | -5 | -7 | -8 | -10 | -10 | -10 | -6.2 | -2.4 |
| 24-Mar | -12 | -13 | -14 | -15 | -17 | -16 | -14 | -13 | -12 | -9 | -6 | -7 | -4 | -1 | 1 | 4 | 3 | 2 | 0 | -2 | -3 | -3 | -4 | -5 | -6.7 | 4.3 |
| 25-Mar | -6 | -8 | -8 | -9 | -10 | -10 | -11 | -11 | -6 | -4 | -1 | 2 | 5 | 7 | 7 | 8 | 9 | 9 | 6 | 1 | -1 | -4 | -5 | -6 | -1.9 | 9.5 |
| 26-Mar | -7 | -8 | -9 | -8 | -9 | -9 | -10 | -10 | -5 | 1 | 4 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 3 | 1 | -1 | -1 | -2 | -1 | -1.2 | 6.1 |
| 27-Mar | -1 | -3 | -4 | -4 | -5 | -5 | -5 | -4 | -3 | 0 | 4 | 7 | 6 | 7 | 8 | 10 | 10 | 10 | 9 | 7 | 6 | 6 | 5 | 3 | 2.7 | 10.2 |
| 28-Mar | 2 | 1 | 1 | 0 | 0 | -1 | -1 | -1 | 1 | 2 | 4 | 6 | 7 | 9 | 9 | 9 | 9 | 8 | 7 | 4 | 3 | 2 | 2 | 2 | 3.6 | 9.5 |
| 29-Mar | 2 | 1 | 0 | 0 | 0 | -1 | -1 | -1 | -1 | 0 | 3 | 6 | 9 | 12 | 12 | 12 | 9 | 8 | 6 | 5 | 3 | 1 | 0 | -1 | 3.5 | 11.9 |
| 30-Mar | -2 | -2 | -2 | -1 | -1 | -2 | -1 | -1 | 0 | 2 | 2 | 4 | 4 | 5 | 6 | 7 | 6 | 7 | 6 | 3 | 2 | 2 | 0 | -2 | 1.8 | 7.3 |
| 31-Mar | -2 | -1 | -2 | -4 | -4 | -4 | -2 | -1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 6 | 3 | 0 | -3 | -4 | -4 | 0.9 | 6.8 |
| | | | | | | | | | | | | | | | | | | | | | | | | Diurnal Average | | |
| | | | | | | | | | | | | | | | | | | | | | | | | Diurnal Maximum | | |



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - March 2012

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1 Spd | 20 | 17 | 18 | 17 | 12 | 14 | 12 | 8 | 7 | 7 | 8 | 7 | 0 | 9 | 2 | 5 | 7 | 7 | 6 | 5 | 4 | 4 | 3 | 4 | 7.4 | 19.7 |
| Dir | 15 | 2 | 355 | 357 | 356 | 351 | 351 | 2 | 15 | 12 | 0 | 37 | 167 | 332 | 336 | 251 | 277 | 297 | 15 | 17 | 36 | 334 | 6 | 236 | 355.0 | 15.0 |
| 2 Spd | 7 | 9 | 9 | 9 | 12 | 11 | 11 | 11 | 11 | 9 | 7 | 11 | 11 | 13 | 17 | 20 | 16 | 17 | 13 | 24 | 11 | 11 | 13 | 14 | 10.8 | 24.4 |
| Dir | 253 | 244 | 204 | 209 | 218 | 226 | 238 | 256 | 234 | 222 | 227 | 245 | 249 | 235 | 237 | 259 | 275 | 304 | 240 | 313 | 297 | 237 | 237 | 229 | 249.2 | 312.6 |
| 3 Spd | 17 | 14 | 17 | 13 | 12 | 8 | 11 | 17 | 18 | 15 | 20 | 22 | 21 | 18 | 16 | 28 | 25 | 17 | 18 | 19 | 16 | 18 | 19 | 22 | 16.6 | 28.0 |
| Dir | 241 | 247 | 250 | 236 | 232 | 251 | 223 | 211 | 220 | 251 | 253 | 249 | 244 | 248 | 264 | 281 | 297 | 264 | 255 | 259 | 244 | 247 | 254 | 262 | 251.7 | 280.5 |
| 4 Spd | 23 | 24 | 21 | 18 | 18 | 18 | 18 | 20 | 20 | 16 | 17 | 17 | 17 | 20 | 19 | 16 | 16 | 15 | 13 | 14 | 12 | 10 | 10 | 9 | 16.3 | 23.5 |
| Dir | 252 | 252 | 266 | 264 | 264 | 262 | 258 | 255 | 248 | 255 | 252 | 253 | 237 | 236 | 235 | 237 | 238 | 242 | 252 | 252 | 248 | 221 | 232 | 260 | 249.7 | 252.3 |
| 5 Spd | 8 | 10 | 9 | 7 | 9 | 8 | 7 | 13 | 14 | 14 | 9 | 6 | 19 | 17 | 19 | 20 | 19 | 21 | 18 | 17 | 16 | 14 | 14 | 13 | 7.0 | 20.9 |
| Dir | 241 | 233 | 236 | 245 | 207 | 245 | 247 | 271 | 269 | 268 | 250 | 325 | 340 | 350 | 6 | 6 | 13 | 24 | 19 | 19 | 23 | 27 | 47 | 37 | 342.3 | 23.9 |
| 6 Spd | 11 | 7 | 7 | 4 | 7 | 5 | 6 | 5 | 5 | 11 | 9 | 12 | 15 | 14 | 16 | 18 | 18 | 23 | 24 | 18 | 19 | 16 | 15 | 15 | 6.7 | 23.9 |
| Dir | 31 | 9 | 49 | 40 | 48 | 49 | 79 | 87 | 78 | 140 | 167 | 202 | 244 | 254 | 252 | 235 | 239 | 229 | 240 | 256 | 232 | 238 | 258 | 267 | 240.9 | 256.3 |
| 7 Spd | 17 | 15 | 13 | 13 | 11 | 14 | 17 | 16 | 17 | 22 | 27 | 25 | 22 | 26 | 26 | 27 | 26 | 31 | 14 | 10 | 8 | 17 | 14 | 10 | 14.4 | 31.4 |
| Dir | 261 | 266 | 261 | 235 | 239 | 254 | 251 | 260 | 261 | 254 | 243 | 246 | 249 | 246 | 242 | 247 | 252 | 258 | 274 | 334 | 360 | 13 | 35 | 51 | 259.1 | 257.6 |
| 8 Spd | 9 | 6 | 7 | 6 | 5 | 6 | 7 | 9 | 15 | 28 | 25 | 23 | 16 | 16 | 15 | 8 | 7 | 15 | 5 | 2 | 4 | 5 | 12 | 5 | 7.4 | 27.6 |
| Dir | 46 | 29 | 32 | 4 | 274 | 232 | 255 | 292 | 248 | 243 | 239 | 238 | 225 | 225 | 227 | 235 | 201 | 211 | 182 | 168 | 66 | 194 | 169 | 227 | 233.2 | 243.3 |
| 9 Spd | 6 | 9 | 8 | 8 | 9 | 6 | 5 | 20 | 29 | 23 | 22 | 27 | 37 | 34 | 33 | 33 | 19 | 23 | 22 | 20 | 22 | 17 | 20 | 15 | 18.6 | 37.4 |
| Dir | 199 | 214 | 231 | 217 | 223 | 175 | 103 | 210 | 213 | 223 | 234 | 246 | 241 | 232 | 240 | 248 | 243 | 243 | 251 | 235 | 229 | 256 | 240 | 245 | 234.1 | 240.9 |
| 10 Spd | 9 | 14 | 10 | 16 | 10 | 8 | 10 | 8 | 10 | 9 | 9 | 10 | 14 | 10 | 5 | 12 | 16 | 14 | 9 | 11 | 15 | 11 | 11 | 8 | 6.5 | 16.5 |
| Dir | 231 | 269 | 253 | 258 | 253 | 199 | 235 | 276 | 271 | 244 | 265 | 205 | 190 | 216 | 259 | 140 | 135 | 146 | 139 | 136 | 150 | 156 | 122 | 161 | 200.3 | 135.3 |
| 11 Spd | 10 | 6 | 3 | 3 | 5 | 3 | 5 | 6 | 7 | 1 | 7 | 5 | 4 | 3 | 5 | 7 | 6 | 7 | 10 | 4 | 17 | 14 | 10 | 13 | 0.7 | 17.1 |
| Dir | 181 | 173 | 184 | 4 | 324 | 317 | 43 | 21 | 43 | 154 | 144 | 150 | 134 | 57 | 14 | 25 | 19 | 29 | 75 | 329 | 252 | 273 | 222 | 255 | 293.9 | 252.0 |
| 12 Spd | 18 | 26 | 25 | 22 | 23 | 15 | 18 | 15 | 11 | 5 | 2 | 7 | 7 | 13 | 17 | 17 | 15 | 14 | 15 | 12 | 11 | 11 | 9 | 13 | 2.5 | 26.0 |
| Dir | 252 | 248 | 237 | 233 | 246 | 260 | 252 | 263 | 245 | 264 | 145 | 132 | 108 | 107 | 108 | 101 | 82 | 76 | 42 | 26 | 354 | 353 | 4 | 12 | 254.7 | 248.1 |
| 13 Spd | 17 | 16 | 18 | 14 | 17 | 21 | 17 | 15 | 15 | 11 | 14 | 9 | 4 | 6 | 1 | 4 | 10 | 14 | 7 | 8 | 6 | 9 | 6 | 3 | 8.0 | 20.9 |
| Dir | 14 | 4 | 17 | 9 | 359 | 356 | 358 | 340 | 338 | 340 | 318 | 36 | 48 | 290 | 224 | 181 | 252 | 246 | 264 | 266 | 344 | 355 | 345 | 249 | 342.8 | 355.8 |
| 14 Spd | 2 | 7 | 7 | 8 | 6 | 7 | 5 | 7 | 6 | 7 | 8 | 10 | 8 | 10 | 4 | 2 | 10 | 15 | 14 | 11 | 8 | 7 | 6 | 4 | 2.1 | 15.2 |
| Dir | 243 | 257 | 264 | 258 | 258 | 255 | 238 | 261 | 222 | 207 | 235 | 244 | 222 | 235 | 249 | 47 | 43 | 49 | 50 | 52 | 25 | 10 | 351 | 301 | 283.3 | 49.0 |
| 15 Spd | 8 | 10 | 9 | 4 | 5 | 3 | 6 | 8 | 12 | 7 | 9 | 12 | 24 | 18 | 15 | 12 | 9 | 7 | 5 | 6 | 6 | 0 | 4 | 6 | 2.1 | 23.8 |
| Dir | 252 | 251 | 212 | 206 | 291 | 245 | 353 | 31 | 27 | 33 | 94 | 131 | 138 | 119 | 109 | 91 | 22 | 15 | 221 | 245 | 262 | 75 | 349 | 22 | 102.6 | 137.9 |
| 16 Spd | 6 | 14 | 14 | 16 | 17 | 15 | 20 | 15 | 17 | 14 | 9 | 30 | 31 | 23 | 23 | 20 | 19 | 15 | 11 | 12 | 11 | 8 | 8 | 10 | 15.1 | 31.2 |
| Dir | 267 | 266 | 269 | 261 | 259 | 257 | 253 | 240 | 220 | 248 | 287 | 233 | 233 | 236 | 233 | 236 | 239 | 234 | 252 | 270 | 264 | 278 | 262 | 286 | 248.1 | 232.7 |
| 17 Spd | 2 | 5 | 6 | 7 | 12 | 14 | 15 | 17 | 21 | 24 | 22 | 23 | 27 | 26 | 28 | 25 | 24 | 24 | 26 | 24 | 23 | 17 | 19 | 20 | 17.7 | 28.2 |
| Dir | 146 | 243 | 275 | 11 | 21 | 19 | 16 | 22 | 32 | 34 | 34 | 25 | 23 | 20 | 24 | 30 | 29 | 19 | 21 | 18 | 16 | 13 | 2 | 2 | 20.4 | 23.9 |
| 18 Spd | 13 | 11 | 13 | 10 | 11 | 9 | 12 | 10 | 13 | 18 | 21 | 22 | 20 | 16 | 9 | 8 | 12 | 12 | 13 | 14 | 7 | 4 | 6 | 3 | 8.0 | 21.5 |
| Dir | 344 | 272 | 278 | 316 | 245 | 267 | 308 | 246 | 247 | 248 | 253 | 240 | 238 | 248 | 257 | 1 | 3 | 347 | 355 | 348 | 38 | 237 | 280 | 102 | 280.0 | 239.8 |
| 19 Spd | 4 | 13 | 12 | 11 | 10 | 10 | 10 | 12 | 14 | 15 | 15 | 15 | 13 | 13 | 14 | 15 | 11 | 10 | 7 | 6 | 7 | 4 | 6 | 5 | 10.2 | 15.3 |
| Dir | 49 | 25 | 18 | 34 | 26 | 16 | 17 | 18 | 18 | 23 | 17 | 24 | 6 | 2 | 0 | 9 | 4 | 22 | 12 | 9 | 331 | 336 | 3 | 9 | 14.0 | 17.0 |
| 20 Spd | 8 | 8 | 8 | 8 | 11 | 14 | 17 | 16 | 18 | 19 | 17 | 17 | 21 | 22 | 16 | 13 | 11 | 10 | 7 | 5 | 4 | 1 | 3 | 4 | 10.7 | 21.6 |
| Dir | 18 | 26 | 24 | 18 | 29 | 30 | 29 | 31 | 33 | 32 | 34 | 21 | 20 | 21 | 13 | 359 | 353 | 3 | 358 | 312 | 321 | 287 | 337 | 207 | 18.8 | 21.2 |
| 21 Spd | 7 | 13 | 14 | 11 | 12 | 15 | 18 | 18 | 19 | 14 | 12 | 12 | 11 | 12 | 13 | 15 | 18 | 17 | 16 | 16 | 16 | 17 | 18 | 20 | 14.5 | 20.1 |
| Dir | 357 | 41 | 46 | 35 | 30 | 28 | 29 | 34 | 33 | 33 | 27 | 14 | 6 | 5 | 15 | 14 | 16 | 19 | 18 | 12 | 18 | 19 | 19 | 17 | 22.4 | 16.6 |
| 22 Spd | 19 | 18 | 20 | 21 | 19 | 17 | 17 | 18 | 19 | 20 | 18 | 19 | 16 | 16 | 18 | 17 | 16 | 15 | 14 | 18 | 15 | 18 | 15 | 16 | 17.2 | 21.4 |
| Dir | 18 | 20 | 16 | 16 | 20 | 20 | 24 | 16 | 16 | 15 | 11 | 18 | 1 | 351 | 353 | 354 | 352 | 353 | 351 | 11 | 13 | 18 | 16 | 13 | 10.4 | 15.7 |

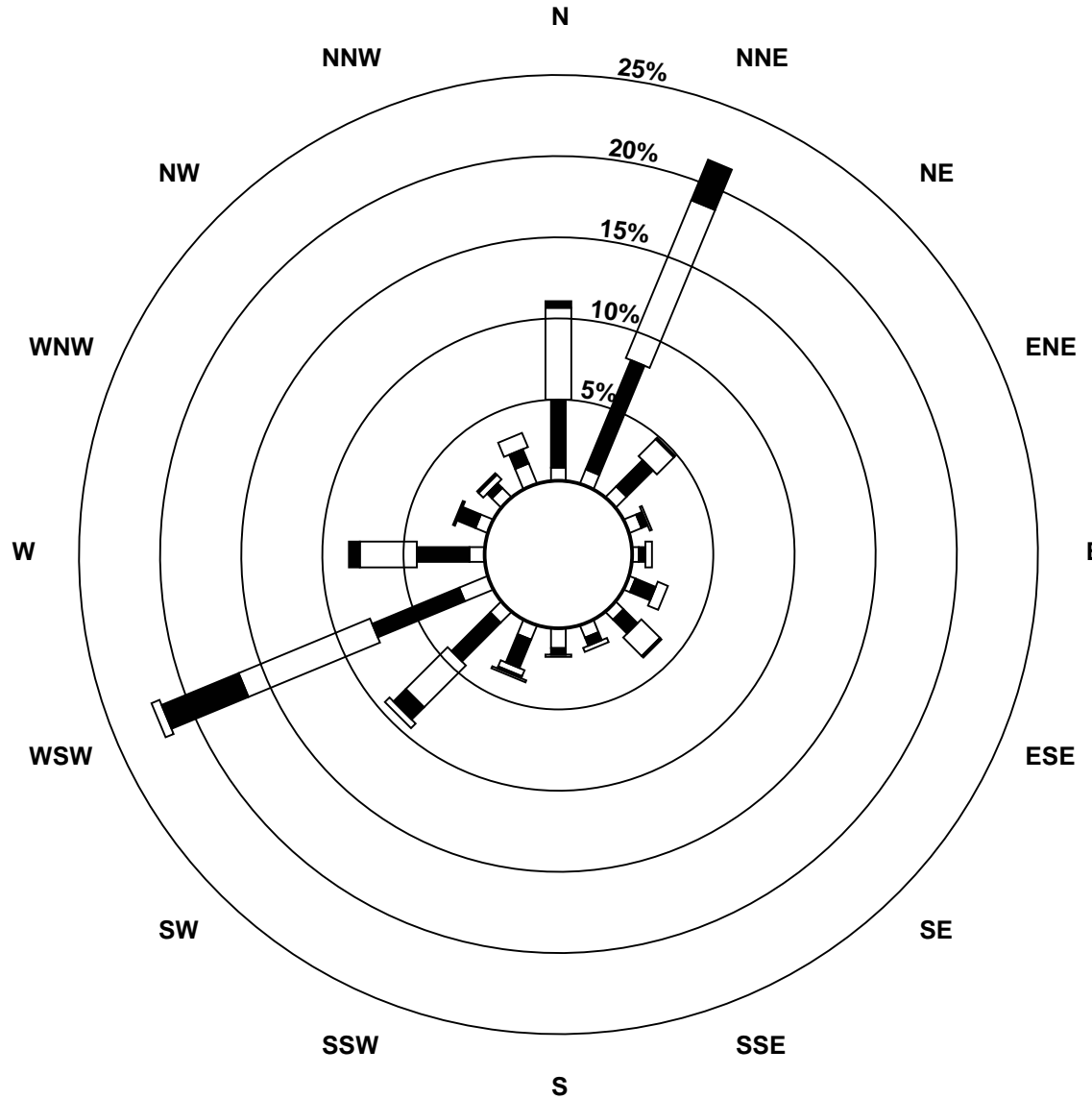
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - March 2012

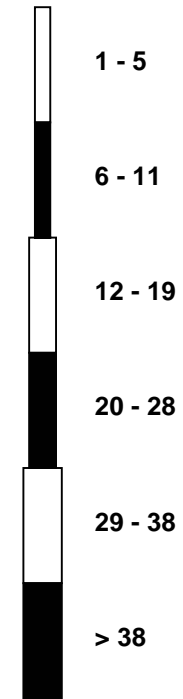
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--|-------------------------------|--|----------|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------------------|-------|-------|-------|-------|-------|-------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 23 Spd | 13 | 15 | 10 | 11 | 11 | 9 | 10 | 14 | 13 | 11 | 12 | 11 | 14 | 11 | 12 | 12 | 12 | 11 | 12 | 11 | 11 | 13 | 14 | 14 | 11.8 | 15.1 |
| Dir | 13 | 10 | 6 | 1 | 4 | 24 | 16 | 19 | 24 | 30 | 19 | 24 | 21 | 12 | 10 | 17 | 10 | 8 | 13 | 355 | 10 | 5 | 4 | 13 | 12.9 | 10.4 |
| 24 Spd | 12 | 13 | 7 | 4 | 2 | 4 | 7 | 6 | 6 | 3 | 4 | 9 | 9 | 6 | 2 | 2 | 8 | 12 | 13 | 11 | 11 | 12 | 13 | 11 | 4.5 | 13.2 |
| Dir | 11 | 14 | 9 | 319 | 280 | 243 | 245 | 215 | 207 | 242 | 262 | 259 | 267 | 273 | 258 | 28 | 9 | 6 | 9 | 355 | 7 | 36 | 8 | 15 | 343.8 | 8.4 |
| 25 Spd | 10 | 7 | 6 | 6 | 7 | 7 | 2 | 2 | 5 | 4 | 5 | 3 | 1 | 1 | 5 | 6 | 6 | 2 | 4 | 12 | 4 | 5 | 7 | 3 | 2.7 | 11.9 |
| Dir | 26 | 38 | 24 | 16 | 24 | 28 | 348 | 65 | 28 | 179 | 234 | 251 | 206 | 348 | 349 | 12 | 21 | 58 | 260 | 327 | 327 | 200 | 268 | 293 | 355.0 | 326.6 |
| 26 Spd | 7 | 8 | 1 | 4 | 4 | 7 | 4 | 2 | 3 | 7 | 8 | 9 | 13 | 14 | 13 | 14 | 15 | 15 | 12 | 10 | 11 | 11 | 12 | 14 | 7.3 | 15.2 |
| Dir | 266 | 288 | 317 | 32 | 174 | 301 | 216 | 297 | 359 | 50 | 42 | 33 | 26 | 17 | 8 | 8 | 10 | 18 | 24 | 21 | 21 | 15 | 20 | 17 | 11.8 | 18.2 |
| 27 Spd | 15 | 12 | 9 | 10 | 9 | 9 | 9 | 12 | 11 | 8 | 4 | 0 | 13 | 11 | 4 | 6 | 10 | 10 | 11 | 13 | 17 | 19 | 17 | 14 | 5.8 | 18.7 |
| Dir | 15 | 19 | 15 | 15 | 17 | 18 | 13 | 25 | 20 | 17 | 11 | 248 | 144 | 140 | 208 | 123 | 116 | 112 | 106 | 107 | 127 | 128 | 140 | 140 | 82.8 | 128.3 |
| 28 Spd | 13 | 11 | 13 | 10 | 8 | 7 | 7 | 4 | 7 | 11 | 8 | 7 | 12 | 6 | 8 | 5 | 11 | 12 | 15 | 11 | 4 | 22 | 11 | 9 | 3.9 | 21.6 |
| Dir | 134 | 135 | 135 | 141 | 120 | 108 | 104 | 92 | 78 | 125 | 57 | 84 | 126 | 103 | 35 | 75 | 23 | 31 | 32 | 28 | 353 | 259 | 247 | 285 | 90.1 | 259.3 |
| 29 Spd | 10 | 15 | 12 | 11 | 7 | 1 | 1 | 1 | 1 | 3 | 2 | 2 | 4 | 4 | 3 | 6 | 4 | 9 | 8 | 18 | 7 | 4 | 6 | 4 | 2.4 | 18.4 |
| Dir | 194 | 224 | 207 | 206 | 163 | 150 | 152 | 153 | 145 | 125 | 84 | 16 | 26 | 108 | 182 | 20 | 182 | 54 | 321 | 240 | 339 | 177 | 243 | 268 | 212.1 | 239.5 |
| 30 Spd | 3 | 7 | 10 | 14 | 12 | 5 | 7 | 8 | 10 | 12 | 14 | 18 | 19 | 17 | 19 | 15 | 10 | 10 | 13 | 12 | 12 | 14 | 14 | 12 | 11.7 | 19.4 |
| Dir | 182 | 219 | 250 | 250 | 258 | 213 | 206 | 243 | 250 | 234 | 235 | 237 | 238 | 241 | 237 | 230 | 238 | 223 | 230 | 222 | 225 | 234 | 248 | 247 | 236.2 | 236.8 |
| 31 Spd | 14 | 15 | 16 | 8 | 14 | 15 | 20 | 17 | 22 | 25 | 25 | 25 | 21 | 18 | 16 | 16 | 12 | 9 | 7 | 4 | 5 | 7 | 2 | 5 | 13.9 | 25.2 |
| Dir | 254 | 241 | 227 | 237 | 255 | 256 | 237 | 253 | 237 | 240 | 241 | 238 | 233 | 235 | 235 | 254 | 241 | 249 | 243 | 232 | 255 | 264 | 293 | 257 | 242.8 | 237.8 |
| Spd | 3.3 | 4.8 | 4.0 | 3.9 | 3.8 | 3.8 | 3.7 | 4.2 | 3.6 | 3.7 | 4.5 | 5.0 | 4.7 | 4.8 | 4.4 | 4.0 | 4.4 | 4.1 | 4.1 | 5.4 | 3.6 | 3.3 | 3.2 | 3.7 | Diurnal Average | |
| Dir | 308.6 | 289.9 | 286.5 | 295.0 | 291.6 | 306.1 | 303.3 | 300.1 | 290.7 | 274.0 | 275.9 | 259.6 | 252.4 | 267.3 | 281.5 | 303.1 | 322.1 | 326.7 | 332.4 | 323.7 | 324.6 | 306.1 | 310.6 | 314.5 | Diurnal Maximum | |
| Spd | 22.5 | 26.0 | 25.4 | 21.9 | 22.6 | 20.9 | 20.0 | 20.2 | 28.9 | 27.6 | 26.8 | 30.0 | 37.4 | 34.0 | 33.4 | 32.7 | 26.2 | 31.4 | 26.3 | 24.4 | 22.5 | 21.6 | 19.8 | 21.6 | Diurnal Maximum | |
| Dir | 252.0 | 248.1 | 237.4 | 233.0 | 245.7 | 355.8 | 237.3 | 255.5 | 213.2 | 243.3 | 243.5 | 233.3 | 240.9 | 231.9 | 240.3 | 247.6 | 251.5 | 257.6 | 21.0 | 312.6 | 16.3 | 259.3 | 240.3 | 262.2 | Diurnal Maximum | |
| Maximum Speed Value: 37 km/h on Mar 9 13:00 | | Minimum Speed Value: 0 km/h on Mar 15 22:00 | | | | | | | | | | | | | | | | Hours in Service: 744 | | | | | | | | |
| Maximum Daily Speed Average: 18.6 km/h on Mar 9 | | Minimum Daily Speed Average: 0.7 km/h on Mar 25 | | | | | | | | | | | | | | | | Hours of Data: 744 | | | | | | | | |
| Maximum Diurnal Speed Average: 5.4 km/h at hour 20 | | Minimum Diurnal Speed Average: 3.2 km/h at hour 23 | | | | | | | | | | | | | | | | Hours of Missing Data: 0 | | | | | | | | |
| Monthly Average Velocity: 3.79 km/h 296.96 deg | | Speed Percentiles: P ₁ = 1.2 P ₁₀ = 4.4 Q ₁ = 7.2 Median = 11.5 Q ₃ = 16.3 P ₉₀ = 20.1 P ₉₉ = 28.9 | | | | | | | | | | | | | | | | Percent Operational Time: 100.0 | | | | | | | | |
| All monthly, daily, and diurnal averages have been calculated using vector methods | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequency Distribution | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Speed Range (km/h) | | | | | | | | | | | | | | | | | | | | | | | | |
| Direction | 0 to 5 | 5 to 11 | 11 to 19 | 19 to 28 | 28 to 38 | > 38 | Total | | | | | | | | | | | | | | | | | | | |
| North | 11 | 61 | 109 | 15 | 0 | 0 | 196 | | | | | | | | | | | | | | | | | | | |
| NorthEast | 13 | 37 | 40 | 9 | 1 | 0 | 100 | | | | | | | | | | | | | | | | | | | |
| East | 7 | 13 | 8 | 0 | 0 | 0 | 28 | | | | | | | | | | | | | | | | | | | |
| SouthEast | 9 | 13 | 16 | 1 | 0 | 0 | 39 | | | | | | | | | | | | | | | | | | | |
| South | 10 | 14 | 2 | 0 | 0 | 0 | 26 | | | | | | | | | | | | | | | | | | | |
| SouthWest | 14 | 55 | 62 | 36 | 6 | 0 | 173 | | | | | | | | | | | | | | | | | | | |
| West | 14 | 50 | 66 | 18 | 3 | 0 | 151 | | | | | | | | | | | | | | | | | | | |
| NorthWest | 16 | 9 | 4 | 2 | 0 | 0 | 31 | | | | | | | | | | | | | | | | | | | |
| Total | 94 | 252 | 307 | 81 | 10 | 0 | 744 | | | | | | | | | | | | | | | | | | | |

Wind Rose

Wind Speed (WS) (km/h)
Smoky Heights - March 2012



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - March 2012

| | | |
|---|--|---------------------------------|
| Maximum Speed: 38 km/h on Mar 9 13:00 | Maximum Daily Speed Average: 20.0 km/h on Mar 9 | Hours in Service: 744 |
| Minimum Speed: 1 km/h on Mar 29 06:00 | Minimum Daily Speed Average: 5.9 km/h on Mar 25 | Hours of Data: 744 |
| Maximum Diurnal Speed Average: 15.3 km/h at hour 13 | Minimum Diurnal Speed Average: 10.3 km/h at hour 6 | Hours of Missing Data: 0 |
| Monthly Average Speed: 12.56 km/h | Percentiles: P ₁ = 3.1 P ₁₀ = 5.3 Q ₁ = 7.8 Median = 11.9 Q ₃ = 16.5 P ₉₀ = 20.3 P ₉₉ = 28.9 | Percent Operational Time: 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 20 | 17 | 18 | 17 | 13 | 14 | 12 | 9 | 7 | 7 | 8 | 7 | 4 | 11 | 6 | 5 | 7 | 7 | 7 | 5 | 5 | 5 | 3 | 4 | 9.2 | 19.9 |
| 2-Mar | 8 | 10 | 9 | 9 | 12 | 11 | 11 | 11 | 11 | 9 | 8 | 12 | 11 | 13 | 17 | 20 | 17 | 17 | 14 | 26 | 12 | 11 | 13 | 14 | 12.8 | 25.6 |
| 3-Mar | 18 | 14 | 17 | 13 | 13 | 9 | 11 | 18 | 18 | 15 | 21 | 22 | 21 | 18 | 18 | 28 | 26 | 19 | 19 | 19 | 16 | 18 | 19 | 22 | 18.0 | 28.2 |
| 4-Mar | 23 | 24 | 21 | 18 | 18 | 18 | 18 | 20 | 20 | 16 | 17 | 17 | 17 | 20 | 19 | 16 | 16 | 15 | 13 | 14 | 13 | 10 | 10 | 9 | 16.7 | 23.7 |
| 5-Mar | 9 | 11 | 9 | 8 | 9 | 8 | 7 | 13 | 14 | 14 | 9 | 10 | 19 | 17 | 19 | 20 | 19 | 21 | 19 | 17 | 16 | 14 | 14 | 13 | 13.8 | 21.0 |
| 6-Mar | 11 | 7 | 7 | 5 | 7 | 5 | 6 | 5 | 5 | 11 | 9 | 10 | 12 | 15 | 14 | 16 | 18 | 18 | 23 | 24 | 18 | 19 | 17 | 15 | 12.4 | 24.4 |
| 7-Mar | 17 | 15 | 13 | 13 | 12 | 15 | 17 | 16 | 17 | 22 | 27 | 25 | 22 | 26 | 26 | 27 | 26 | 31 | 18 | 12 | 11 | 17 | 14 | 10 | 18.7 | 31.5 |
| 8-Mar | 9 | 6 | 7 | 7 | 6 | 7 | 8 | 10 | 16 | 28 | 25 | 23 | 16 | 16 | 15 | 8 | 7 | 15 | 6 | 5 | 4 | 6 | 12 | 7 | 11.2 | 27.7 |
| 9-Mar | 9 | 10 | 10 | 9 | 9 | 7 | 5 | 20 | 29 | 24 | 22 | 27 | 38 | 34 | 33 | 33 | 20 | 23 | 22 | 20 | 23 | 18 | 20 | 15 | 20.0 | 37.7 |
| 10-Mar | 10 | 14 | 11 | 17 | 12 | 8 | 12 | 9 | 10 | 9 | 9 | 11 | 14 | 11 | 5 | 12 | 17 | 14 | 9 | 11 | 15 | 11 | 11 | 8 | 11.3 | 16.8 |
| 11-Mar | 10 | 7 | 5 | 4 | 5 | 4 | 6 | 6 | 7 | 3 | 7 | 6 | 4 | 4 | 6 | 8 | 8 | 8 | 10 | 6 | 18 | 15 | 10 | 13 | 7.4 | 18.0 |
| 12-Mar | 18 | 26 | 25 | 22 | 23 | 16 | 18 | 15 | 11 | 6 | 4 | 7 | 7 | 14 | 18 | 17 | 16 | 14 | 15 | 12 | 11 | 11 | 10 | 13 | 14.5 | 26.1 |
| 13-Mar | 17 | 16 | 18 | 14 | 17 | 21 | 17 | 15 | 15 | 11 | 15 | 9 | 5 | 8 | 5 | 5 | 10 | 14 | 7 | 9 | 7 | 9 | 7 | 4 | 11.5 | 21.3 |
| 14-Mar | 4 | 7 | 7 | 8 | 6 | 7 | 6 | 8 | 7 | 7 | 9 | 10 | 9 | 10 | 5 | 5 | 10 | 15 | 14 | 11 | 8 | 7 | 7 | 5 | 8.0 | 15.2 |
| 15-Mar | 8 | 10 | 10 | 5 | 6 | 5 | 6 | 8 | 12 | 7 | 9 | 13 | 24 | 18 | 15 | 14 | 9 | 8 | 12 | 7 | 8 | 5 | 5 | 6 | 9.6 | 24.0 |
| 16-Mar | 7 | 14 | 14 | 16 | 17 | 15 | 20 | 15 | 17 | 14 | 10 | 30 | 31 | 23 | 23 | 20 | 19 | 15 | 12 | 12 | 11 | 8 | 9 | 12 | 16.0 | 31.3 |
| 17-Mar | 4 | 5 | 7 | 7 | 13 | 14 | 15 | 17 | 21 | 24 | 22 | 23 | 27 | 26 | 28 | 25 | 25 | 24 | 26 | 24 | 23 | 17 | 19 | 20 | 19.0 | 28.3 |
| 18-Mar | 15 | 12 | 13 | 11 | 12 | 9 | 12 | 11 | 13 | 18 | 21 | 22 | 21 | 16 | 10 | 9 | 12 | 12 | 13 | 14 | 8 | 5 | 7 | 5 | 12.6 | 21.6 |
| 19-Mar | 5 | 13 | 12 | 12 | 10 | 10 | 10 | 12 | 14 | 15 | 15 | 15 | 14 | 14 | 14 | 15 | 12 | 10 | 7 | 6 | 7 | 5 | 7 | 5 | 10.7 | 15.4 |
| 20-Mar | 8 | 8 | 8 | 8 | 11 | 14 | 17 | 16 | 18 | 19 | 17 | 18 | 21 | 22 | 16 | 14 | 12 | 10 | 7 | 5 | 4 | 4 | 6 | 5 | 12.0 | 21.7 |
| 21-Mar | 7 | 13 | 14 | 11 | 12 | 15 | 18 | 18 | 19 | 14 | 12 | 12 | 11 | 12 | 13 | 15 | 18 | 17 | 16 | 16 | 16 | 17 | 18 | 20 | 14.8 | 20.1 |
| 22-Mar | 19 | 18 | 20 | 22 | 19 | 17 | 17 | 18 | 19 | 20 | 18 | 19 | 17 | 17 | 18 | 17 | 17 | 16 | 14 | 18 | 15 | 18 | 15 | 16 | 17.6 | 21.5 |
| 23-Mar | 14 | 15 | 10 | 11 | 11 | 9 | 10 | 14 | 13 | 12 | 12 | 11 | 14 | 11 | 12 | 13 | 12 | 11 | 12 | 11 | 12 | 13 | 14 | 14 | 12.1 | 15.2 |
| 24-Mar | 12 | 13 | 8 | 6 | 3 | 5 | 7 | 7 | 6 | 3 | 4 | 9 | 9 | 7 | 3 | 4 | 9 | 12 | 13 | 11 | 11 | 12 | 14 | 11 | 8.3 | 13.6 |
| 25-Mar | 10 | 7 | 6 | 6 | 7 | 7 | 4 | 3 | 5 | 5 | 6 | 3 | 3 | 4 | 6 | 7 | 6 | 3 | 4 | 13 | 7 | 6 | 8 | 6 | 5.9 | 12.6 |
| 26-Mar | 7 | 9 | 4 | 5 | 5 | 8 | 7 | 4 | 6 | 7 | 8 | 9 | 13 | 14 | 13 | 14 | 15 | 15 | 12 | 10 | 11 | 11 | 12 | 14 | 9.8 | 15.2 |
| 27-Mar | 15 | 12 | 9 | 10 | 10 | 9 | 9 | 12 | 11 | 8 | 5 | 4 | 13 | 11 | 7 | 7 | 10 | 11 | 11 | 14 | 17 | 19 | 17 | 14 | 11.0 | 18.9 |
| 28-Mar | 13 | 11 | 13 | 10 | 8 | 8 | 7 | 5 | 8 | 11 | 10 | 8 | 12 | 6 | 9 | 8 | 11 | 12 | 15 | 11 | 8 | 22 | 12 | 12 | 10.4 | 21.9 |
| 29-Mar | 15 | 15 | 12 | 11 | 8 | 1 | 1 | 1 | 1 | 4 | 3 | 3 | 4 | 4 | 5 | 6 | 13 | 11 | 11 | 19 | 8 | 6 | 6 | 5 | 7.3 | 19.5 |
| 30-Mar | 4 | 7 | 11 | 14 | 12 | 7 | 8 | 9 | 10 | 12 | 14 | 18 | 19 | 17 | 19 | 15 | 10 | 10 | 13 | 13 | 13 | 14 | 15 | 12 | 12.4 | 19.4 |
| 31-Mar | 14 | 15 | 16 | 9 | 14 | 15 | 20 | 18 | 22 | 25 | 25 | 25 | 21 | 18 | 16 | 16 | 12 | 9 | 8 | 4 | 5 | 7 | 4 | 5 | 14.4 | 25.3 |
| | 11.6 | 12.3 | 11.7 | 10.9 | 10.9 | 10.3 | 11.1 | 11.7 | 13.0 | 12.9 | 13.0 | 14.1 | 15.3 | 14.9 | 14.0 | 14.2 | 14.1 | 14.1 | 12.9 | 12.9 | 11.7 | 11.6 | 11.3 | 10.8 | Diurnal Average | |
| | 22.9 | 26.1 | 25.4 | 22.0 | 23.1 | 21.3 | 20.1 | 20.3 | 28.9 | 27.7 | 26.9 | 30.1 | 37.7 | 34.2 | 33.4 | 32.9 | 26.3 | 31.5 | 26.3 | 25.6 | 22.7 | 21.9 | 20.0 | 21.6 | Diurnal Maximum | |

All monthly, daily, and diurnal averages have been calculated using scalar methods

Hourly Standard Deviations

Wind Direction (WD) - deg
Smoky Heights - March 2012

| Maximum Value: 98.1 deg on Mar 25 14:00 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|
| Minimum Value: 0.2 deg on Mar 29 07:00 | | Hours of Data: 744 | | | | | | | | | | | | | | | | | | | | | | | |
| Percentiles: P ₁ = 2.6 P ₁₀ = 4.7 Q ₁ = 6.3 Median = 10.5 Q ₃ = 20.0 P ₉₀ = 40.4 P ₉₉ = 83.2 | | Hours of Missing Data: 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | | Hours of Calibration: 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| 1-Mar | 8 | 9 | 9 | 9 | 11 | 11 | 11 | 11 | 8 | 11 | 12 | 8 | 85 | 33 | 67 | 9 | 25 | 13 | 35 | 14 | 10 | 18 | 45 | 42 | 85.2 |
| 2-Mar | 20 | 10 | 8 | 5 | 9 | 7 | 5 | 7 | 14 | 14 | 27 | 11 | 12 | 8 | 5 | 12 | 25 | 16 | 18 | 22 | 31 | 8 | 15 | 14 | 31.2 |
| 3-Mar | 23 | 14 | 15 | 15 | 14 | 12 | 14 | 9 | 12 | 8 | 12 | 9 | 7 | 10 | 28 | 7 | 15 | 21 | 5 | 10 | 11 | 5 | 5 | 2 | 28.0 |
| 4-Mar | 10 | 6 | 3 | 3 | 3 | 5 | 7 | 6 | 3 | 6 | 6 | 8 | 5 | 5 | 4 | 5 | 3 | 2 | 10 | 7 | 12 | 11 | 8 | 20 | 19.7 |
| 5-Mar | 14 | 12 | 21 | 28 | 7 | 23 | 21 | 5 | 4 | 5 | 7 | 70 | 15 | 11 | 13 | 9 | 10 | 6 | 9 | 6 | 6 | 6 | 6 | 9 | 70.4 |
| 6-Mar | 6 | 16 | 23 | 15 | 10 | 22 | 11 | 16 | 14 | 13 | 17 | 25 | 13 | 10 | 11 | 7 | 6 | 11 | 9 | 12 | 4 | 4 | 8 | 9 | 24.7 |
| 7-Mar | 12 | 7 | 11 | 10 | 7 | 8 | 5 | 4 | 5 | 6 | 4 | 9 | 7 | 5 | 4 | 5 | 5 | 3 | 46 | 31 | 57 | 10 | 6 | 15 | 56.8 |
| 8-Mar | 10 | 12 | 13 | 24 | 20 | 26 | 27 | 33 | 15 | 4 | 4 | 6 | 5 | 4 | 3 | 8 | 14 | 12 | 11 | 73 | 40 | 41 | 6 | 33 | 73.2 |
| 9-Mar | 52 | 17 | 41 | 31 | 10 | 17 | 30 | 14 | 3 | 7 | 3 | 8 | 7 | 6 | 4 | 6 | 13 | 4 | 9 | 6 | 6 | 7 | 7 | 34 | 51.7 |
| 10-Mar | 44 | 9 | 14 | 19 | 80 | 31 | 28 | 31 | 14 | 6 | 10 | 22 | 8 | 28 | 47 | 14 | 6 | 5 | 9 | 8 | 7 | 12 | 10 | 22 | 80.1 |
| 11-Mar | 13 | 9 | 54 | 57 | 12 | 23 | 16 | 14 | 22 | 74 | 12 | 25 | 26 | 65 | 30 | 25 | 41 | 25 | 18 | 36 | 21 | 14 | 9 | 8 | 74.2 |
| 12-Mar | 6 | 5 | 3 | 6 | 12 | 12 | 6 | 5 | 17 | 14 | 72 | 9 | 17 | 19 | 11 | 8 | 9 | 9 | 5 | 7 | 12 | 14 | 9 | 6 | 71.8 |
| 13-Mar | 7 | 10 | 8 | 14 | 10 | 11 | 16 | 8 | 10 | 17 | 14 | 26 | 48 | 47 | 84 | 44 | 11 | 3 | 14 | 26 | 24 | 15 | 46 | 27 | 83.8 |
| 14-Mar | 68 | 15 | 11 | 13 | 8 | 17 | 22 | 8 | 24 | 11 | 12 | 12 | 26 | 8 | 60 | 87 | 9 | 5 | 5 | 6 | 14 | 16 | 20 | 32 | 87.5 |
| 15-Mar | 10 | 9 | 19 | 30 | 47 | 61 | 22 | 8 | 7 | 14 | 14 | 19 | 7 | 9 | 8 | 28 | 9 | 22 | 72 | 25 | 53 | 93 | 41 | 24 | 93.2 |
| 16-Mar | 32 | 7 | 6 | 5 | 8 | 9 | 7 | 4 | 8 | 13 | 28 | 3 | 4 | 6 | 5 | 4 | 4 | 3 | 10 | 5 | 21 | 15 | 30 | 56 | 56.4 |
| 17-Mar | 69 | 24 | 28 | 20 | 6 | 4 | 5 | 5 | 6 | 5 | 5 | 6 | 6 | 6 | 6 | 5 | 5 | 4 | 4 | 5 | 6 | 7 | 7 | 11 | 69.0 |
| 18-Mar | 37 | 24 | 10 | 15 | 24 | 19 | 16 | 20 | 10 | 5 | 5 | 4 | 6 | 9 | 20 | 20 | 12 | 10 | 10 | 9 | 42 | 39 | 33 | 58 | 57.8 |
| 19-Mar | 22 | 5 | 6 | 11 | 8 | 11 | 7 | 7 | 5 | 5 | 7 | 9 | 9 | 12 | 13 | 10 | 14 | 11 | 14 | 27 | 19 | 38 | 11 | 23 | 38.0 |
| 20-Mar | 24 | 6 | 11 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 7 | 8 | 5 | 6 | 8 | 12 | 12 | 13 | 12 | 23 | 21 | 82 | 66 | 35 | 82.2 |
| 21-Mar | 25 | 13 | 7 | 7 | 5 | 5 | 4 | 4 | 4 | 5 | 7 | 7 | 13 | 10 | 8 | 7 | 5 | 5 | 5 | 6 | 4 | 5 | 4 | 5 | 25.4 |
| 22-Mar | 5 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 5 | 7 | 8 | 7 | 14 | 11 | 9 | 10 | 9 | 10 | 11 | 9 | 6 | 5 | 6 | 9 | 14.2 |
| 23-Mar | 6 | 7 | 9 | 8 | 9 | 6 | 6 | 5 | 9 | 10 | 7 | 11 | 10 | 11 | 10 | 7 | 8 | 7 | 7 | 11 | 9 | 11 | 8 | 9 | 11.1 |
| 24-Mar | 5 | 10 | 26 | 61 | 57 | 20 | 5 | 17 | 14 | 10 | 27 | 8 | 7 | 15 | 56 | 78 | 20 | 16 | 13 | 11 | 17 | 16 | 15 | 7 | 78.0 |
| 25-Mar | 7 | 15 | 7 | 9 | 9 | 14 | 57 | 56 | 13 | 43 | 19 | 43 | 73 | 98 | 26 | 26 | 22 | 59 | 16 | 22 | 85 | 26 | 17 | 73 | 98.1 |
| 26-Mar | 26 | 20 | 89 | 61 | 45 | 39 | 56 | 68 | 62 | 24 | 16 | 6 | 6 | 12 | 8 | 8 | 6 | 4 | 4 | 5 | 4 | 5 | 3 | 5 | 89.2 |
| 27-Mar | 6 | 5 | 4 | 5 | 6 | 6 | 7 | 7 | 6 | 8 | 53 | 95 | 10 | 11 | 58 | 52 | 14 | 13 | 10 | 13 | 8 | 8 | 8 | 11 | 94.6 |
| 28-Mar | 19 | 9 | 6 | 6 | 13 | 14 | 12 | 37 | 23 | 7 | 36 | 34 | 13 | 25 | 27 | 47 | 7 | 7 | 6 | 5 | 61 | 10 | 13 | 42 | 60.8 |
| 29-Mar | 55 | 8 | 8 | 12 | 22 | 2 | 0 | 0 | 20 | 31 | 60 | 57 | 23 | 41 | 77 | 20 | 93 | 35 | 39 | 21 | 22 | 61 | 20 | 29 | 93.5 |
| 30-Mar | 47 | 16 | 13 | 6 | 19 | 67 | 24 | 11 | 6 | 8 | 6 | 6 | 6 | 4 | 4 | 8 | 4 | 7 | 11 | 23 | 18 | 18 | 3 | 7 | 66.8 |
| 31-Mar | 3 | 7 | 3 | 19 | 12 | 8 | 6 | 18 | 4 | 4 | 5 | 5 | 7 | 7 | 10 | 11 | 12 | 10 | 12 | 30 | 20 | 12 | 70 | 26 | 70.1 |
| | 69.0 | 23.9 | 89.2 | 61.1 | 80.1 | 66.8 | 56.9 | 68.0 | 62.1 | 74.2 | 71.8 | 94.6 | 85.2 | 98.1 | 83.8 | 87.5 | 93.5 | 58.7 | 71.9 | 73.2 | 85.2 | 93.2 | 70.1 | 73.3 | |

PAZA

Beaverlodge Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

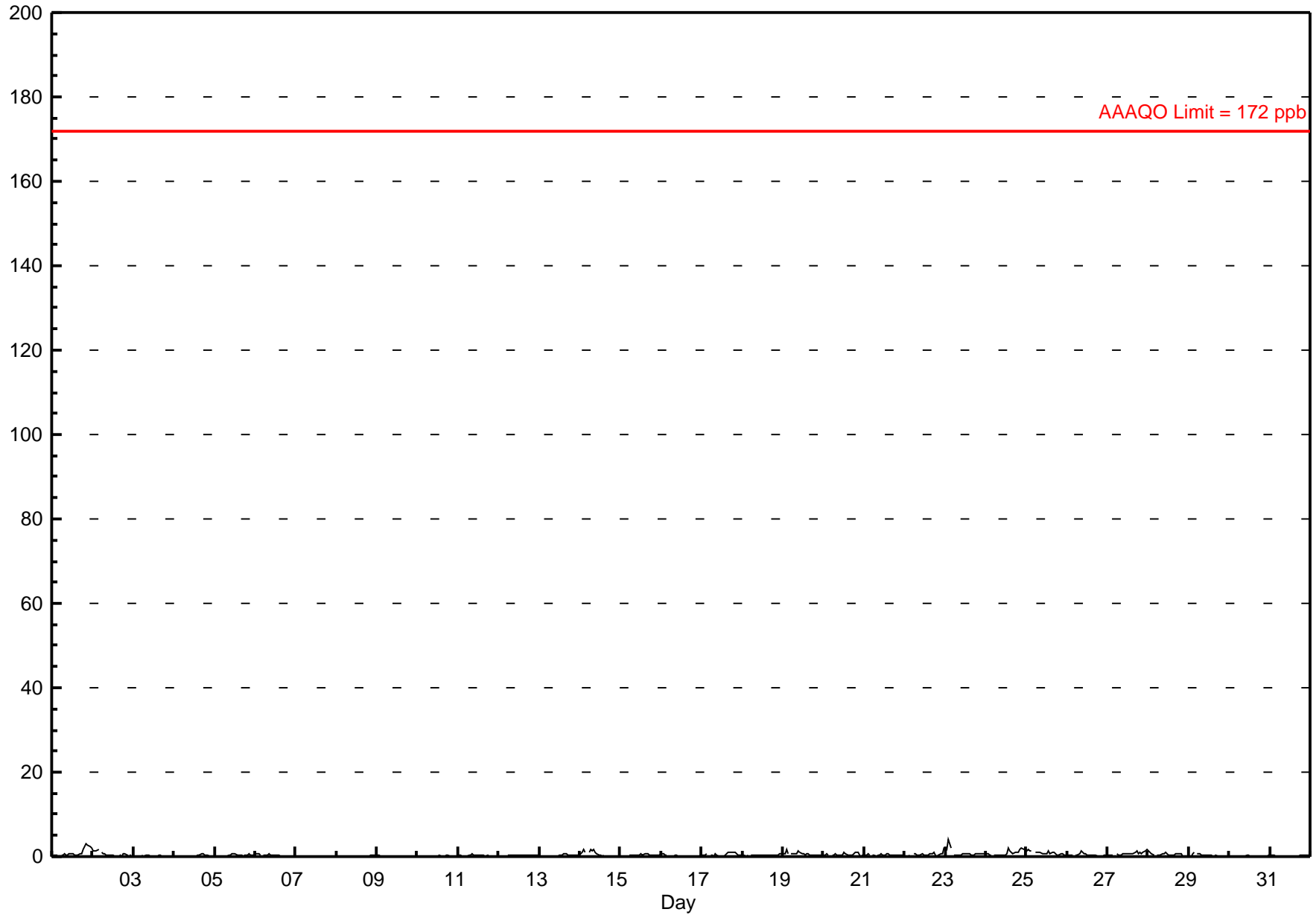
Sulphur Dioxide (SO₂) - ppb

Beaverlodge - March 2012

| | | | | |
|--|--|----------|---------------------------|-------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 3.9 ppb on Mar 23 03:00 | Maximum Daily Average: 1.0 ppb on Mar 1 | | Hours of Data: | 710 |
| Minimum Value: 0 ppb on Mar 30 17:00 | Minimum Daily Average: 0.1 ppb on Mar 9 | | Hours of Missing Data: | 34 |
| Maximum Diurnal Average: 0.6 ppb at hour 3 | Minimum Diurnal Average: 0.3 ppb at hour 12 | | Hours of Calibration: | 34 |
| Monthly Average: 0.40 ppb | Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.3 Q ₃ = 0.5 P ₉₀ = 0.8 P ₉₉ = 2.2 | | Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|-----------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 1.0 | 3.2 |
| 2-Mar | 2 | 1 | 1 | 2 | A | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0.5 | 1.7 |
| 3-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.2 |
| 4-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.6 |
| 5-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0.3 | 0.6 |
| 6-Mar | 1 | 1 | 1 | 0 | A | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.7 |
| 7-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.1 |
| 8-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.4 |
| 9-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.2 |
| 10-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 |
| 11-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.6 |
| 12-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.4 |
| 13-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.8 |
| 14-Mar | 1 | 1 | 2 | 1 | A | 1 | 2 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | C | C | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 1.7 |
| 15-Mar | 0 | 0 | 0 | 0 | A | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.7 |
| 16-Mar | 1 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.6 |
| 17-Mar | 0 | 0 | 0 | 1 | A | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0.5 | 1.2 |
| 18-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0.3 | 0.7 |
| 19-Mar | 1 | 1 | 2 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 1.8 |
| 20-Mar | 0 | 0 | 1 | 0 | A | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0.4 | 1.0 |
| 21-Mar | 0 | 0 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.6 |
| 22-Mar | 0 | 0 | 0 | 0 | A | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 0.5 | 2.2 |
| 23-Mar | 2 | 2 | 4 | 2 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 3.9 |
| 24-Mar | 1 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 0.9 | 2.2 |
| 25-Mar | 1 | 2 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0.9 | 1.7 |
| 26-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.3 |
| 27-Mar | 0 | 0 | 0 | 0 | A | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 0.7 | 1.7 |
| 28-Mar | 1 | 1 | 1 | 1 | A | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.2 |
| 29-Mar | 0 | 0 | 1 | 1 | A | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.2 |
| 30-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 |
| 31-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.5 |
| | 0.4 | 0.4 | 0.6 | 0.4 | -- | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | | Diurnal Average | |
| | 2.0 | 1.7 | 3.9 | 1.9 | -- | 1.1 | 1.5 | 1.5 | 1.6 | 1.2 | 0.9 | 0.8 | 0.9 | 2.0 | 1.4 | 1.2 | 1.1 | 1.2 | 1.8 | 2.4 | 3.2 | 2.9 | 2.5 | 2.2 | | Diurnal Maximum |

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb



Hourly Maximums

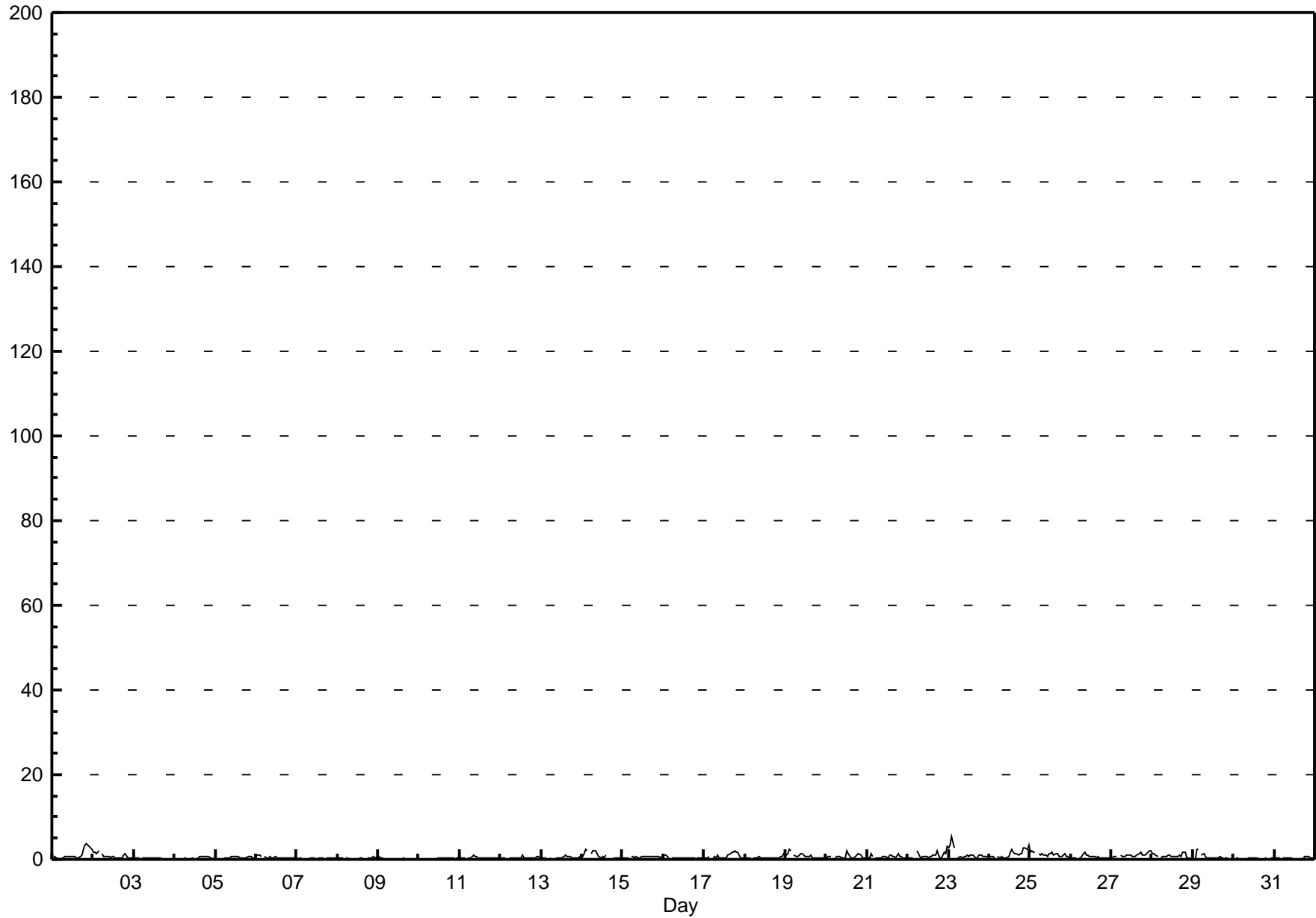
Sulphur Dioxide (SO₂) - ppb

Beaverlodge - March 2012

| Maximum Value: 5.5 ppb on Mar 23 03:00 | | Maximum Daily Average: 1.3 ppb on Mar 24 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|--|-----|---------------------------------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|-----------------|
| Minimum Value: 0 ppb on Mar 8 12:00 | | Minimum Daily Average: 0.2 ppb on Mar 9 | | Hours of Data: 710 | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 0.8 ppb at hour 3 | | Minimum Diurnal Average: 0.5 ppb at hour 12 | | Hours of Missing Data: 34 | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 0.59 ppb | | Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.4 Q ₃ = 0.7 P ₉₀ = 1.3 P ₉₉ = 2.9 | | Hours of Calibration: 34 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 0 | 1 | 0 | 0 | A | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 3 | 3 | 2 | 1.2 | 3.7 | |
| 2-Mar | 2 | 2 | 1 | 2 | A | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0.7 | 2.0 | |
| 3-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 4-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0.3 | 0.8 | |
| 5-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0.4 | 0.8 | |
| 6-Mar | 1 | 1 | 1 | 1 | A | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.0 | |
| 7-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 8-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0.2 | 0.6 | |
| 9-Mar | 1 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.5 | |
| 10-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.5 | |
| 11-Mar | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.9 | |
| 12-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0.4 | 1.1 | |
| 13-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.4 | 1.0 | |
| 14-Mar | 1 | 1 | 2 | 2 | A | 1 | 2 | 2 | 2 | 1 | 1 | 0 | 1 | 0 | 1 | C | C | C | 0 | 0 | 0 | 0 | 0 | 1.0 | 2.3 | |
| 15-Mar | 0 | 0 | 0 | 0 | A | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0.6 | 0.8 | |
| 16-Mar | 1 | 1 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.0 | |
| 17-Mar | 0 | 0 | 0 | 1 | A | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0.8 | 1.9 | |
| 18-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0.5 | 1.2 | |
| 19-Mar | 1 | 2 | 2 | 2 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.9 | 2.3 | |
| 20-Mar | 0 | 1 | 1 | 1 | A | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0.7 | 1.9 | |
| 21-Mar | 0 | 0 | 1 | 1 | A | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0.6 | 1.3 | |
| 22-Mar | 0 | 0 | 0 | 0 | A | 2 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 2 | 1 | 0.9 | 3.1 | |
| 23-Mar | 3 | 3 | 6 | 3 | A | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1.2 | 5.5 | |
| 24-Mar | 1 | 1 | 1 | 0 | A | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 2 | 1.3 | 3.4 | |
| 25-Mar | 2 | 2 | 2 | 2 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1.1 | 1.9 | |
| 26-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 1.7 | |
| 27-Mar | 0 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 1.0 | 2.1 | |
| 28-Mar | 1 | 1 | 1 | 1 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0.8 | 1.8 | |
| 29-Mar | 0 | 0 | 2 | 2 | A | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 2.4 | |
| 30-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.4 | |
| 31-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0.3 | 0.6 | |
| | | 0.6 | 0.7 | 0.8 | 0.7 | -- | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.7 | Diurnal Average |
| | | 2.6 | 3.4 | 5.5 | 2.8 | -- | 2.1 | 1.9 | 2.0 | 2.0 | 1.5 | 1.4 | 1.2 | 1.9 | 2.5 | 1.7 | 1.4 | 1.6 | 1.9 | 2.3 | 3.3 | 3.7 | 3.4 | 2.7 | 3.4 | Diurnal Maximum |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | |

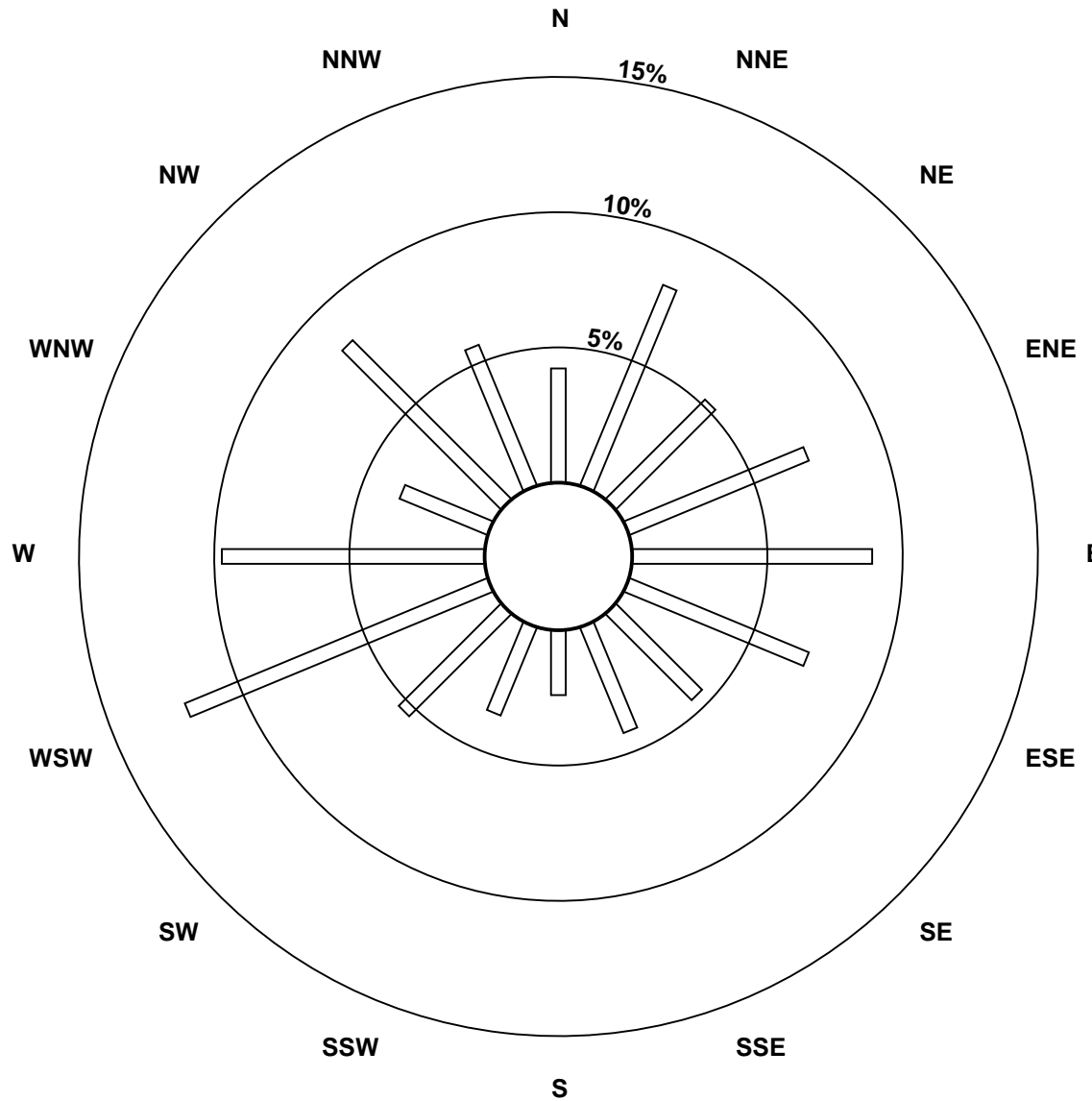
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - March 2012

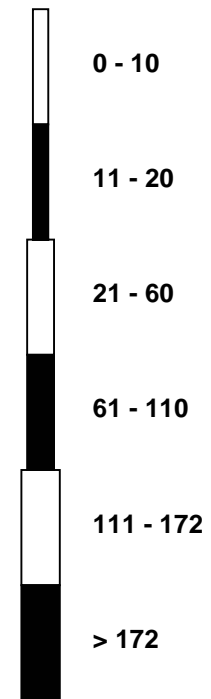


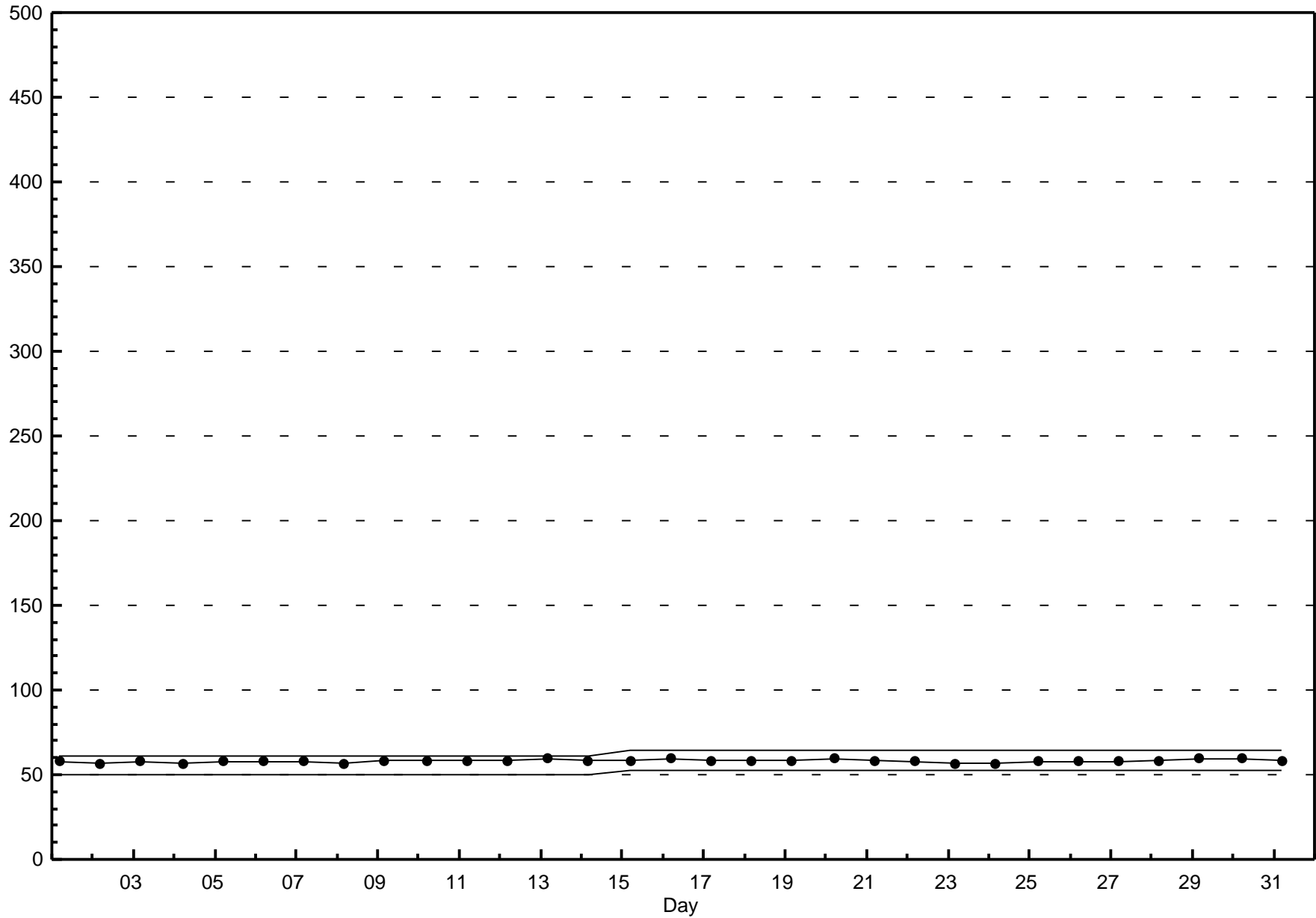
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - March 2012



Pollutant Classes (ppb)





Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

Beaverlodge - March 2012

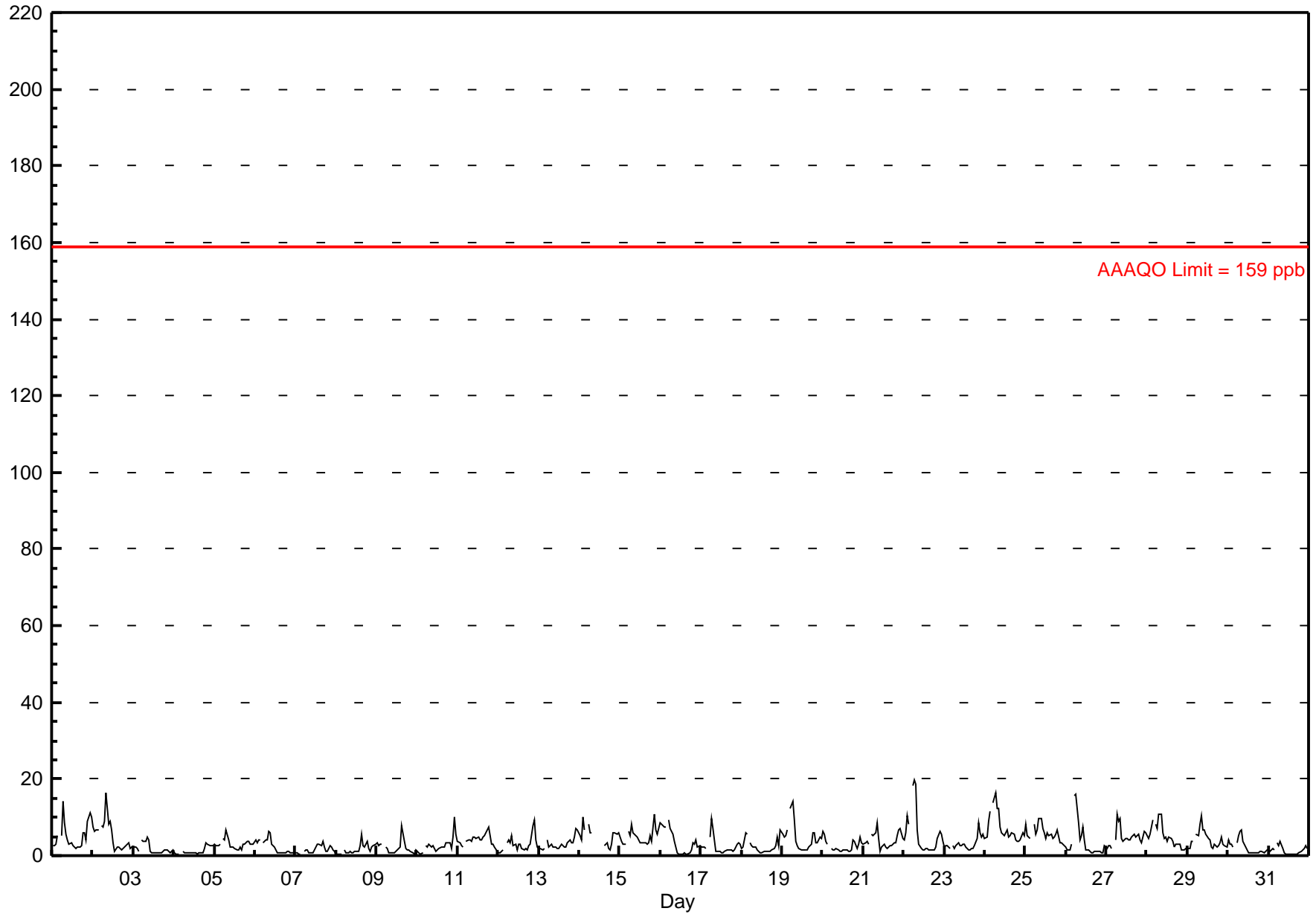
| | | | | |
|--|---|----------|---------------------------|-------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 19.7 ppb on Mar 22 07:00 | Maximum Daily Average: 7.1 ppb on Mar 24 | | Hours of Data: | 706 |
| Minimum Value: 0 ppb on Mar 4 02:00 | Minimum Daily Average: 1.2 ppb on Mar 4 | | Hours of Missing Data: | 38 |
| Maximum Diurnal Average: 6.2 ppb at hour 7 | Minimum Diurnal Average: 2.1 ppb at hour 15 | | Hours of Calibration: | 38 |
| Monthly Average: 3.51 ppb | Percentiles: P ₁ = 0.5 P ₁₀ = 0.8 Q ₁ = 1.5 Median = 2.8 Q ₃ = 4.8 P ₉₀ = 6.9 P ₉₉ = 15.6 | | Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|-----|------|------|----|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|------|------|---------------|-----------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 2 | 3 | 3 | 5 | A | 5 | 14 | 9 | 5 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 6 | 6 | 4 | 9 | 11 | 10 | 5.1 | 14.2 |
| 2-Mar | 7 | 6 | 7 | 7 | A | 8 | 8 | 9 | 17 | 8 | 9 | 7 | 3 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 5.1 | 16.5 |
| 3-Mar | 2 | 2 | 2 | 1 | A | 4 | 4 | 4 | 5 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1.9 | 5.0 |
| 4-Mar | 1 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 1.2 | 3.3 |
| 5-Mar | 3 | 2 | 3 | 3 | A | 5 | 4 | 7 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3.0 | 6.9 |
| 6-Mar | 4 | 3 | 4 | 4 | A | 3 | 4 | 4 | 6 | 6 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2.4 | 6.4 |
| 7-Mar | 1 | 1 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 4 | 2 | 1 | 1 | 3 | 2 | 1 | 1 | 1.5 | 3.7 |
| 8-Mar | 0 | 0 | 0 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 6 | 3 | 2 | 4 | 2 | 1 | 2 | 3 | 3 | 1.7 | 5.7 |
| 9-Mar | 3 | 3 | 3 | 3 | A | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 8 | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2.0 | 7.9 |
| 10-Mar | 1 | 1 | 1 | 1 | A | 3 | 2 | 3 | 2 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 5 | 10 | 6 | 2.7 | 10.1 |
| 11-Mar | 4 | 3 | 3 | 2 | A | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | 7 | 7 | 5 | 3 | 3 | 2 | 1 | 4.1 | 7.4 |
| 12-Mar | 1 | 1 | 1 | 2 | A | 3 | 4 | 3 | 5 | 3 | 3 | 2 | 3 | 3 | 2 | 1 | 2 | 2 | 3 | 3 | 8 | 9 | 4 | 2 | 3.0 | 9.2 |
| 13-Mar | 2 | 2 | 2 | 2 | A | 4 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 4 | 3 | 3 | 5 | 7 | 7 | 3.0 | 6.9 |
| 14-Mar | 5 | 4 | 10 | 7 | A | 8 | 6 | 6 | C | C | C | C | C | C | C | 3 | 3 | 2 | 2 | 3 | 6 | 6 | 6 | 6 | -- | 10.2 |
| 15-Mar | 5 | 4 | 3 | 3 | A | 6 | 5 | 8 | 6 | 5 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 4 | 11 | 7 | 6 | 7 | 4.9 | 10.9 |
| 16-Mar | 9 | 8 | 7 | 7 | A | 10 | 7 | 6 | 4 | 2 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 4 | 2 | 3 | 3.5 | 9.5 |
| 17-Mar | 2 | 2 | 2 | 2 | A | 5 | 10 | 7 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 3 | 3 | 3 | 2.5 | 9.8 |
| 18-Mar | 2 | 2 | 6 | 6 | A | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 5 | 3 | 7 | 2.4 | 6.7 |
| 19-Mar | 5 | 5 | 5 | 7 | A | 12 | 14 | 9 | 4 | 3 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 3 | 6 | 6 | 3 | 3 | 5 | 5 | 4.7 | 14.1 |
| 20-Mar | 6 | 6 | 4 | 3 | A | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 4 | 4 | 2 | 3 | 5 | 3 | 2.5 | 6.3 |
| 21-Mar | 3 | 3 | 4 | 3 | A | 6 | 5 | 6 | 8 | 5 | 1 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 5 | 7 | 7 | 5 | 3.9 | 8.5 |
| 22-Mar | 4 | 6 | 10 | 8 | A | 18 | 20 | 18 | 7 | 3 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 5 | 6 | 5 | 4 | 5.7 | 19.7 |
| 23-Mar | 2 | 3 | 3 | 2 | A | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 3 | 4 | 9 | 6 | 5 | 6 | 3.1 | 8.5 |
| 24-Mar | 4 | 5 | 9 | 12 | A | 14 | 16 | 12 | 12 | 7 | 6 | 5 | 6 | 7 | 5 | 5 | 6 | 6 | 4 | 4 | 4 | 4 | 6 | 5 | 7.1 | 16.4 |
| 25-Mar | 8 | 5 | 5 | 4 | A | 8 | 6 | 7 | 10 | 10 | 7 | 6 | 4 | 6 | 5 | 5 | 4 | 5 | 6 | 7 | 3 | 3 | 3 | 3 | 5.7 | 9.8 |
| 26-Mar | 2 | 2 | 2 | 3 | A | 16 | 16 | 9 | 4 | 5 | 8 | 4 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3.7 | 16.0 |
| 27-Mar | 2 | 3 | 3 | 2 | A | 4 | 11 | 9 | 10 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 6 | 5 | 5 | 6 | 4 | 3 | 7 | 6 | 4.9 | 10.7 |
| 28-Mar | 5 | 4 | 6 | 9 | A | 8 | 7 | 11 | 11 | 6 | 5 | 5 | 4 | 5 | 5 | 4 | 2 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 4.9 | 10.8 |
| 29-Mar | 2 | 2 | 4 | 4 | A | 6 | 5 | 8 | 10 | 7 | 7 | 6 | 4 | 4 | 2 | 2 | 3 | 2 | 2 | 4 | 5 | 3 | 3 | 2 | 4.2 | 10.4 |
| 30-Mar | 4 | 3 | 3 | 2 | A | 3 | 5 | 6 | 7 | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2.3 | 6.9 |
| 31-Mar | 1 | 1 | 2 | 2 | A | 3 | 3 | 4 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 1.4 | 3.7 |
| | 3.4 | 3.1 | 3.7 | 3.8 | -- | 5.8 | 6.2 | 5.9 | 5.4 | 3.6 | 3.0 | 2.6 | 2.3 | 2.3 | 2.1 | 2.4 | 2.3 | 2.4 | 2.9 | 3.1 | 3.4 | 3.7 | 3.8 | 3.6 | | Diurnal Average |
| | 8.5 | 8.0 | 10.5 | 11.7 | -- | 18.3 | 19.7 | 18.5 | 16.5 | 9.8 | 9.0 | 6.6 | 5.9 | 6.6 | 5.2 | 7.9 | 6.0 | 6.5 | 7.4 | 6.6 | 10.9 | 9.2 | 11.4 | 10.1 | | Diurnal Maximum |

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb

Hourly Averages

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - March 2012



Hourly Maximums

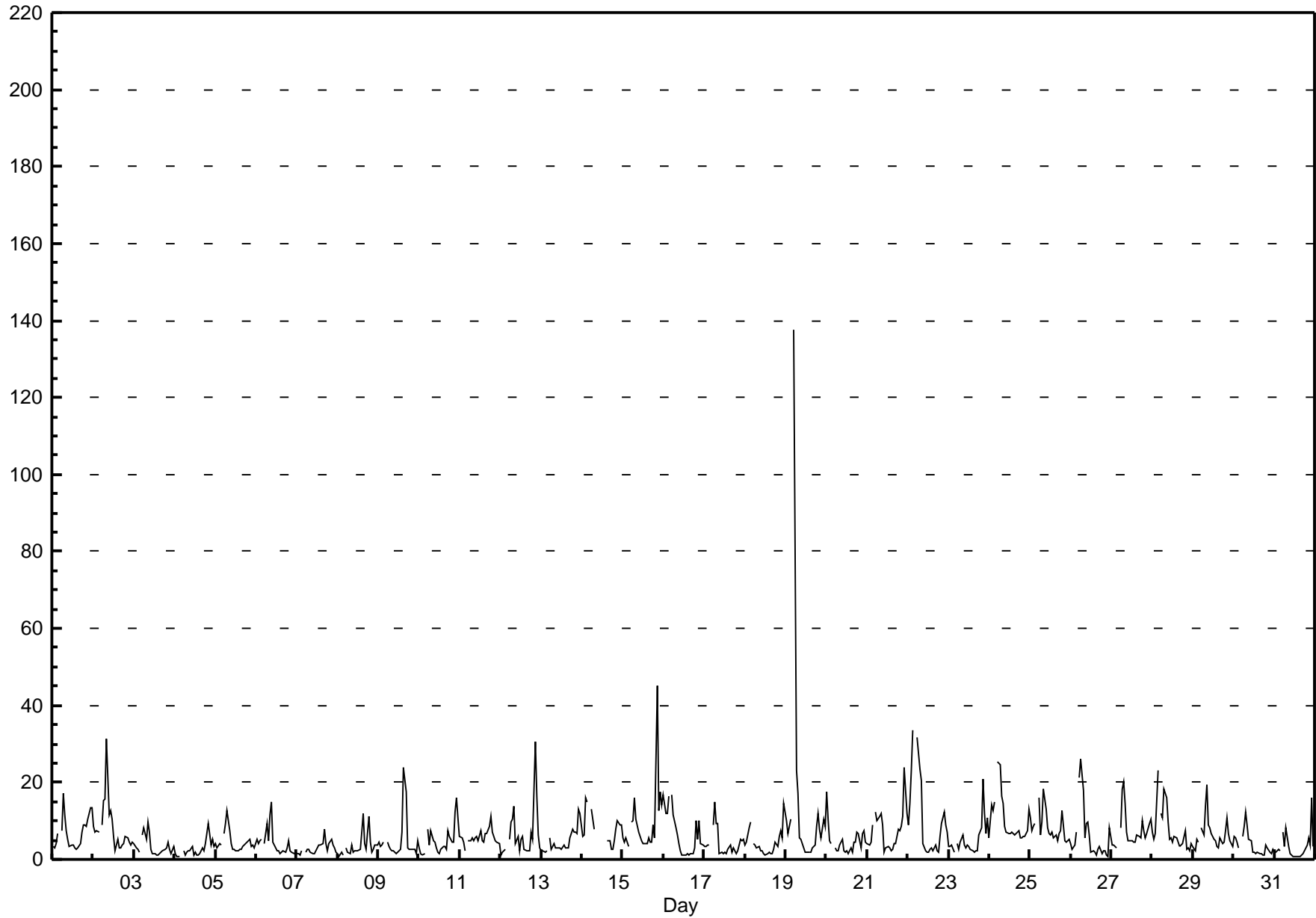
Nitrogen Dioxide (NO₂) - ppb

Beaverlodge - March 2012

| Maximum Value: 137.6 ppb on Mar 19 06:00 | | Maximum Daily Average: 12.9 ppb on Mar 19 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|------|---------------------------------|------|-----|-------|------|------|------|------|------|------|-----|-----|-----|------|------|-----|------|------|------|------|------|---------------|-----------------|--|
| Minimum Value: 1 ppb on Mar 4 04:00 | | Minimum Daily Average: 2.7 ppb on Mar 4 | | Hours of Data: 706 | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 13.4 ppb at hour 6 | | Minimum Diurnal Average: 3.1 ppb at hour 14 | | Hours of Missing Data: 38 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 6.11 ppb | | Percentiles: P ₁ = 0.8 P ₁₀ = 1.7 Q ₁ = 2.5 Median = 4.3 Q ₃ = 7.4 P ₉₀ = 12.1 P ₉₉ = 26.1 | | Hours of Calibration: 38 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 3 | 3 | 4 | 7 | A | 8 | 17 | 12 | 7 | 5 | 3 | 4 | 4 | 3 | 2 | 3 | 4 | 7 | 9 | 9 | 9 | 11 | 13 | 13 | 7.0 | 17.3 | |
| 2-Mar | 9 | 7 | 7 | 7 | A | 9 | 15 | 16 | 31 | 12 | 13 | 11 | 6 | 2 | 5 | 3 | 3 | 4 | 4 | 6 | 6 | 4 | 4 | 4 | 8.1 | 31.5 | |
| 3-Mar | 4 | 3 | 3 | 2 | A | 6 | 8 | 5 | 10 | 7 | 3 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 2 | 3 | 3.5 | 9.8 | |
| 4-Mar | 1 | 1 | 1 | 1 | A | 2 | 1 | 2 | 2 | 2 | 3 | 1 | 2 | 1 | 1 | 2 | 3 | 2 | 4 | 7 | 9 | 4 | 5 | 3 | 2.7 | 9.3 | |
| 5-Mar | 4 | 3 | 4 | 4 | A | 7 | 9 | 13 | 7 | 4 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 3 | 4 | 3 | 4.4 | 12.7 | |
| 6-Mar | 5 | 4 | 5 | 5 | A | 4 | 10 | 5 | 12 | 15 | 4 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 5 | 2 | 2 | 2 | 2 | 4.3 | 14.8 | |
| 7-Mar | 2 | 1 | 1 | 2 | A | 2 | 3 | 3 | 2 | 1 | 2 | 2 | 3 | 4 | 4 | 4 | 8 | 4 | 2 | 4 | 5 | 4 | 3 | 2 | 2.9 | 7.9 | |
| 8-Mar | 1 | 1 | 2 | 1 | A | 3 | 2 | 1 | 4 | 2 | 2 | 2 | 2 | 3 | 7 | 12 | 4 | 3 | 11 | 4 | 2 | 3 | 4 | 4 | 3.5 | 11.7 | |
| 9-Mar | 4 | 3 | 4 | 4 | A | 5 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 7 | 24 | 17 | 3 | 3 | 3 | 3 | 2 | 2 | 5 | 4.7 | 24.0 | |
| 10-Mar | 3 | 2 | 1 | 1 | A | 8 | 4 | 7 | 5 | 5 | 3 | 2 | 2 | 3 | 4 | 3 | 8 | 6 | 5 | 4 | 12 | 16 | 11 | 5.0 | 16.1 | | |
| 11-Mar | 6 | 6 | 4 | 2 | A | 5 | 5 | 6 | 5 | 6 | 6 | 5 | 8 | 5 | 4 | 7 | 7 | 8 | 11 | 7 | 6 | 5 | 4 | 4 | 5.7 | 11.4 | |
| 12-Mar | 1 | 2 | 2 | 3 | A | 5 | 10 | 10 | 14 | 4 | 6 | 2 | 5 | 6 | 2 | 2 | 2 | 2 | 7 | 5 | 30 | 17 | 6 | 3 | 6.4 | 30.5 | |
| 13-Mar | 2 | 2 | 2 | 2 | A | 6 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 6 | 8 | 7 | 7 | 7 | 13 | 12 | 4.7 | 13.1 | |
| 14-Mar | 6 | 6 | 16 | 15 | A | 13 | 10 | 8 | C | C | C | C | C | C | C | 5 | 5 | 3 | 3 | 5 | 8 | 10 | 9 | 9 | -- | 16.1 | |
| 15-Mar | 5 | 4 | 6 | 3 | A | 10 | 10 | 16 | 10 | 7 | 6 | 5 | 4 | 4 | 4 | 6 | 4 | 5 | 9 | 5 | 45 | 13 | 18 | 14 | 9.3 | 45.0 | |
| 16-Mar | 17 | 12 | 12 | 17 | A | 17 | 12 | 8 | 6 | 4 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 3 | 10 | 5 | 10 | 4 | 4 | 6.6 | 16.9 | |
| 17-Mar | 3 | 3 | 4 | 4 | A | 9 | 15 | 9 | 9 | 2 | 2 | 1 | 2 | 2 | 3 | 4 | 2 | 3 | 2 | 2 | 2 | 5 | 5 | 5 | 4.3 | 14.9 | |
| 18-Mar | 4 | 5 | 8 | 10 | A | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 3 | 4 | 3 | 6 | 8 | 6 | 15 | 4.2 | 14.7 | |
| 19-Mar | 10 | 7 | 9 | 10 | A | 138 | 23 | 17 | 6 | 5 | 4 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 9 | 12 | 8 | 6 | 10 | 9 | 12.9 | 137.6 | |
| 20-Mar | 18 | 10 | 5 | 4 | A | 3 | 2 | 2 | 4 | 5 | 2 | 2 | 2 | 3 | 2 | 4 | 4 | 7 | 7 | 7 | 3 | 7 | 7 | 5 | 4.8 | 17.6 | |
| 21-Mar | 4 | 4 | 5 | 9 | A | 12 | 10 | 11 | 12 | 9 | 2 | 3 | 3 | 2 | 3 | 4 | 4 | 8 | 7 | 8 | 11 | 24 | 12 | 7.4 | 24.0 | | |
| 22-Mar | 9 | 15 | 23 | 34 | A | 32 | 28 | 23 | 21 | 4 | 2 | 2 | 2 | 2 | 3 | 2 | 4 | 2 | 2 | 6 | 9 | 12 | 9 | 7 | 11.0 | 33.6 | |
| 23-Mar | 3 | 3 | 4 | 2 | A | 4 | 2 | 5 | 6 | 4 | 3 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 6 | 8 | 21 | 12 | 7 | 11 | 5.2 | 20.8 | |
| 24-Mar | 6 | 14 | 13 | 15 | A | 25 | 25 | 17 | 14 | 9 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 8 | 5 | 5 | 6 | 6 | 8 | 13 | 10.3 | 25.4 | |
| 25-Mar | 11 | 8 | 9 | 9 | A | 16 | 6 | 10 | 18 | 13 | 8 | 7 | 6 | 7 | 6 | 6 | 5 | 7 | 7 | 13 | 5 | 5 | 5 | 5 | 8.3 | 18.4 | |
| 26-Mar | 4 | 3 | 4 | 7 | A | 21 | 26 | 18 | 6 | 9 | 10 | 6 | 2 | 2 | 2 | 1 | 3 | 3 | 1 | 2 | 2 | 1 | 1 | 8 | 6.2 | 26.1 | |
| 27-Mar | 4 | 4 | 3 | 3 | A | 8 | 18 | 20 | 14 | 7 | 5 | 5 | 5 | 4 | 4 | 6 | 6 | 5 | 10 | 7 | 5 | 7 | 9 | 10 | 7.5 | 20.2 | |
| 28-Mar | 7 | 5 | 7 | 23 | A | 12 | 11 | 18 | 16 | 10 | 5 | 5 | 4 | 6 | 6 | 4 | 3 | 4 | 4 | 7 | 3 | 3 | 2 | 4 | 7.4 | 23.1 | |
| 29-Mar | 3 | 2 | 5 | 4 | A | 8 | 6 | 14 | 19 | 9 | 8 | 7 | 5 | 5 | 3 | 3 | 6 | 4 | 4 | 7 | 11 | 7 | 5 | 3 | 6.6 | 19.5 | |
| 30-Mar | 6 | 6 | 5 | 3 | A | 6 | 9 | 12 | 9 | 5 | 5 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 4 | 3 | 2 | 2 | 3 | 3.9 | 12.5 | |
| 31-Mar | 2 | 2 | 2 | 2 | A | 7 | 3 | 8 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 4 | 6 | 4 | 16 | 3 | 3.3 | 16.1 | |
| | | 5.4 | 4.9 | 5.7 | 7.0 | -- | 13.4 | 10.0 | 9.9 | 9.4 | 5.8 | 4.2 | 3.4 | 3.2 | 3.1 | 3.2 | 4.1 | 4.0 | 3.8 | 5.3 | 5.9 | 8.0 | 6.6 | 7.2 | 6.8 | Diurnal Average | |
| | | 17.6 | 14.6 | 23.2 | 33.6 | -- | 137.6 | 27.7 | 23.4 | 31.5 | 14.8 | 12.5 | 10.5 | 7.6 | 7.1 | 7.2 | 24.0 | 17.4 | 8.4 | 11.4 | 12.6 | 45.0 | 16.6 | 24.0 | 14.7 | Diurnal Maximum | |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | | |

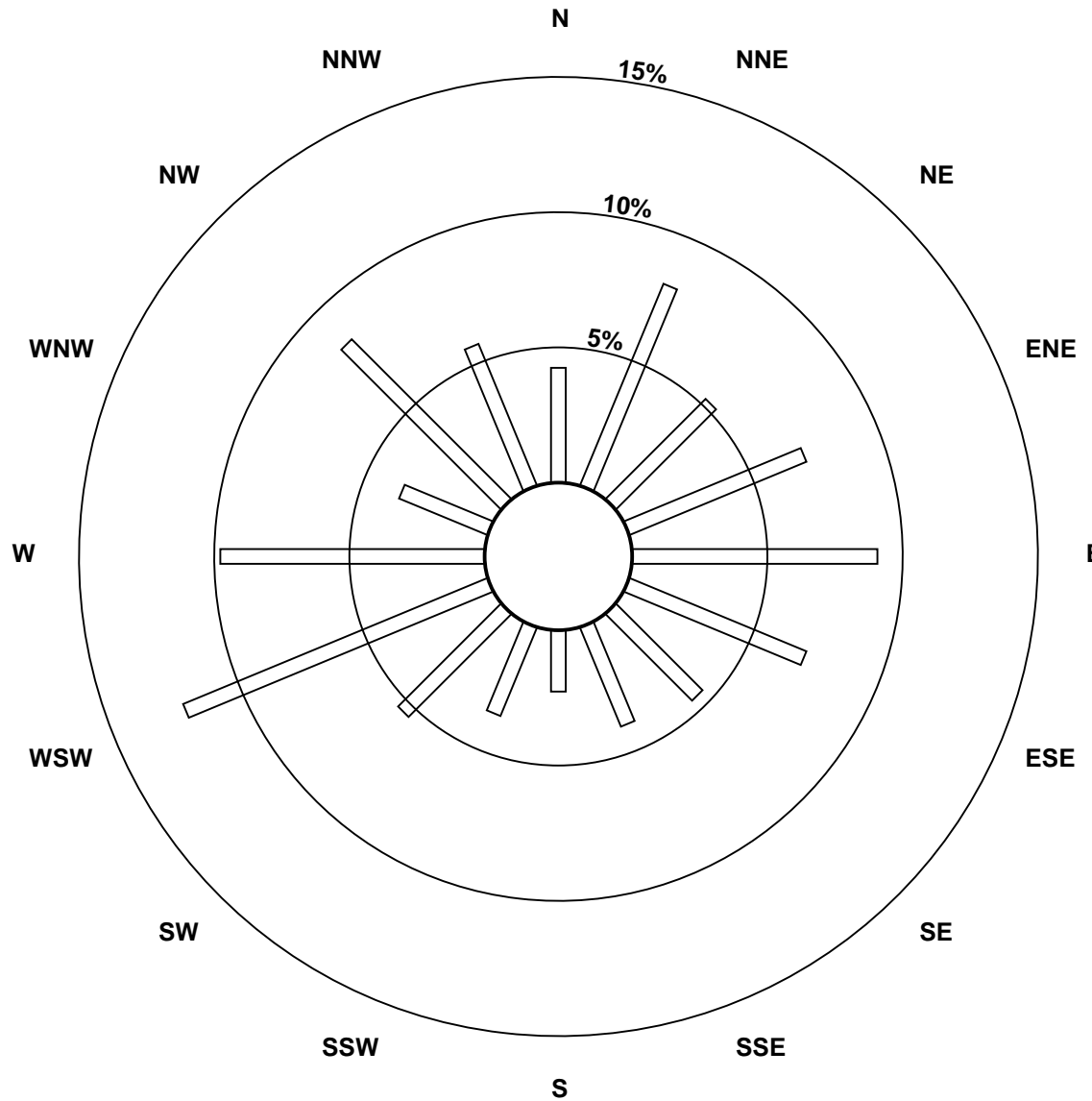
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - March 2012

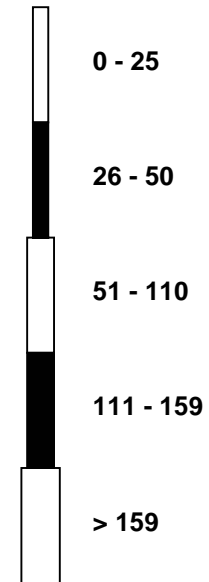


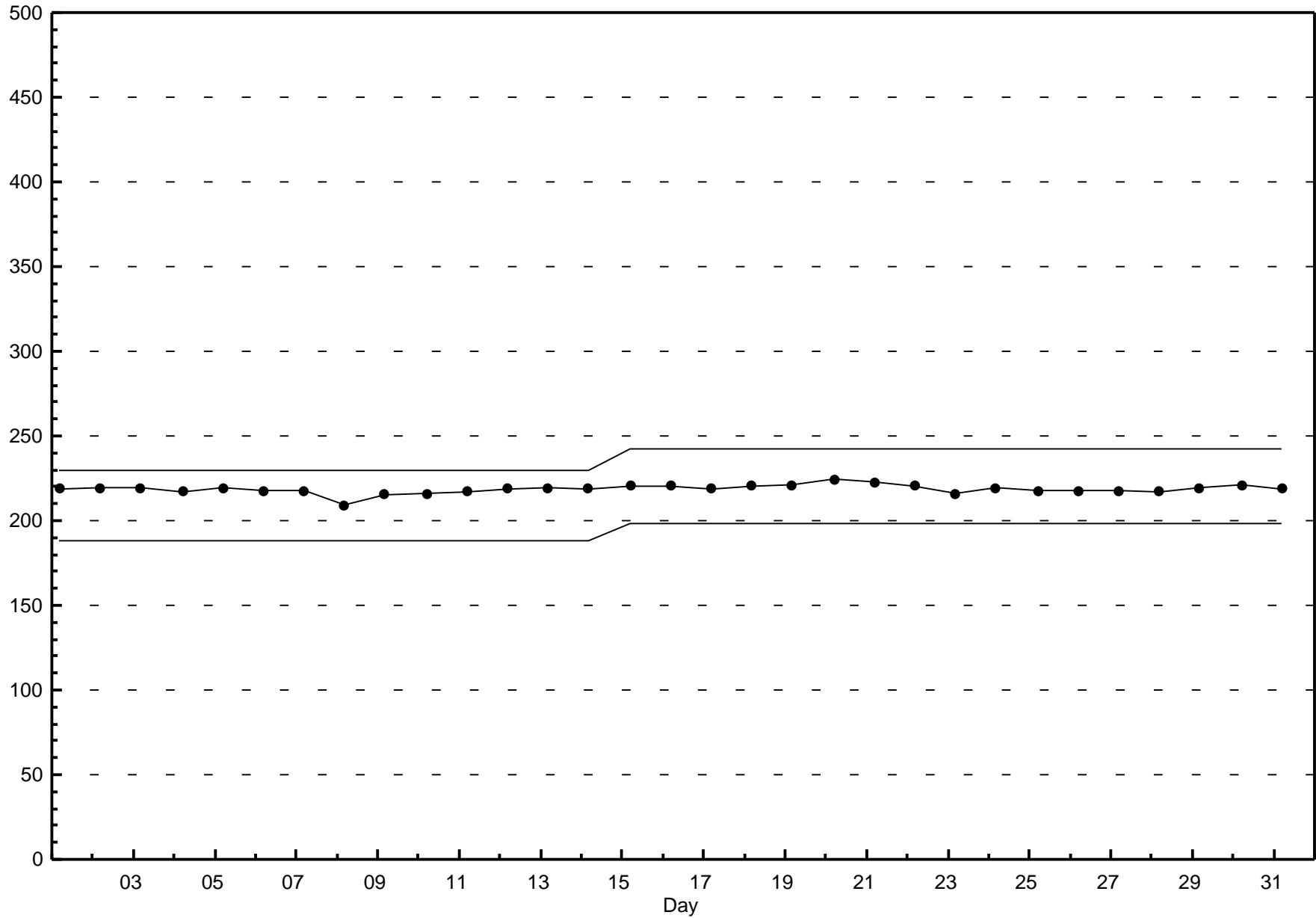
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - March 2012



Pollutant Classes (ppb)





Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - March 2012

| | | | | |
|--|--|----------|---------------------------|-------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 9.4 ppb on Mar 24 09:00 | Maximum Daily Average: 2.0 ppb on Mar 24 | | Hours of Data: | 706 |
| Minimum Value: 0 ppb on Mar 10 04:00 | Minimum Daily Average: 0.1 ppb on Mar 4 | | Hours of Missing Data: | 38 |
| Maximum Diurnal Average: 1.7 ppb at hour 9 | Minimum Diurnal Average: 0.0 ppb at hour 2 | | Hours of Calibration: | 38 |
| Monthly Average: 0.49 ppb | Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.5 P ₉₀ = 1.2 P ₉₉ = 5.3 | | Percent Operational Time: | 100.0 |

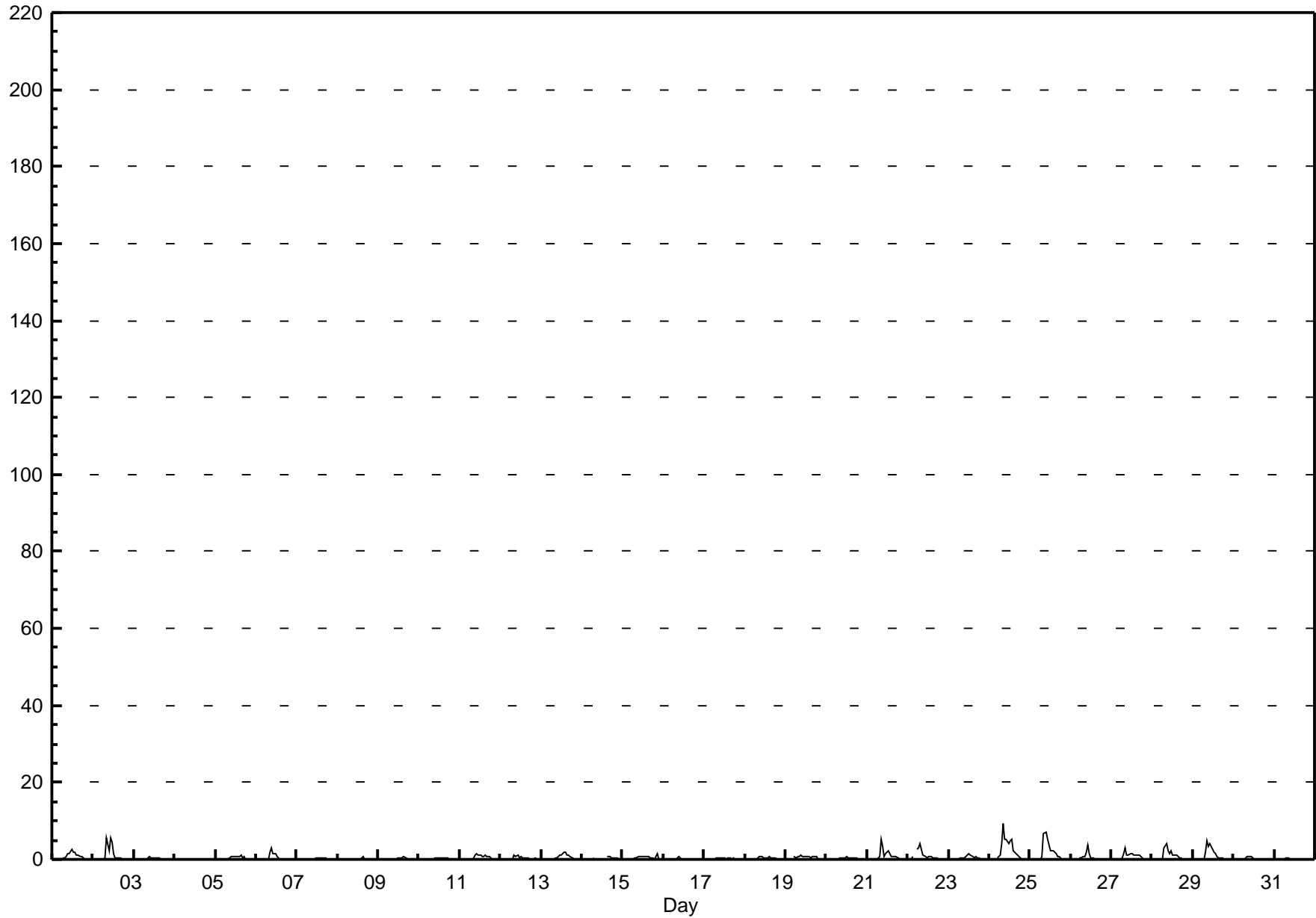
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 2.6 |
| 2-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 6 | 2 | 5 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 5.7 |
| 3-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.6 |
| 4-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.2 |
| 5-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.0 |
| 6-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 2 | 3 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 3.1 |
| 7-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.5 |
| 8-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.6 |
| 9-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.8 |
| 10-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.5 |
| 11-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.3 |
| 12-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.1 |
| 13-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.8 |
| 14-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | C | C | C | C | C | C | C | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -- | 0.9 |
| 15-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0.4 | 1.5 |
| 16-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.6 |
| 17-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.5 |
| 18-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.7 |
| 19-Mar | 0 | 0 | 0 | 0 | A | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0.5 | 1.0 |
| 20-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.6 |
| 21-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 5 | 3 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 5.1 |
| 22-Mar | 0 | 0 | 0 | 1 | A | 3 | 3 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 4.1 |
| 23-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.5 |
| 24-Mar | 0 | 0 | 0 | 0 | A | 0 | 1 | 4 | 9 | 5 | 5 | 4 | 5 | 5 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 9.4 |
| 25-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 7 | 7 | 5 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 7.1 |
| 26-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 1 | 2 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 3.6 |
| 27-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 2.9 |
| 28-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 3 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 4.1 |
| 29-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 2 | 5 | 4 | 4 | 3 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 4.7 |
| 30-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.9 |
| 31-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.4 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|
| 0.0 | 0.0 | 0.0 | 0.1 | -- | 0.2 | 0.2 | 0.7 | 1.7 | 1.4 | 1.4 | 1.2 | 1.0 | 0.9 | 0.6 | 0.6 | 0.5 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | Diurnal Average |
| 0.2 | 0.1 | 0.2 | 0.7 | -- | 2.7 | 2.9 | 4.2 | 9.4 | 7.1 | 5.4 | 4.6 | 4.8 | 5.3 | 2.4 | 1.7 | 1.4 | 0.9 | 0.7 | 0.2 | 1.5 | 0.2 | 0.2 | 0.1 | 0.1 | Diurnal Maximum |

C - Calibration A - Automated Daily Zero Span

Hourly Averages

Nitrogen Oxide (NO) - ppb
Beaverlodge - March 2012



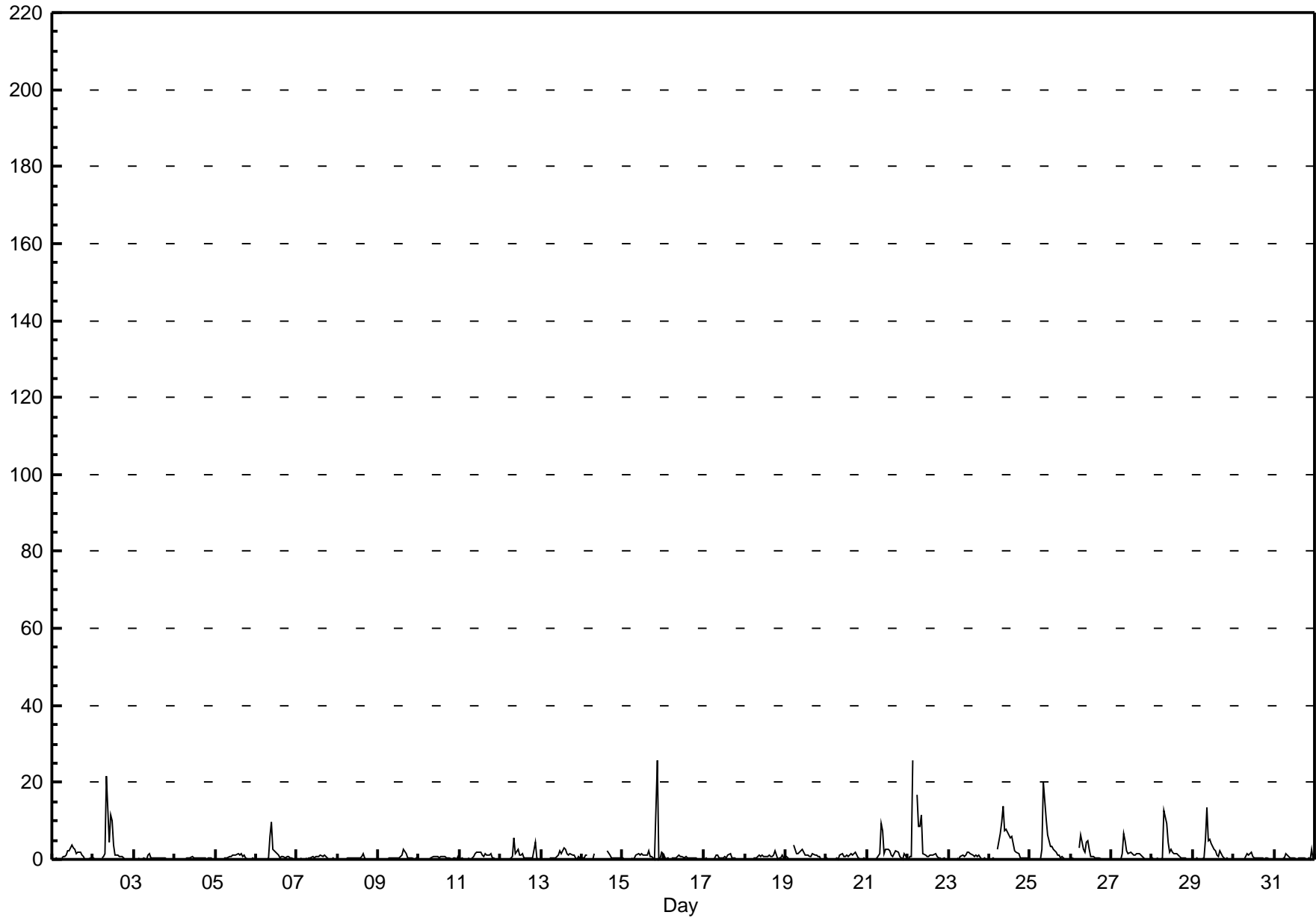
Hourly Maximums

Nitrogen Oxide (NO) - ppb Beaverlodge - March 2012

| Maximum Value: 25.8 ppb on Mar 15 21:00 | | Maximum Daily Average: 3.7 ppb on Mar 22 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|---|-----|---------------------------------|-------------------------------|----|------|-----|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|---------------|-----------------|--|--|--|--|
| Minimum Value: 0 ppb on Mar 14 07:00 | | Minimum Daily Average: 0.3 ppb on Mar 4 | | Hours of Data: 706 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 4.5 ppb at hour 9 | | Minimum Diurnal Average: 0.2 ppb at hour 2 | | Hours of Missing Data: 38 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 1.15 ppb | | Percentiles: P ₁ = 0.1 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.4 Q ₃ = 1.1 P ₉₀ = 2.3 P ₉₉ = 13.0 | | Hours of Calibration: 38 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | | | | |
| 1-Mar | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 1 | 2 | 2 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1.1 | 3.6 | | | | |
| 2-Mar | 0 | 0 | 0 | 0 | A | 0 | 1 | 2 | 22 | 5 | 11 | 10 | 4 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.6 | 21.6 | | | | |
| 3-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.3 | | | | |
| 4-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.6 | | | | |
| 5-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.6 | 1.4 | | | | |
| 6-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 6 | 10 | 3 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1.2 | 9.8 | | | | |
| 7-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.0 | | | | |
| 8-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.6 | | | | |
| 9-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 2.6 | | | | |
| 10-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.4 | 0.8 | | | | |
| 11-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.7 | 1.9 | | | | |
| 12-Mar | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 6 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 1.0 | 5.8 | | | | |
| 13-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0.9 | 2.9 | | | | |
| 14-Mar | 0 | 0 | 1 | 1 | A | 0 | 0 | 1 | C | C | C | C | C | C | C | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -- | 2.1 | | | | |
| 15-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | 26 | 0 | 0 | 2 | 1.8 | 25.8 | | | | |
| 16-Mar | 2 | 0 | 0 | 1 | A | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.5 | | | | |
| 17-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.4 | | | | |
| 18-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | 0 | 1 | 1 | 1 | 0.7 | 2.3 | | | | |
| 19-Mar | 1 | 1 | 0 | 0 | A | 4 | 2 | 2 | 2 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1.1 | 3.8 | | | | |
| 20-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0.7 | 2.0 | | | | |
| 21-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 9 | 7 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 0 | 0 | 2 | 0 | 1.7 | 9.2 | | | | |
| 22-Mar | 0 | 1 | 1 | 26 | A | 17 | 9 | 8 | 12 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 3.7 | 25.6 | | | | |
| 23-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.6 | 1.8 | | | | |
| 24-Mar | 0 | 0 | 1 | 0 | A | 3 | 7 | 10 | 14 | 8 | 8 | 6 | 6 | 6 | 4 | 2 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 3.4 | 13.9 | | | | |
| 25-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 3 | 20 | 10 | 6 | 5 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 2.6 | 20.3 | | | | |
| 26-Mar | 0 | 0 | 0 | 0 | A | 3 | 6 | 3 | 2 | 5 | 5 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.3 | 6.3 | | | | |
| 27-Mar | 0 | 0 | 0 | 0 | A | 0 | 1 | 7 | 5 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1.3 | 6.6 | | | | |
| 28-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 13 | 9 | 4 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1.8 | 12.5 | | | | |
| 29-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 5 | 13 | 5 | 5 | 4 | 3 | 2 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1.9 | 13.3 | | | | |
| 30-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 2 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.8 | | | | |
| 31-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0.4 | 2.4 | | | | |
| | | 0.2 | 0.2 | 0.2 | 1.0 | -- | 1.0 | 1.0 | 2.0 | 4.5 | 2.6 | 2.2 | 1.9 | 1.5 | 1.3 | 1.1 | 1.1 | 1.0 | 0.8 | 0.6 | 0.3 | 1.2 | 0.2 | 0.3 | 0.2 | Diurnal Average | | | | |
| | | 1.5 | 0.7 | 1.0 | 25.6 | -- | 16.9 | 8.6 | 12.5 | 21.6 | 10.3 | 11.5 | 10.1 | 5.6 | 6.0 | 4.1 | 2.6 | 2.2 | 2.3 | 2.3 | 1.2 | 25.8 | 0.5 | 2.4 | 1.8 | Diurnal Maximum | | | | |
| C - Calibration | | | | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | | |

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Beaverlodge - March 2012

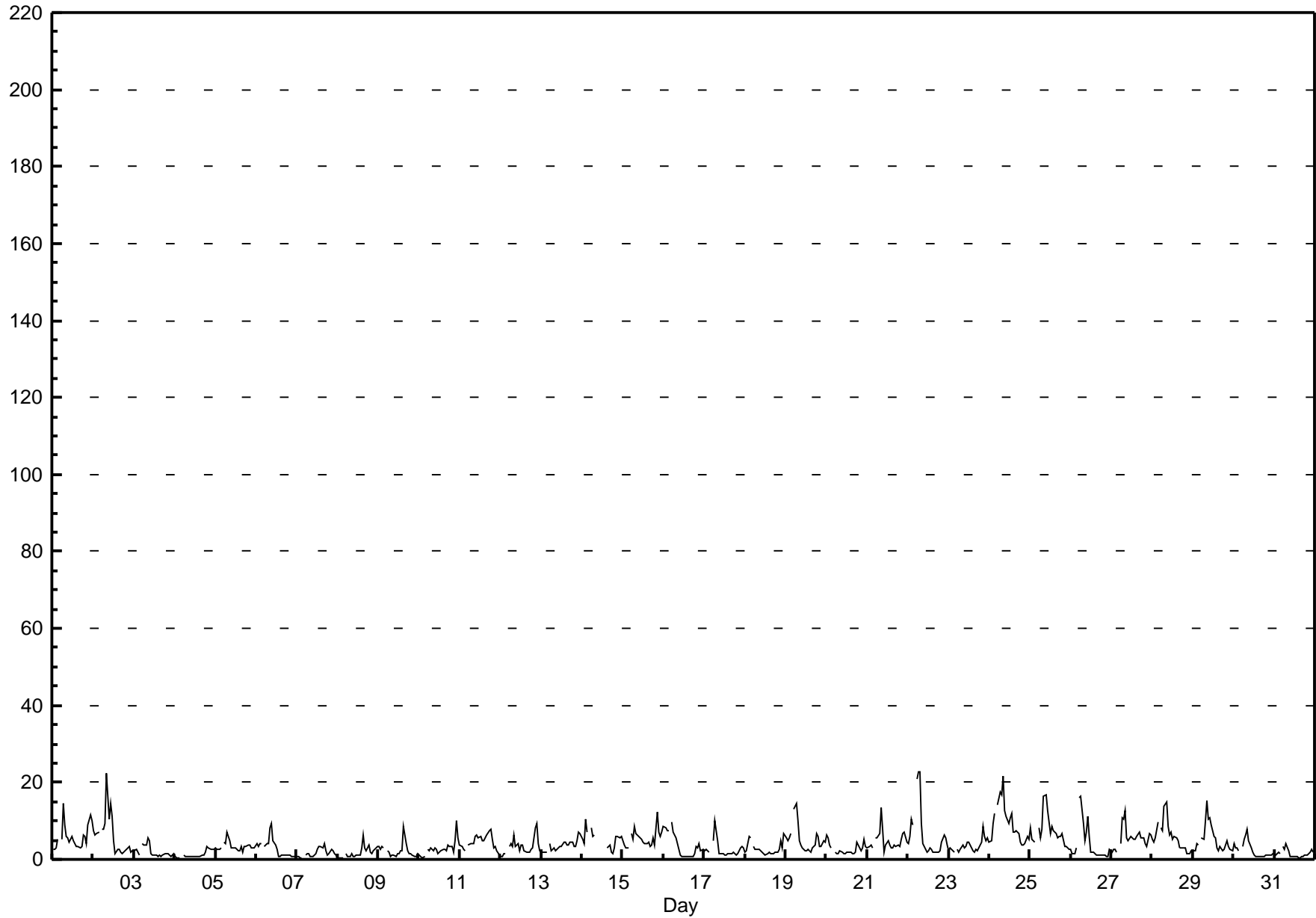


Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - March 2012

| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|-----|------|------|----|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|------|-----|------|---------------|-----------------|--|
| Maximum Value: 22.7 ppb on Mar 22 08:00 | | Maximum Daily Average: 9.2 ppb on Mar 24 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Minimum Value: 0 ppb on Mar 4 02:00 | | Hours of Data: 706 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 7.1 ppb at hour 9 | | Hours of Missing Data: 38 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 4.01 ppb | | Hours of Calibration: 38 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Minimum Daily Average: 1.2 ppb on Mar 4 | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Minimum Diurnal Average: 2.7 ppb at hour 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Percentiles: P ₁ = 0.5 P ₁₀ = 0.9 Q ₁ = 1.8 Median = 3.1 Q ₃ = 5.3 P ₉₀ = 7.9 P ₉₉ = 16.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 3 | 3 | 3 | 5 | A | 5 | 14 | 9 | 6 | 6 | 5 | 6 | 5 | 4 | 3 | 3 | 3 | 3 | 6 | 6 | 4 | 9 | 11 | 10 | 5.8 | 14.4 | |
| 2-Mar | 7 | 6 | 7 | 7 | A | 8 | 8 | 9 | 22 | 11 | 14 | 11 | 5 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 6.1 | 22.3 | |
| 3-Mar | 2 | 2 | 2 | 1 | A | 4 | 4 | 4 | 5 | 5 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2.0 | 5.5 | |
| 4-Mar | 1 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 1.2 | 3.3 | |
| 5-Mar | 3 | 3 | 3 | 3 | A | 5 | 4 | 7 | 5 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 3.3 | 7.0 | |
| 6-Mar | 4 | 3 | 4 | 4 | A | 3 | 4 | 4 | 8 | 9 | 5 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2.8 | 9.1 | |
| 7-Mar | 1 | 1 | 0 | 0 | A | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 4 | 2 | 1 | 1 | 3 | 2 | 1 | 1 | 1.7 | 4.1 | |
| 8-Mar | 1 | 0 | 0 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 6 | 3 | 2 | 4 | 2 | 1 | 2 | 3 | 3 | 1.8 | 6.3 | |
| 9-Mar | 3 | 3 | 3 | 3 | A | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 9 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2.2 | 8.7 | |
| 10-Mar | 1 | 1 | 1 | 1 | A | 3 | 2 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 4 | 3 | 3 | 3 | 2 | 5 | 10 | 6 | 2.8 | 10.1 | |
| 11-Mar | 4 | 3 | 3 | 2 | A | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 5 | 5 | 6 | 6 | 7 | 8 | 5 | 3 | 3 | 2 | 1 | 4.5 | 7.9 | |
| 12-Mar | 1 | 1 | 1 | 2 | A | 3 | 4 | 3 | 6 | 3 | 4 | 2 | 4 | 4 | 2 | 2 | 2 | 2 | 3 | 3 | 8 | 9 | 4 | 2 | 3.3 | 9.3 | |
| 13-Mar | 2 | 2 | 2 | 2 | A | 4 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 5 | 4 | 4 | 4 | 4 | 5 | 3 | 3 | 5 | 7 | 7 | 3.6 | 7.1 | |
| 14-Mar | 5 | 4 | 10 | 7 | A | 8 | 6 | 6 | C | C | C | C | C | C | C | 3 | 4 | 2 | 2 | 3 | 6 | 6 | 6 | 6 | -- | 10.4 | |
| 15-Mar | 5 | 4 | 3 | 3 | A | 7 | 5 | 9 | 7 | 6 | 6 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 4 | 12 | 7 | 6 | 7 | 5.4 | 12.4 | |
| 16-Mar | 9 | 8 | 8 | 7 | A | 10 | 7 | 6 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 4 | 2 | 3 | 3.7 | 9.6 | |
| 17-Mar | 2 | 2 | 2 | 2 | A | 5 | 10 | 7 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 3 | 3 | 3 | 2.7 | 10.0 | |
| 18-Mar | 2 | 2 | 6 | 6 | A | 3 | 3 | 2 | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 5 | 3 | 7 | 2.7 | 6.8 | |
| 19-Mar | 6 | 5 | 5 | 7 | A | 13 | 15 | 10 | 5 | 4 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 4 | 7 | 6 | 3 | 4 | 5 | 5 | 5.2 | 14.6 | |
| 20-Mar | 6 | 6 | 4 | 3 | A | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 4 | 4 | 2 | 3 | 5 | 3 | 2.8 | 6.4 | |
| 21-Mar | 3 | 3 | 4 | 3 | A | 6 | 5 | 7 | 14 | 8 | 2 | 4 | 5 | 4 | 3 | 3 | 4 | 3 | 4 | 3 | 5 | 7 | 7 | 5 | 4.8 | 13.6 | |
| 22-Mar | 4 | 6 | 11 | 9 | A | 21 | 23 | 23 | 9 | 4 | 3 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 6 | 6 | 4 | 6.6 | 22.7 | |
| 23-Mar | 2 | 3 | 3 | 2 | A | 3 | 2 | 3 | 4 | 3 | 3 | 5 | 5 | 4 | 2 | 2 | 3 | 2 | 3 | 4 | 9 | 6 | 5 | 6 | 3.6 | 8.7 | |
| 24-Mar | 4 | 5 | 9 | 12 | A | 14 | 18 | 17 | 22 | 13 | 11 | 9 | 11 | 12 | 7 | 7 | 7 | 7 | 4 | 4 | 4 | 4 | 6 | 5 | 9.2 | 21.8 | |
| 25-Mar | 8 | 5 | 5 | 4 | A | 8 | 6 | 8 | 17 | 17 | 13 | 10 | 7 | 9 | 8 | 7 | 5 | 6 | 6 | 7 | 3 | 3 | 3 | 3 | 7.2 | 17.0 | |
| 26-Mar | 2 | 2 | 2 | 3 | A | 16 | 17 | 9 | 5 | 7 | 11 | 6 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 4.1 | 16.5 | |
| 27-Mar | 2 | 3 | 3 | 2 | A | 4 | 11 | 10 | 13 | 6 | 5 | 6 | 6 | 5 | 5 | 6 | 7 | 6 | 6 | 6 | 4 | 3 | 7 | 6 | 5.6 | 12.6 | |
| 28-Mar | 5 | 4 | 6 | 10 | A | 8 | 7 | 14 | 15 | 8 | 6 | 7 | 5 | 6 | 6 | 5 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 5.7 | 14.9 | |
| 29-Mar | 2 | 2 | 4 | 4 | A | 6 | 5 | 10 | 15 | 10 | 11 | 9 | 6 | 5 | 3 | 2 | 3 | 2 | 3 | 4 | 5 | 3 | 3 | 2 | 5.2 | 15.1 | |
| 30-Mar | 4 | 3 | 3 | 2 | A | 4 | 5 | 6 | 8 | 5 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2.5 | 7.7 | |
| 31-Mar | 1 | 1 | 2 | 2 | A | 3 | 3 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 1.5 | 4.1 | |
| | | 3.4 | 3.1 | 3.8 | 3.8 | -- | 6.0 | 6.4 | 6.6 | 7.1 | 5.1 | 4.4 | 3.8 | 3.3 | 3.2 | 2.8 | 3.0 | 2.8 | 2.7 | 3.1 | 3.1 | 3.5 | 3.8 | 3.9 | 3.7 | Diurnal Average | |
| | | 8.7 | 8.1 | 10.6 | 11.8 | -- | 21.1 | 22.6 | 22.7 | 22.3 | 17.0 | 14.5 | 11.2 | 10.8 | 11.9 | 7.5 | 8.7 | 7.5 | 7.4 | 7.9 | 6.7 | 12.4 | 9.3 | 11.5 | 10.2 | Diurnal Maximum | |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | | |



Hourly Maximums

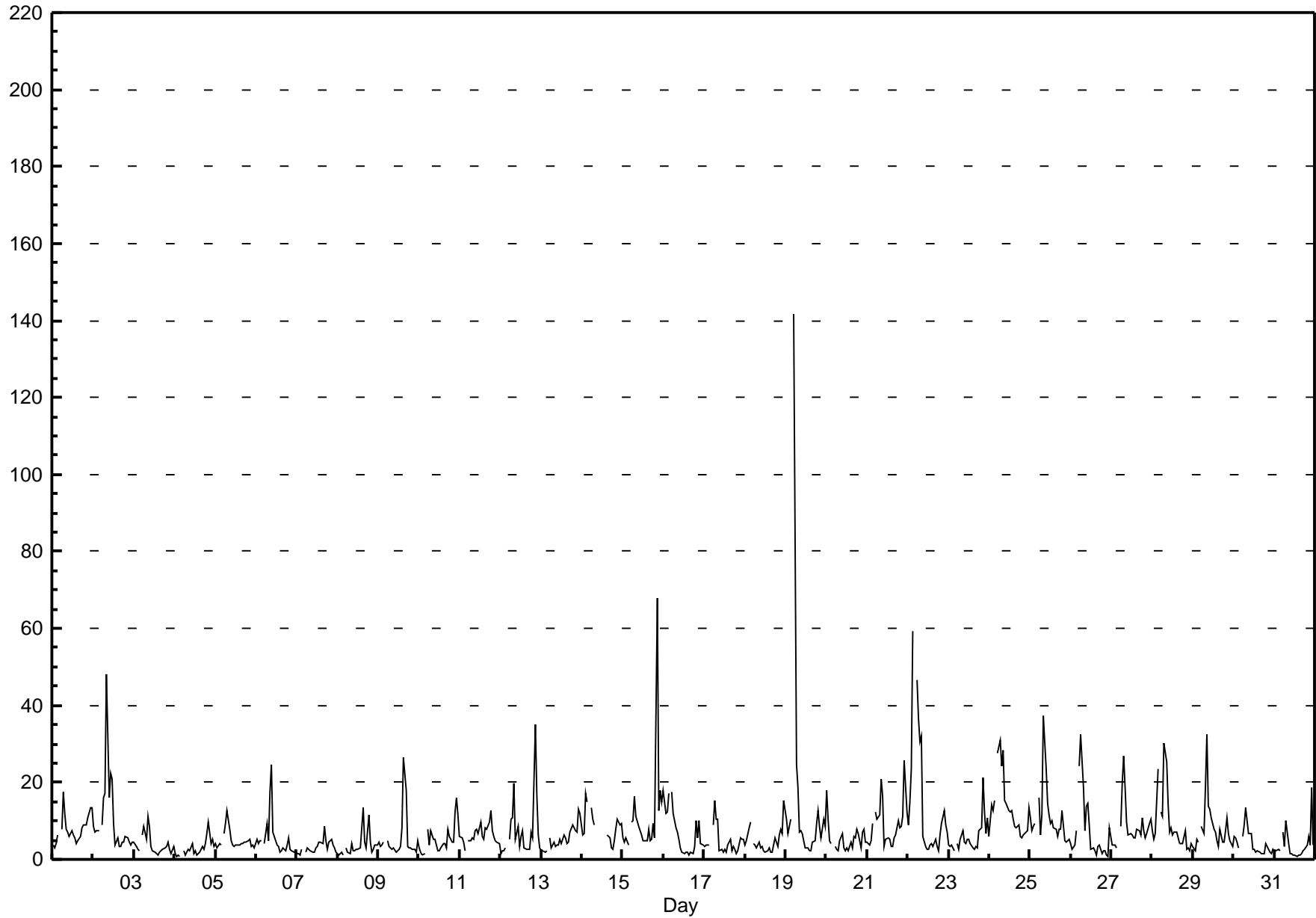
Oxides of Nitrogen (NO_x) - ppb

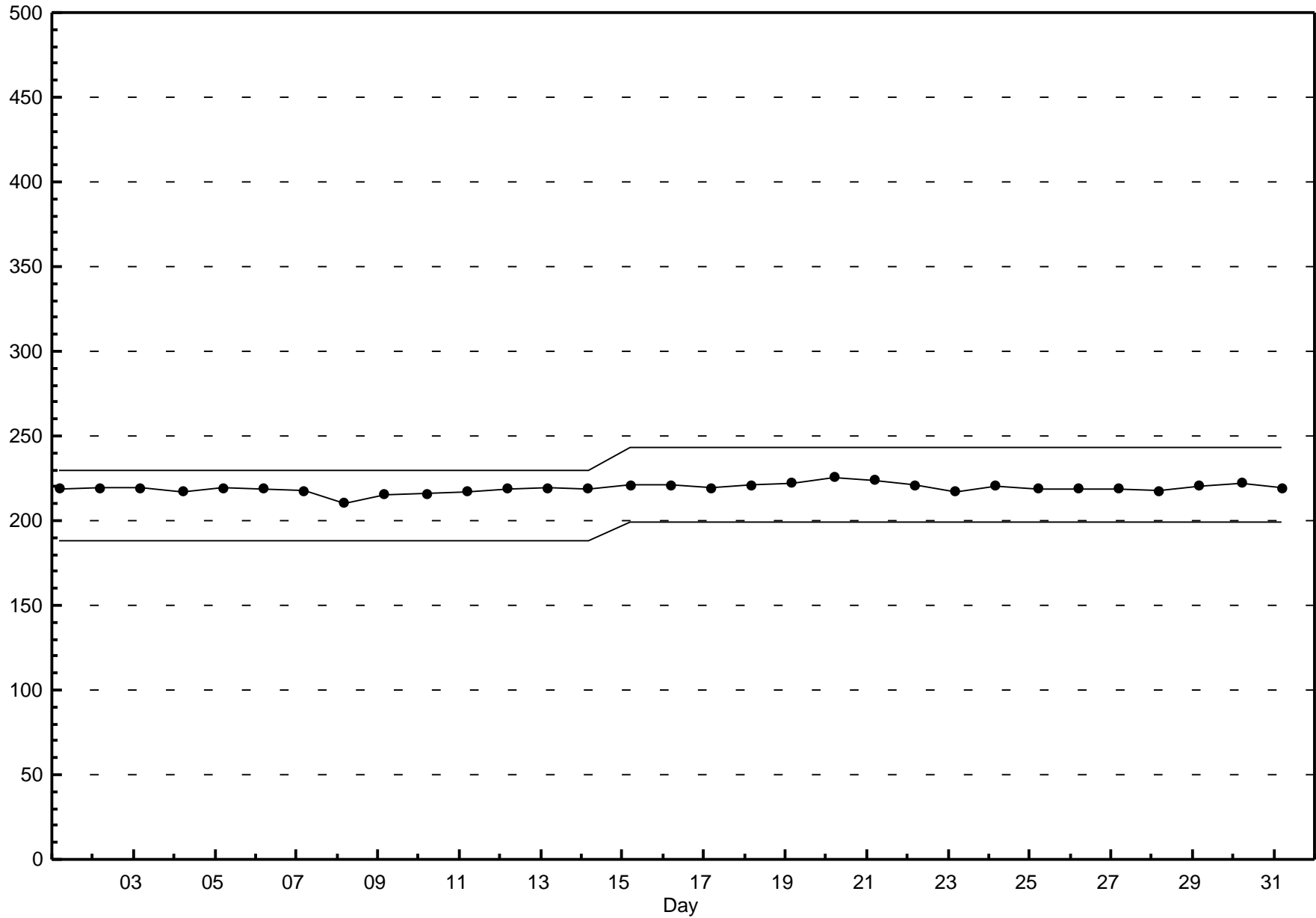
Beaverlodge - March 2012

| Maximum Value: 141.7 ppb on Mar 19 06:00 | | Maximum Daily Average: 14.5 ppb on Mar 22 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|------|---------------------------------|------|-----|-------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|-----------------|-----------------|--|
| Minimum Value: 1 ppb on Mar 4 04:00 | | Minimum Daily Average: 2.9 ppb on Mar 4 | | Hours of Data: 706 | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 14.3 ppb at hour 6 | | Minimum Diurnal Average: 4.3 ppb at hour 15 | | Hours of Missing Data: 38 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 7.15 ppb | | Percentiles: P ₁ = 1.0 P ₁₀ = 2.0 Q ₁ = 3.0 Median = 4.9 Q ₃ = 8.4 P ₉₀ = 13.5 P ₉₉ = 36.1 | | Hours of Calibration: 38 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 4 | 3 | 4 | 7 | A | 8 | 18 | 12 | 8 | 7 | 6 | 7 | 7 | 6 | 4 | 5 | 6 | 8 | 9 | 9 | 9 | 11 | 13 | 13 | 7.9 | 17.7 | |
| 2-Mar | 9 | 7 | 8 | 7 | A | 9 | 16 | 17 | 48 | 16 | 22 | 21 | 9 | 4 | 6 | 4 | 3 | 4 | 4 | 6 | 6 | 4 | 4 | 5 | 10.4 | 48.3 | |
| 3-Mar | 4 | 3 | 3 | 2 | A | 6 | 8 | 5 | 11 | 8 | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 2 | 3 | 3.8 | 11.1 | |
| 4-Mar | 1 | 1 | 1 | 1 | A | 2 | 1 | 2 | 2 | 2 | 4 | 2 | 2 | 1 | 1 | 2 | 3 | 2 | 4 | 7 | 10 | 4 | 5 | 3 | 2.9 | 9.7 | |
| 5-Mar | 4 | 3 | 4 | 4 | A | 7 | 9 | 13 | 8 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 5 | 3 | 4 | 3 | 4.9 | 12.8 | |
| 6-Mar | 5 | 4 | 5 | 5 | A | 4 | 9 | 5 | 17 | 25 | 7 | 5 | 4 | 3 | 2 | 2 | 3 | 2 | 4 | 6 | 2 | 2 | 2 | 2 | 5.5 | 24.6 | |
| 7-Mar | 2 | 1 | 1 | 3 | A | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 4 | 5 | 4 | 8 | 5 | 3 | 4 | 5 | 4 | 3 | 2 | 3.2 | 8.4 | |
| 8-Mar | 2 | 1 | 2 | 1 | A | 3 | 2 | 2 | 4 | 2 | 2 | 3 | 3 | 3 | 8 | 13 | 4 | 3 | 11 | 4 | 2 | 3 | 4 | 4 | 3.7 | 13.4 | |
| 9-Mar | 4 | 3 | 4 | 4 | A | 5 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 8 | 26 | 18 | 3 | 3 | 3 | 3 | 3 | 2 | 5 | 5.1 | 26.3 | |
| 10-Mar | 3 | 2 | 1 | 1 | A | 8 | 4 | 7 | 5 | 5 | 4 | 2 | 2 | 3 | 4 | 4 | 3 | 8 | 6 | 5 | 5 | 12 | 16 | 11 | 5.3 | 16.0 | |
| 11-Mar | 6 | 6 | 5 | 2 | A | 5 | 5 | 6 | 5 | 7 | 8 | 7 | 10 | 6 | 5 | 8 | 8 | 10 | 13 | 7 | 6 | 5 | 4 | 4 | 6.4 | 12.8 | |
| 12-Mar | 1 | 2 | 2 | 3 | A | 5 | 10 | 11 | 20 | 5 | 9 | 3 | 6 | 8 | 3 | 3 | 2 | 2 | 7 | 6 | 35 | 17 | 7 | 3 | 7.4 | 34.9 | |
| 13-Mar | 2 | 2 | 2 | 2 | A | 6 | 3 | 4 | 3 | 4 | 4 | 5 | 4 | 7 | 6 | 4 | 4 | 7 | 9 | 8 | 7 | 7 | 13 | 12 | 5.5 | 13.2 | |
| 14-Mar | 6 | 7 | 17 | 15 | A | 13 | 11 | 9 | C | C | C | C | C | C | C | 6 | 6 | 3 | 3 | 5 | 8 | 10 | 9 | 9 | -- | 17.1 | |
| 15-Mar | 5 | 4 | 6 | 4 | A | 10 | 10 | 16 | 11 | 9 | 7 | 6 | 5 | 5 | 5 | 8 | 5 | 5 | 9 | 6 | 68 | 13 | 18 | 15 | 10.8 | 67.8 | |
| 16-Mar | 18 | 12 | 12 | 17 | A | 17 | 12 | 8 | 7 | 5 | 3 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 3 | 10 | 6 | 10 | 4 | 4 | 7.0 | 18.0 | |
| 17-Mar | 3 | 4 | 4 | 4 | A | 9 | 15 | 10 | 11 | 2 | 2 | 2 | 3 | 2 | 4 | 5 | 2 | 3 | 3 | 2 | 2 | 5 | 5 | 5 | 4.7 | 15.2 | |
| 18-Mar | 4 | 5 | 8 | 10 | A | 4 | 4 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 4 | 6 | 3 | 6 | 8 | 7 | 15 | 4.8 | 15.3 | |
| 19-Mar | 11 | 7 | 9 | 10 | A | 142 | 25 | 19 | 7 | 7 | 7 | 3 | 3 | 3 | 2 | 2 | 4 | 5 | 9 | 13 | 8 | 6 | 10 | 9 | 14.0 | 141.7 | |
| 20-Mar | 18 | 11 | 5 | 4 | A | 3 | 3 | 2 | 5 | 7 | 3 | 2 | 3 | 2 | 5 | 3 | 6 | 6 | 8 | 7 | 3 | 7 | 8 | 5 | 5.4 | 17.8 | |
| 21-Mar | 4 | 4 | 5 | 9 | A | 12 | 10 | 12 | 21 | 16 | 3 | 5 | 5 | 5 | 3 | 3 | 6 | 6 | 10 | 8 | 9 | 11 | 26 | 12 | 9.0 | 25.7 | |
| 22-Mar | 9 | 15 | 24 | 59 | A | 47 | 37 | 31 | 32 | 6 | 3 | 2 | 3 | 4 | 4 | 3 | 5 | 3 | 2 | 6 | 9 | 13 | 9 | 7 | 14.5 | 59.3 | |
| 23-Mar | 4 | 3 | 4 | 2 | A | 4 | 3 | 5 | 7 | 5 | 4 | 5 | 5 | 4 | 3 | 3 | 3 | 3 | 8 | 8 | 21 | 12 | 7 | 11 | 5.8 | 21.1 | |
| 24-Mar | 6 | 14 | 13 | 15 | A | 28 | 31 | 24 | 28 | 15 | 15 | 13 | 12 | 13 | 11 | 9 | 8 | 9 | 6 | 6 | 6 | 7 | 8 | 14 | 13.4 | 30.9 | |
| 25-Mar | 11 | 8 | 9 | 9 | A | 16 | 6 | 12 | 37 | 23 | 14 | 11 | 9 | 10 | 8 | 8 | 6 | 8 | 8 | 13 | 5 | 5 | 5 | 5 | 10.7 | 37.2 | |
| 26-Mar | 4 | 3 | 4 | 7 | A | 24 | 32 | 19 | 7 | 14 | 14 | 9 | 3 | 3 | 2 | 1 | 3 | 4 | 2 | 2 | 2 | 1 | 1 | 8 | 7.4 | 32.5 | |
| 27-Mar | 4 | 4 | 4 | 3 | A | 8 | 20 | 27 | 19 | 10 | 6 | 7 | 7 | 6 | 5 | 8 | 8 | 6 | 11 | 8 | 6 | 7 | 9 | 11 | 8.7 | 26.9 | |
| 28-Mar | 7 | 5 | 7 | 23 | A | 12 | 11 | 30 | 25 | 14 | 7 | 8 | 7 | 7 | 7 | 6 | 4 | 4 | 4 | 8 | 3 | 3 | 2 | 4 | 9.1 | 30.4 | |
| 29-Mar | 3 | 2 | 5 | 4 | A | 8 | 7 | 19 | 33 | 14 | 13 | 11 | 8 | 7 | 5 | 3 | 8 | 5 | 5 | 7 | 11 | 7 | 5 | 3 | 8.4 | 32.6 | |
| 30-Mar | 6 | 6 | 5 | 3 | A | 6 | 9 | 13 | 10 | 7 | 7 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 4 | 3 | 2 | 2 | 3 | 4.3 | 13.3 | |
| 31-Mar | 2 | 2 | 3 | 2 | A | 7 | 3 | 10 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 6 | 4 | 19 | 4 | 3.6 | 18.7 | |
| | | 5.6 | 4.9 | 5.8 | 7.9 | -- | 14.3 | 11.0 | 11.6 | 13.6 | 8.3 | 6.4 | 5.3 | 4.6 | 4.3 | 5.0 | 4.9 | 4.6 | 5.8 | 6.2 | 9.1 | 6.7 | 7.4 | 6.9 | Diurnal Average | | |
| | | 18.0 | 14.8 | 23.5 | 59.3 | -- | 141.7 | 36.5 | 30.7 | 48.3 | 24.6 | 22.3 | 20.7 | 12.2 | 12.9 | 10.5 | 26.3 | 17.9 | 9.8 | 12.8 | 12.7 | 67.8 | 16.7 | 25.7 | 15.3 | Diurnal Maximum | |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | | |

Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb
Beaverlodge - March 2012





Hourly Averages

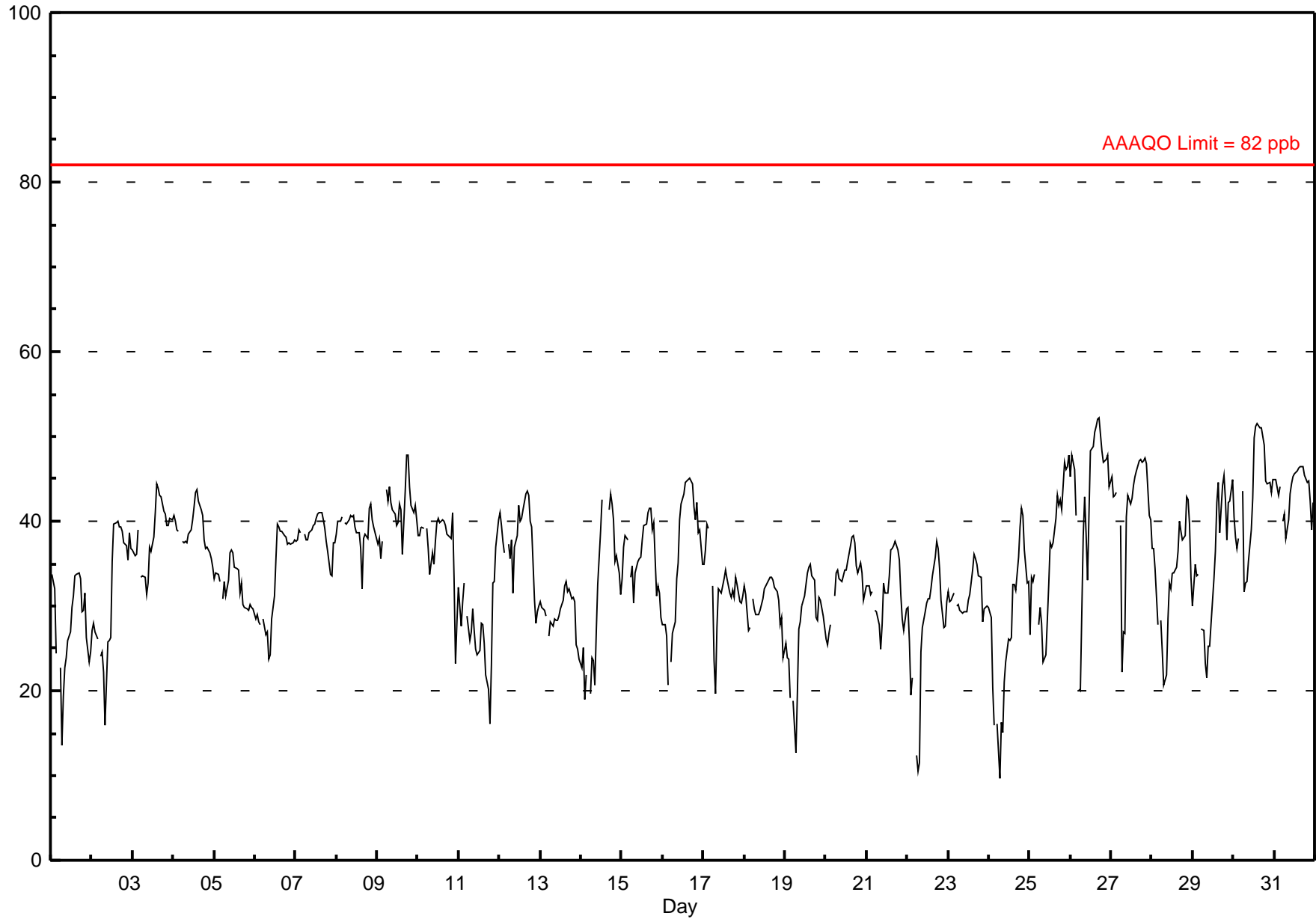
Ozone (O₃) - ppb

Beaverlodge - March 2012

| | | | | |
|--|---|----------|---------------------------|-------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 52.2 ppb on Mar 26 18:00 | Maximum Daily Average: 43.7 ppb on Mar 31 | | Hours of Data: | 710 |
| Minimum Value: 10 ppb on Mar 24 07:00 | Minimum Daily Average: 27.4 ppb on Mar 22 | | Hours of Missing Data: | 34 |
| Maximum Diurnal Average: 39.2 ppb at hour 18 | Minimum Diurnal Average: 28.3 ppb at hour 7 | | Hours of Calibration: | 34 |
| Monthly Average: 34.65 ppb | Percentiles: P ₁ = 15.8 P ₁₀ = 25.5 Q ₁ = 29.7 Median = 34.8 Q ₃ = 39.9 P ₉₀ = 43.8 P ₉₉ = 51.0 | | Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | | | | | | | | | | | | | | | | | | | | | | |
|--------|-------------------------------|----|----|----|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------|---------------|---------------|------|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Mar | 34 | 33 | 32 | 24 | A | 23 | 14 | 19 | 23 | 24 | 26 | 27 | 30 | 31 | 33 | 34 | 34 | 33 | 29 | 29 | 32 | 26 | 23 | 25 | 27.7 | 33.9 | | | | | | | | | | | | | | | | | | | | | | |
| 2-Mar | 27 | 28 | 27 | 26 | A | 24 | 25 | 22 | 16 | 26 | 26 | 26 | 35 | 40 | 40 | 40 | 39 | 39 | 39 | 38 | 37 | 35 | 39 | 37 | 31.8 | 40.0 | | | | | | | | | | | | | | | | | | | | | | |
| 3-Mar | 37 | 36 | 36 | 39 | A | 33 | 33 | 33 | 31 | 33 | 37 | 37 | 38 | 41 | 44 | 44 | 43 | 43 | 41 | 41 | 40 | 40 | 40 | 40 | 38.3 | 44.3 | | | | | | | | | | | | | | | | | | | | | | |
| 4-Mar | 41 | 40 | 39 | 39 | A | 38 | 37 | 38 | 37 | 38 | 39 | 40 | 42 | 43 | 44 | 42 | 41 | 41 | 38 | 37 | 37 | 36 | 36 | 35 | 39.0 | 43.8 | | | | | | | | | | | | | | | | | | | | | | |
| 5-Mar | 33 | 34 | 34 | 33 | A | 31 | 33 | 31 | 33 | 36 | 37 | 36 | 35 | 34 | 34 | 32 | 33 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 32.5 | 36.7 | | | | | | | | | | | | | | | | | | | | | | |
| 6-Mar | 28 | 29 | 28 | 28 | A | 28 | 27 | 27 | 24 | 24 | 28 | 31 | 36 | 40 | 39 | 39 | 39 | 38 | 38 | 37 | 37 | 37 | 37 | 38 | 33.0 | 39.6 | | | | | | | | | | | | | | | | | | | | | | |
| 7-Mar | 38 | 38 | 39 | 39 | A | 39 | 38 | 38 | 39 | 39 | 40 | 40 | 40 | 41 | 41 | 41 | 40 | 39 | 38 | 36 | 34 | 34 | 37 | 37 | 38.4 | 41.0 | | | | | | | | | | | | | | | | | | | | | | |
| 8-Mar | 39 | 40 | 40 | 41 | A | 40 | 40 | 40 | 41 | 40 | 41 | 39 | 39 | 39 | 37 | 32 | 38 | 39 | 38 | 42 | 42 | 40 | 39 | 38 | 39.2 | 42.1 | | | | | | | | | | | | | | | | | | | | | | |
| 9-Mar | 37 | 38 | 36 | 38 | A | 44 | 42 | 44 | 42 | 41 | 41 | 40 | 40 | 42 | 41 | 36 | 43 | 48 | 48 | 44 | 42 | 41 | 42 | 40 | 41.3 | 47.8 | | | | | | | | | | | | | | | | | | | | | | |
| 10-Mar | 38 | 38 | 39 | 39 | A | 39 | 37 | 34 | 36 | 35 | 38 | 40 | 40 | 40 | 40 | 40 | 39 | 39 | 38 | 38 | 41 | 33 | 23 | 28 | 37.1 | 41.0 | | | | | | | | | | | | | | | | | | | | | | |
| 11-Mar | 32 | 28 | 31 | 33 | A | 29 | 26 | 27 | 30 | 27 | 25 | 24 | 25 | 28 | 28 | 26 | 22 | 20 | 16 | 23 | 33 | 33 | 37 | 40 | 27.9 | 40.2 | | | | | | | | | | | | | | | | | | | | | | |
| 12-Mar | 41 | 39 | 38 | 36 | A | 37 | 36 | 38 | 32 | 37 | 38 | 42 | 40 | 40 | 41 | 43 | 44 | 43 | 40 | 39 | 31 | 28 | 29 | 30 | 37.5 | 43.5 | | | | | | | | | | | | | | | | | | | | | | |
| 13-Mar | 31 | 30 | 29 | 29 | A | 27 | 28 | 28 | 29 | 28 | 28 | 29 | 30 | 31 | 32 | 33 | 32 | 32 | 31 | 31 | 30 | 25 | 25 | 24 | 29.2 | 32.8 | | | | | | | | | | | | | | | | | | | | | | |
| 14-Mar | 23 | 25 | 19 | 22 | A | 20 | 24 | 23 | 21 | 27 | 32 | 39 | 43 | C | C | C | 41 | 43 | 42 | 40 | 35 | 36 | 34 | 31 | 31.0 | 43.1 | | | | | | | | | | | | | | | | | | | | | | |
| 15-Mar | 33 | 37 | 38 | 38 | A | 33 | 35 | 30 | 34 | 35 | 36 | 36 | 38 | 39 | 40 | 41 | 42 | 42 | 39 | 40 | 31 | 32 | 32 | 29 | 36.0 | 41.6 | | | | | | | | | | | | | | | | | | | | | | |
| 16-Mar | 28 | 28 | 26 | 21 | A | 23 | 27 | 28 | 33 | 35 | 40 | 42 | 43 | 45 | 45 | 45 | 45 | 44 | 42 | 40 | 42 | 39 | 39 | 35 | 36.3 | 45.0 | | | | | | | | | | | | | | | | | | | | | | |
| 17-Mar | 35 | 37 | 40 | 39 | A | 32 | 24 | 20 | 27 | 32 | 31 | 32 | 33 | 34 | 33 | 32 | 31 | 32 | 31 | 33 | 33 | 31 | 30 | 31 | 31.9 | 39.6 | | | | | | | | | | | | | | | | | | | | | | |
| 18-Mar | 32 | 31 | 27 | 27 | A | 31 | 30 | 29 | 29 | 30 | 31 | 32 | 33 | 33 | 33 | 33 | 33 | 32 | 32 | 31 | 28 | 29 | 24 | 30.4 | 33.4 | | | | | | | | | | | | | | | | | | | | | | | |
| 19-Mar | 26 | 24 | 24 | 19 | A | 19 | 13 | 20 | 27 | 28 | 30 | 31 | 33 | 34 | 35 | 35 | 34 | 33 | 29 | 28 | 31 | 31 | 29 | 27 | 27.7 | 34.9 | | | | | | | | | | | | | | | | | | | | | | |
| 20-Mar | 26 | 26 | 27 | 28 | A | 31 | 34 | 34 | 33 | 33 | 34 | 34 | 34 | 35 | 37 | 38 | 38 | 37 | 35 | 34 | 35 | 34 | 31 | 32 | 33.0 | 38.2 | | | | | | | | | | | | | | | | | | | | | | |
| 21-Mar | 32 | 32 | 31 | 32 | A | 30 | 29 | 28 | 25 | 28 | 33 | 32 | 31 | 34 | 37 | 37 | 37 | 38 | 37 | 35 | 31 | 28 | 27 | 30 | 31.9 | 37.6 | | | | | | | | | | | | | | | | | | | | | | |
| 22-Mar | 30 | 26 | 19 | 22 | A | 12 | 10 | 11 | 25 | 27 | 29 | 30 | 31 | 31 | 32 | 34 | 36 | 38 | 37 | 34 | 31 | 28 | 28 | 31 | 27.4 | 37.6 | | | | | | | | | | | | | | | | | | | | | | |
| 23-Mar | 32 | 30 | 31 | 32 | A | 30 | 30 | 30 | 29 | 29 | 29 | 29 | 31 | 31 | 34 | 36 | 36 | 35 | 34 | 33 | 28 | 30 | 30 | 30 | 31.3 | 36.1 | | | | | | | | | | | | | | | | | | | | | | |
| 24-Mar | 30 | 29 | 20 | 16 | A | 16 | 10 | 16 | 15 | 21 | 23 | 26 | 26 | 26 | 32 | 33 | 32 | 36 | 39 | 42 | 41 | 37 | 33 | 33 | 27.4 | 41.6 | | | | | | | | | | | | | | | | | | | | | | |
| 25-Mar | 27 | 33 | 33 | 34 | A | 28 | 30 | 28 | 23 | 24 | 28 | 32 | 37 | 37 | 38 | 40 | 43 | 42 | 43 | 41 | 47 | 46 | 46 | 48 | 36.0 | 47.8 | | | | | | | | | | | | | | | | | | | | | | |
| 26-Mar | 45 | 48 | 46 | 41 | A | 20 | 20 | 38 | 43 | 39 | 33 | 41 | 48 | 49 | 50 | 51 | 52 | 52 | 48 | 47 | 47 | 47 | 48 | 44 | 43.4 | 52.2 | | | | | | | | | | | | | | | | | | | | | | |
| 27-Mar | 45 | 43 | 43 | 43 | A | 39 | 22 | 27 | 27 | 40 | 43 | 42 | 43 | 44 | 45 | 46 | 47 | 47 | 47 | 47 | 47 | 47 | 41 | 40 | 41.6 | 47.4 | | | | | | | | | | | | | | | | | | | | | | |
| 28-Mar | 37 | 37 | 34 | 28 | A | 28 | 25 | 21 | 22 | 28 | 33 | 32 | 34 | 34 | 35 | 36 | 40 | 39 | 38 | 38 | 43 | 43 | 40 | 33 | 33.8 | 42.9 | | | | | | | | | | | | | | | | | | | | | | |
| 29-Mar | 30 | 35 | 34 | 34 | A | 27 | 27 | 23 | 22 | 25 | 25 | 28 | 33 | 36 | 42 | 45 | 39 | 44 | 45 | 43 | 38 | 42 | 42 | 45 | 35.0 | 45.5 | | | | | | | | | | | | | | | | | | | | | | |
| 30-Mar | 41 | 38 | 37 | 38 | A | 44 | 32 | 33 | 33 | 35 | 39 | 43 | 50 | 51 | 52 | 51 | 51 | 50 | 49 | 45 | 44 | 45 | 43 | 45 | 42.9 | 51.6 | | | | | | | | | | | | | | | | | | | | | | |
| 31-Mar | 45 | 45 | 43 | 44 | A | 40 | 41 | 38 | 40 | 43 | 44 | 45 | 46 | 46 | 46 | 46 | 46 | 46 | 45 | 45 | 45 | 42 | 39 | 42 | 43.7 | 46.5 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 33.9 | 34.0 | 32.9 | 32.2 | -- | 30.2 | 28.3 | 28.9 | 29.7 | 32.0 | 33.5 | 34.7 | 36.6 | 37.6 | 38.7 | 38.7 | 39.0 | 39.2 | 37.9 | 37.5 | 36.9 | 35.6 | 34.8 | 34.5 | Diurnal Average |
| | | | | | | | | | | | | | | | | | | | | | | | | 45.2 | 47.7 | 46.1 | 44.1 | -- | 43.8 | 42.4 | 44.1 | 43.0 | 43.3 | 44.3 | 45.2 | 49.9 | 51.2 | 51.6 | 51.2 | 52.0 | 52.2 | 49.1 | 47.1 | 47.4 | 47.3 | 47.8 | 47.8 | Diurnal Maximum |

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na



Hourly Maximums

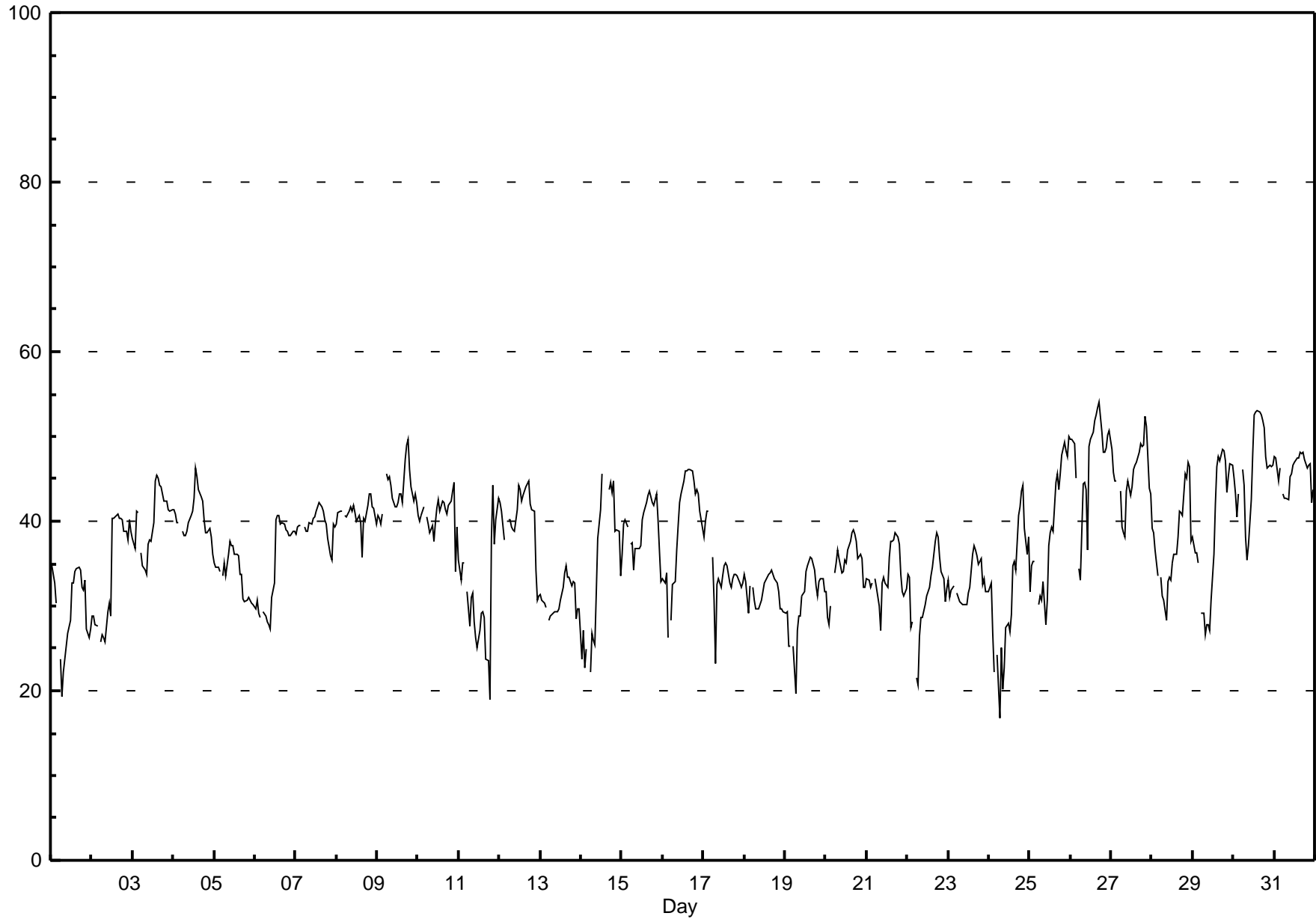
Ozone (O₃) - ppb

Beaverlodge - March 2012

| Maximum Value: 54.1 ppb on Mar 26 18:00 | | Maximum Daily Average: 47.3 ppb on Mar 26 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|---|------|---------------------------------|------|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|-----------------|--|
| Minimum Value: 17 ppb on Mar 24 07:00 | | Minimum Daily Average: 29.6 ppb on Mar 1 | | Hours of Data: 710 | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 40.8 ppb at hour 18 | | Minimum Diurnal Average: 32.5 ppb at hour 7 | | Hours of Missing Data: 34 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 37.21 ppb | | Percentiles: P ₁ = 22.2 P ₁₀ = 28.7 Q ₁ = 32.2 Median = 37.6 Q ₃ = 42.2 P ₉₀ = 46.2 P ₉₉ = 52.6 | | Hours of Calibration: 34 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 35 | 34 | 33 | 30 | A | 24 | 19 | 22 | 24 | 25 | 27 | 28 | 33 | 33 | 34 | 34 | 35 | 34 | 32 | 32 | 33 | 27 | 26 | 27 | 29.6 | 34.7 | |
| 2-Mar | 29 | 29 | 28 | 28 | A | 26 | 27 | 26 | 26 | 29 | 30 | 29 | 40 | 40 | 41 | 41 | 40 | 40 | 40 | 39 | 39 | 38 | 40 | 39 | 34.0 | 40.9 | |
| 3-Mar | 38 | 37 | 41 | 41 | A | 36 | 35 | 34 | 34 | 37 | 38 | 38 | 40 | 45 | 45 | 45 | 44 | 44 | 42 | 42 | 42 | 41 | 41 | 41 | 40.1 | 45.5 | |
| 4-Mar | 41 | 41 | 40 | 40 | A | 39 | 38 | 38 | 39 | 40 | 41 | 41 | 43 | 46 | 45 | 44 | 43 | 42 | 40 | 39 | 39 | 39 | 38 | 36 | 40.5 | 46.2 | |
| 5-Mar | 35 | 35 | 35 | 34 | A | 34 | 35 | 34 | 36 | 38 | 37 | 37 | 36 | 36 | 36 | 34 | 34 | 31 | 30 | 31 | 31 | 31 | 30 | 30 | 33.8 | 37.6 | |
| 6-Mar | 30 | 31 | 29 | 29 | A | 29 | 29 | 28 | 28 | 27 | 31 | 33 | 40 | 41 | 41 | 40 | 40 | 40 | 39 | 39 | 38 | 38 | 39 | 39 | 34.6 | 40.8 | |
| 7-Mar | 38 | 39 | 39 | 39 | A | 39 | 39 | 39 | 40 | 40 | 40 | 40 | 41 | 42 | 42 | 42 | 41 | 40 | 40 | 38 | 36 | 35 | 40 | 39 | 39.6 | 42.3 | |
| 8-Mar | 40 | 41 | 41 | 41 | A | 41 | 40 | 41 | 42 | 41 | 42 | 41 | 40 | 41 | 40 | 36 | 40 | 40 | 42 | 43 | 43 | 42 | 41 | 40 | 40.8 | 43.2 | |
| 9-Mar | 41 | 40 | 40 | 41 | A | 46 | 45 | 45 | 44 | 43 | 42 | 42 | 42 | 43 | 43 | 42 | 47 | 49 | 50 | 46 | 44 | 42 | 43 | 42 | 43.6 | 49.7 | |
| 10-Mar | 41 | 40 | 41 | 42 | A | 41 | 40 | 39 | 39 | 38 | 40 | 42 | 43 | 41 | 42 | 42 | 41 | 41 | 42 | 42 | 44 | 45 | 34 | 39 | 40.7 | 44.6 | |
| 11-Mar | 35 | 33 | 35 | 35 | A | 32 | 28 | 31 | 32 | 28 | 26 | 25 | 27 | 29 | 29 | 29 | 24 | 24 | 19 | 38 | 44 | 37 | 40 | 43 | 31.4 | 44.2 | |
| 12-Mar | 42 | 41 | 39 | 38 | A | 40 | 40 | 39 | 39 | 39 | 41 | 44 | 44 | 42 | 43 | 44 | 44 | 45 | 42 | 41 | 41 | 34 | 31 | 31 | 40.3 | 44.7 | |
| 13-Mar | 31 | 31 | 30 | 30 | A | 28 | 29 | 29 | 29 | 29 | 29 | 30 | 31 | 32 | 34 | 35 | 33 | 33 | 32 | 33 | 33 | 29 | 30 | 30 | 30.9 | 34.7 | |
| 14-Mar | 24 | 27 | 23 | 25 | A | 22 | 27 | 26 | 25 | 32 | 38 | 41 | 46 | C | C | C | 44 | 45 | 43 | 45 | 39 | 39 | 39 | 34 | 34.1 | 45.7 | |
| 15-Mar | 36 | 40 | 40 | 39 | A | 37 | 37 | 34 | 37 | 37 | 37 | 37 | 40 | 41 | 42 | 43 | 43 | 43 | 42 | 42 | 43 | 40 | 36 | 33 | 39.2 | 43.5 | |
| 16-Mar | 33 | 33 | 34 | 26 | A | 28 | 33 | 33 | 37 | 40 | 42 | 43 | 45 | 46 | 46 | 46 | 46 | 46 | 45 | 43 | 44 | 43 | 41 | 39 | 39.6 | 46.2 | |
| 17-Mar | 38 | 40 | 41 | 41 | A | 36 | 31 | 23 | 33 | 33 | 32 | 34 | 35 | 35 | 35 | 33 | 32 | 33 | 34 | 34 | 34 | 33 | 32 | 33 | 34.0 | 41.2 | |
| 18-Mar | 34 | 33 | 29 | 32 | A | 32 | 31 | 30 | 30 | 30 | 31 | 32 | 33 | 33 | 34 | 34 | 34 | 34 | 33 | 33 | 32 | 30 | 30 | 29 | 31.8 | 34.2 | |
| 19-Mar | 29 | 29 | 25 | 25 | A | 25 | 20 | 27 | 29 | 29 | 31 | 32 | 34 | 35 | 35 | 36 | 36 | 34 | 32 | 31 | 33 | 33 | 33 | 32 | 30.7 | 35.7 | |
| 20-Mar | 32 | 29 | 28 | 30 | A | 34 | 35 | 37 | 36 | 34 | 34 | 35 | 35 | 37 | 38 | 39 | 39 | 38 | 38 | 36 | 36 | 36 | 32 | 32 | 34.7 | 39.1 | |
| 21-Mar | 33 | 33 | 32 | 33 | A | 33 | 32 | 30 | 27 | 33 | 33 | 33 | 32 | 36 | 38 | 38 | 38 | 39 | 38 | 37 | 34 | 32 | 31 | 32 | 33.8 | 38.7 | |
| 22-Mar | 34 | 33 | 27 | 28 | A | 22 | 21 | 26 | 29 | 29 | 30 | 31 | 32 | 32 | 34 | 35 | 38 | 39 | 38 | 36 | 34 | 33 | 31 | 32 | 31.4 | 38.6 | |
| 23-Mar | 33 | 31 | 32 | 32 | A | 32 | 31 | 31 | 30 | 30 | 30 | 30 | 32 | 32 | 36 | 37 | 37 | 36 | 35 | 36 | 33 | 33 | 32 | 32 | 32.7 | 37.1 | |
| 24-Mar | 32 | 33 | 27 | 22 | A | 24 | 17 | 25 | 20 | 23 | 27 | 28 | 27 | 29 | 35 | 35 | 34 | 41 | 42 | 44 | 44 | 39 | 36 | 38 | 31.4 | 44.2 | |
| 25-Mar | 32 | 35 | 35 | 35 | A | 30 | 31 | 31 | 33 | 28 | 31 | 37 | 39 | 39 | 39 | 45 | 46 | 44 | 46 | 48 | 49 | 48 | 48 | 50 | 39.0 | 50.0 | |
| 26-Mar | 50 | 50 | 49 | 45 | A | 34 | 33 | 44 | 45 | 44 | 37 | 49 | 50 | 51 | 52 | 53 | 53 | 54 | 51 | 48 | 48 | 49 | 50 | 51 | 47.3 | 54.1 | |
| 27-Mar | 49 | 46 | 45 | 45 | A | 44 | 39 | 39 | 38 | 44 | 45 | 43 | 44 | 46 | 47 | 47 | 48 | 49 | 49 | 49 | 52 | 51 | 44 | 43 | 45.4 | 52.4 | |
| 28-Mar | 39 | 39 | 37 | 34 | A | 33 | 31 | 31 | 28 | 33 | 33 | 33 | 35 | 36 | 36 | 38 | 41 | 41 | 41 | 46 | 45 | 47 | 46 | 38 | 37.4 | 47.0 | |
| 29-Mar | 38 | 36 | 36 | 35 | A | 29 | 29 | 27 | 28 | 28 | 27 | 31 | 36 | 42 | 46 | 48 | 47 | 48 | 48 | 47 | 43 | 45 | 47 | 47 | 38.7 | 48.5 | |
| 30-Mar | 45 | 43 | 41 | 43 | A | 46 | 44 | 38 | 35 | 37 | 42 | 48 | 53 | 53 | 53 | 53 | 53 | 52 | 51 | 48 | 46 | 47 | 46 | 47 | 46.2 | 53.1 | |
| 31-Mar | 48 | 48 | 45 | 46 | A | 43 | 43 | 43 | 42 | 45 | 46 | 47 | 47 | 48 | 47 | 48 | 48 | 48 | 47 | 46 | 47 | 47 | 42 | 44 | 45.8 | 48.2 | |
| | | 36.6 | 36.4 | 35.4 | 35.0 | -- | 33.5 | 32.5 | 32.9 | 33.3 | 34.2 | 35.2 | 36.6 | 38.5 | 39.4 | 40.3 | 40.4 | 40.8 | 40.8 | 40.1 | 40.3 | 40.1 | 38.8 | 37.8 | 37.4 | Diurnal Average | |
| | | 49.6 | 49.6 | 49.1 | 46.2 | -- | 46.1 | 44.8 | 45.2 | 44.6 | 45.2 | 45.6 | 48.8 | 52.5 | 52.8 | 53.1 | 53.0 | 53.4 | 54.1 | 51.0 | 49.1 | 52.4 | 51.1 | 50.1 | 50.6 | Diurnal Maximum | |
| C - Calibration | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | | | | | | |

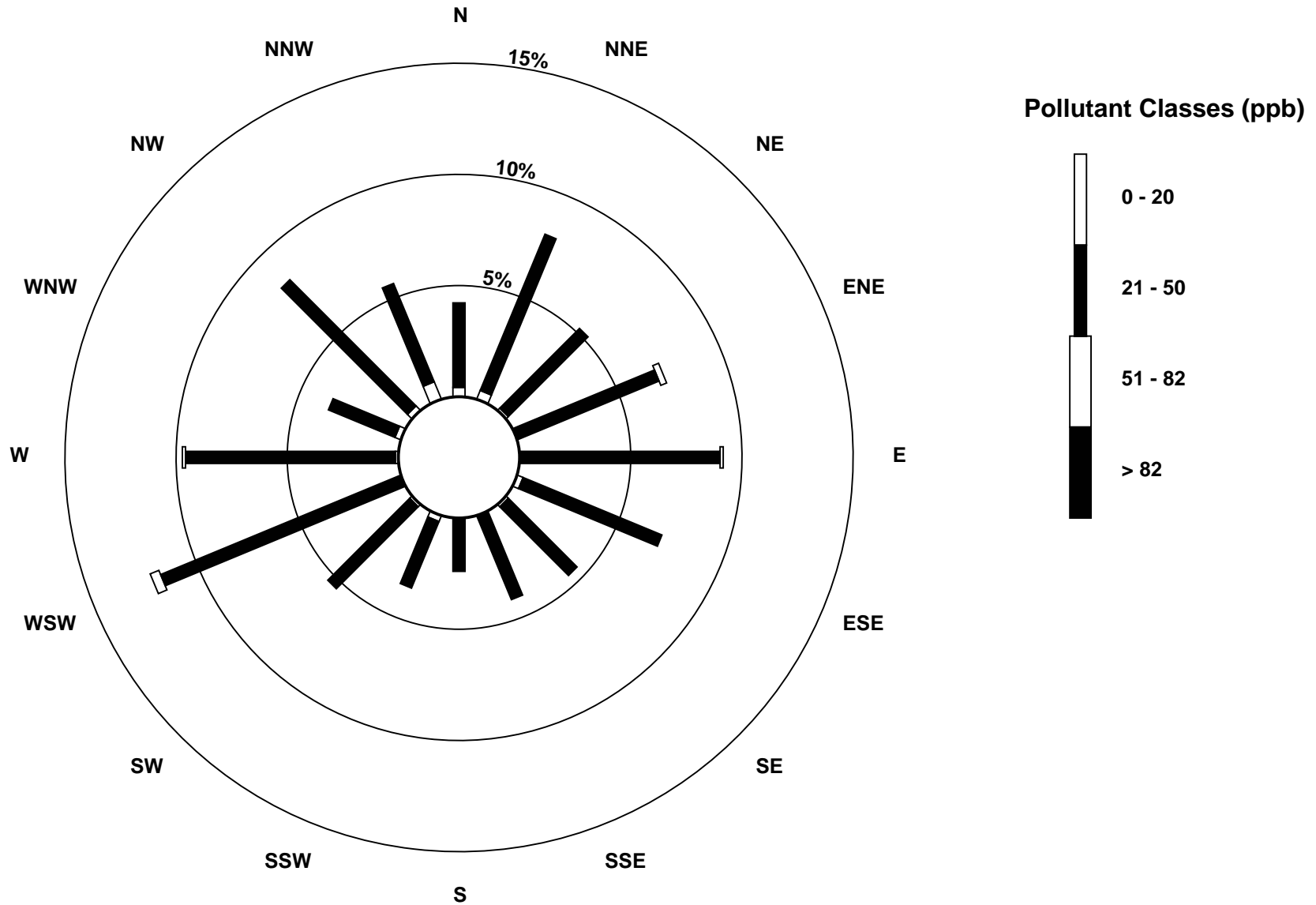
Hourly Maximums

Ozone (O₃) - ppb
Beaverlodge - March 2012



Pollutant Rose

Ozone (O₃) - ppb
Beaverlodge - March 2012



Eight Hour Running Averages

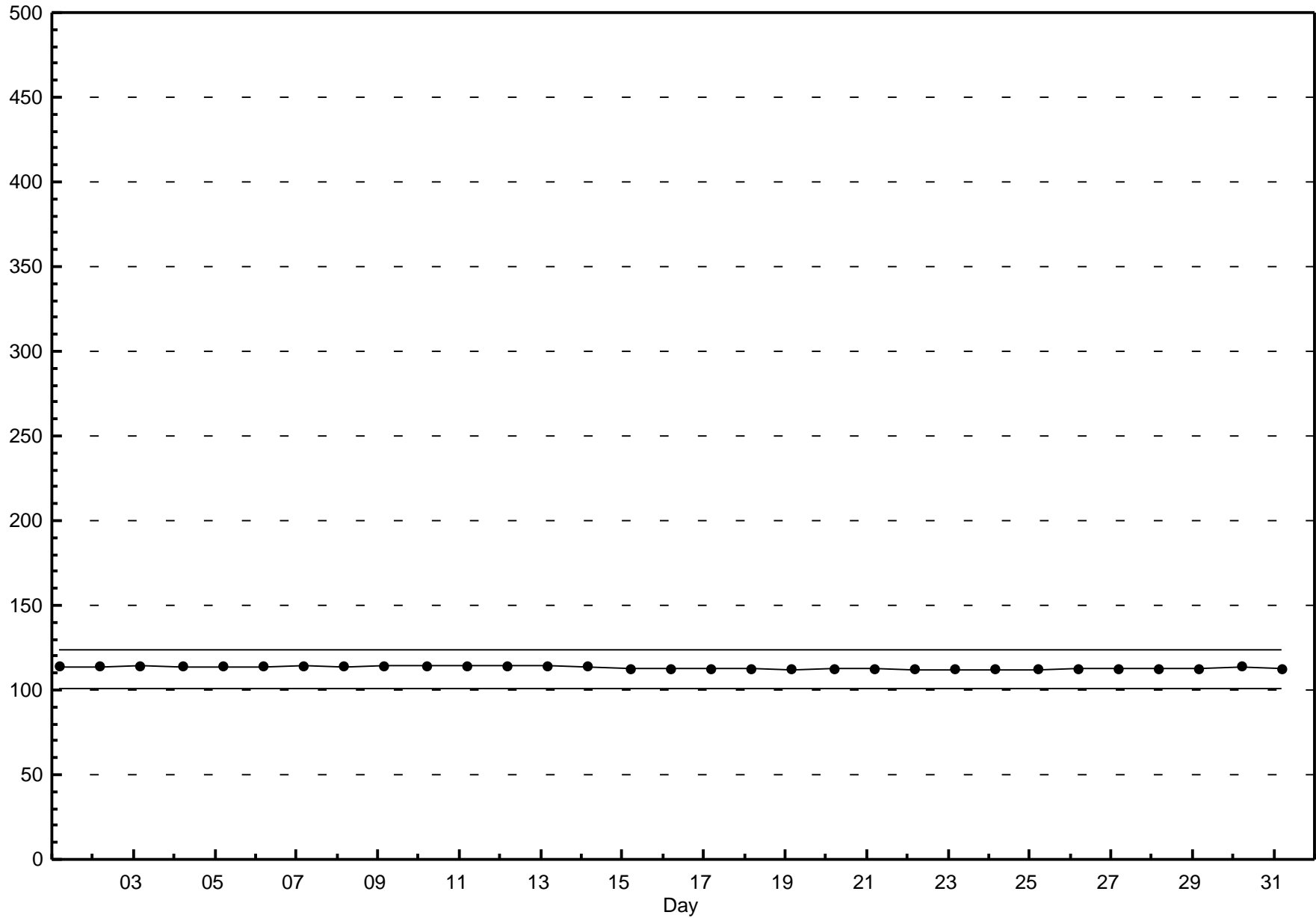
Ozone (O₃) - ppb

Beaverlodge - March 2012

| Maximum Value: 49.8 ppb on Mar 30 20:00 | | | | | | | | | | | | | | | | | | | | | | Hours in Service: | 744 | | |
|---|-------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---------------------------|-------|----|---------------|
| Minimum Value: 16.4 ppb on Mar 24 10:00 | | | | | | | | | | | | | | | | | | | | | | Hours of Data: | 738 | | |
| Percentiles: P ₁ = 19.2 P ₁₀ = 26.5 Q ₁ = 29.9 Median = 34.6 Q ₃ = 39.0 P ₉₀ = 42.5 P ₉₉ = 49.1 | | | | | | | | | | | | | | | | | | | | | | Hours of Missing Data: | 6 | | |
| | | | | | | | | | | | | | | | | | | | | | | Hours of Calibration: | 6 | | |
| | | | | | | | | | | | | | | | | | | | | | | Percent Operational Time: | 100.0 | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| 1-Mar | 35 | 34 | 34 | 32 | 32 | 30 | 28 | 26 | 24 | 23 | 22 | 22 | 23 | 24 | 27 | 28 | 30 | 31 | 31 | 32 | 32 | 31 | 30 | 29 | 34.9 |
| 2-Mar | 28 | 27 | 27 | 27 | 26 | 26 | 26 | 26 | 24 | 24 | 23 | 24 | 25 | 27 | 29 | 31 | 34 | 36 | 37 | 39 | 39 | 38 | 38 | 38 | 39.0 |
| 3-Mar | 38 | 37 | 37 | 37 | 37 | 37 | 36 | 35 | 35 | 34 | 34 | 34 | 34 | 35 | 37 | 38 | 40 | 41 | 41 | 42 | 42 | 42 | 41 | 41 | 42.1 |
| 4-Mar | 41 | 40 | 40 | 40 | 40 | 40 | 39 | 39 | 38 | 38 | 38 | 38 | 39 | 39 | 40 | 41 | 41 | 42 | 41 | 41 | 40 | 39 | 38 | 37 | 41.5 |
| 5-Mar | 36 | 36 | 35 | 35 | 34 | 34 | 33 | 33 | 33 | 33 | 33 | 34 | 34 | 34 | 35 | 35 | 35 | 34 | 33 | 32 | 32 | 31 | 30 | 30 | 36.5 |
| 6-Mar | 30 | 29 | 29 | 29 | 29 | 29 | 28 | 28 | 27 | 27 | 27 | 27 | 28 | 30 | 31 | 33 | 35 | 36 | 37 | 38 | 38 | 38 | 38 | 38 | 38.5 |
| 7-Mar | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 39 | 39 | 39 | 39 | 39 | 40 | 40 | 40 | 40 | 40 | 40 | 39 | 38 | 37 | 37 | 40.2 |
| 8-Mar | 37 | 37 | 37 | 38 | 38 | 39 | 39 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 39 | 38 | 38 | 38 | 37 | 38 | 38 | 38 | 39 | 39 | 40.3 |
| 9-Mar | 39 | 39 | 39 | 38 | 38 | 39 | 39 | 40 | 41 | 41 | 42 | 42 | 42 | 42 | 41 | 40 | 41 | 41 | 42 | 43 | 43 | 43 | 43 | 44 | 43.5 |
| 10-Mar | 43 | 42 | 41 | 40 | 40 | 39 | 39 | 38 | 38 | 37 | 37 | 37 | 37 | 37 | 38 | 39 | 39 | 39 | 40 | 39 | 39 | 39 | 36 | 35 | 42.9 |
| 11-Mar | 34 | 33 | 32 | 31 | 30 | 29 | 29 | 29 | 29 | 29 | 28 | 27 | 27 | 26 | 27 | 27 | 26 | 25 | 24 | 23 | 24 | 25 | 26 | 28 | 34.1 |
| 12-Mar | 30 | 33 | 35 | 37 | 38 | 38 | 38 | 38 | 37 | 36 | 36 | 37 | 37 | 38 | 39 | 39 | 41 | 41 | 42 | 41 | 40 | 39 | 37 | 35 | 41.7 |
| 13-Mar | 34 | 32 | 31 | 30 | 29 | 29 | 29 | 29 | 28 | 28 | 28 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 31 | 31 | 31 | 30 | 29 | 33.8 |
| 14-Mar | 28 | 27 | 25 | 24 | 23 | 22 | 22 | 22 | 22 | 22 | 24 | 27 | 29 | 30 | 31 | N | N | N | N | N | N | 40 | 39 | 38 | 39.7 |
| 15-Mar | 37 | 36 | 36 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 34 | 34 | 35 | 35 | 36 | 37 | 38 | 39 | 39 | 40 | 39 | 38 | 37 | 36 | 40.0 |
| 16-Mar | 34 | 32 | 31 | 28 | 28 | 27 | 26 | 26 | 27 | 28 | 30 | 33 | 34 | 37 | 39 | 41 | 42 | 44 | 44 | 44 | 43 | 43 | 42 | 41 | 43.8 |
| 17-Mar | 39 | 39 | 38 | 38 | 38 | 37 | 34 | 32 | 31 | 31 | 29 | 28 | 29 | 29 | 30 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 39.5 |
| 18-Mar | 32 | 32 | 31 | 30 | 30 | 30 | 30 | 30 | 29 | 29 | 30 | 30 | 30 | 30 | 31 | 31 | 32 | 32 | 33 | 33 | 33 | 32 | 31 | 30 | 32.7 |
| 19-Mar | 29 | 28 | 27 | 25 | 25 | 23 | 21 | 21 | 21 | 21 | 22 | 24 | 25 | 27 | 30 | 32 | 32 | 33 | 33 | 32 | 32 | 32 | 31 | 30 | 33.0 |
| 20-Mar | 29 | 28 | 28 | 28 | 28 | 28 | 28 | 29 | 30 | 31 | 32 | 33 | 33 | 34 | 34 | 35 | 35 | 36 | 36 | 36 | 36 | 36 | 35 | 34 | 36.2 |
| 21-Mar | 34 | 33 | 33 | 32 | 32 | 31 | 31 | 31 | 30 | 29 | 29 | 29 | 29 | 30 | 31 | 32 | 33 | 35 | 35 | 36 | 36 | 35 | 34 | 33 | 35.6 |
| 22-Mar | 32 | 31 | 28 | 27 | 26 | 24 | 21 | 19 | 18 | 18 | 20 | 21 | 22 | 24 | 27 | 30 | 31 | 33 | 33 | 34 | 34 | 34 | 33 | 33 | 34.0 |
| 23-Mar | 32 | 31 | 30 | 30 | 30 | 30 | 31 | 31 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 31 | 32 | 33 | 33 | 34 | 33 | 33 | 33 | 32 | 33.7 |
| 24-Mar | 31 | 30 | 29 | 27 | 26 | 24 | 22 | 20 | 17 | 16 | 17 | 18 | 19 | 20 | 23 | 25 | 27 | 29 | 31 | 33 | 35 | 36 | 36 | 36 | 36.4 |
| 25-Mar | 36 | 35 | 35 | 34 | 33 | 31 | 31 | 30 | 30 | 29 | 28 | 28 | 29 | 30 | 31 | 33 | 35 | 37 | 39 | 40 | 41 | 42 | 44 | 45 | 44.5 |
| 26-Mar | 45 | 45 | 46 | 46 | 46 | 42 | 38 | 37 | 37 | 35 | 33 | 33 | 35 | 39 | 43 | 44 | 45 | 47 | 49 | 50 | 50 | 49 | 49 | 48 | 49.8 |
| 27-Mar | 47 | 46 | 46 | 45 | 45 | 44 | 40 | 38 | 35 | 35 | 35 | 34 | 35 | 36 | 39 | 41 | 44 | 45 | 45 | 46 | 46 | 47 | 46 | 45 | 47.4 |
| 28-Mar | 44 | 43 | 41 | 39 | 38 | 35 | 33 | 30 | 28 | 27 | 26 | 27 | 28 | 29 | 30 | 32 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 39 | 44.1 |
| 29-Mar | 38 | 37 | 37 | 36 | 35 | 33 | 31 | 30 | 29 | 27 | 26 | 25 | 26 | 27 | 29 | 32 | 34 | 37 | 39 | 41 | 42 | 42 | 42 | 42 | 42.3 |
| 30-Mar | 43 | 42 | 41 | 40 | 40 | 41 | 39 | 37 | 36 | 36 | 36 | 37 | 38 | 39 | 42 | 44 | 46 | 48 | 50 | 50 | 49 | 48 | 47 | 46 | 49.8 |
| 31-Mar | 46 | 45 | 44 | 44 | 44 | 44 | 43 | 42 | 42 | 41 | 42 | 42 | 42 | 43 | 44 | 45 | 45 | 46 | 46 | 46 | 46 | 45 | 44 | 44 | 46.0 |
| 47.4 46.2 45.9 45.9 45.7 43.7 43.2 42.2 41.6 41.4 41.8 42.0 42.2 42.9 43.6 44.7 46.4 48.3 49.5 49.8 49.6 49.4 49.1 48.2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diurnal Maximums | | | | | | | | | | | | | | | | | | | | | | | | | |
| N - Not Valid | | | | | | | | | | | | | | | | | | | | | | | | | |

Span Responses

Ozone (O₃)
Beaverlodge - March 2012



Hourly Averages

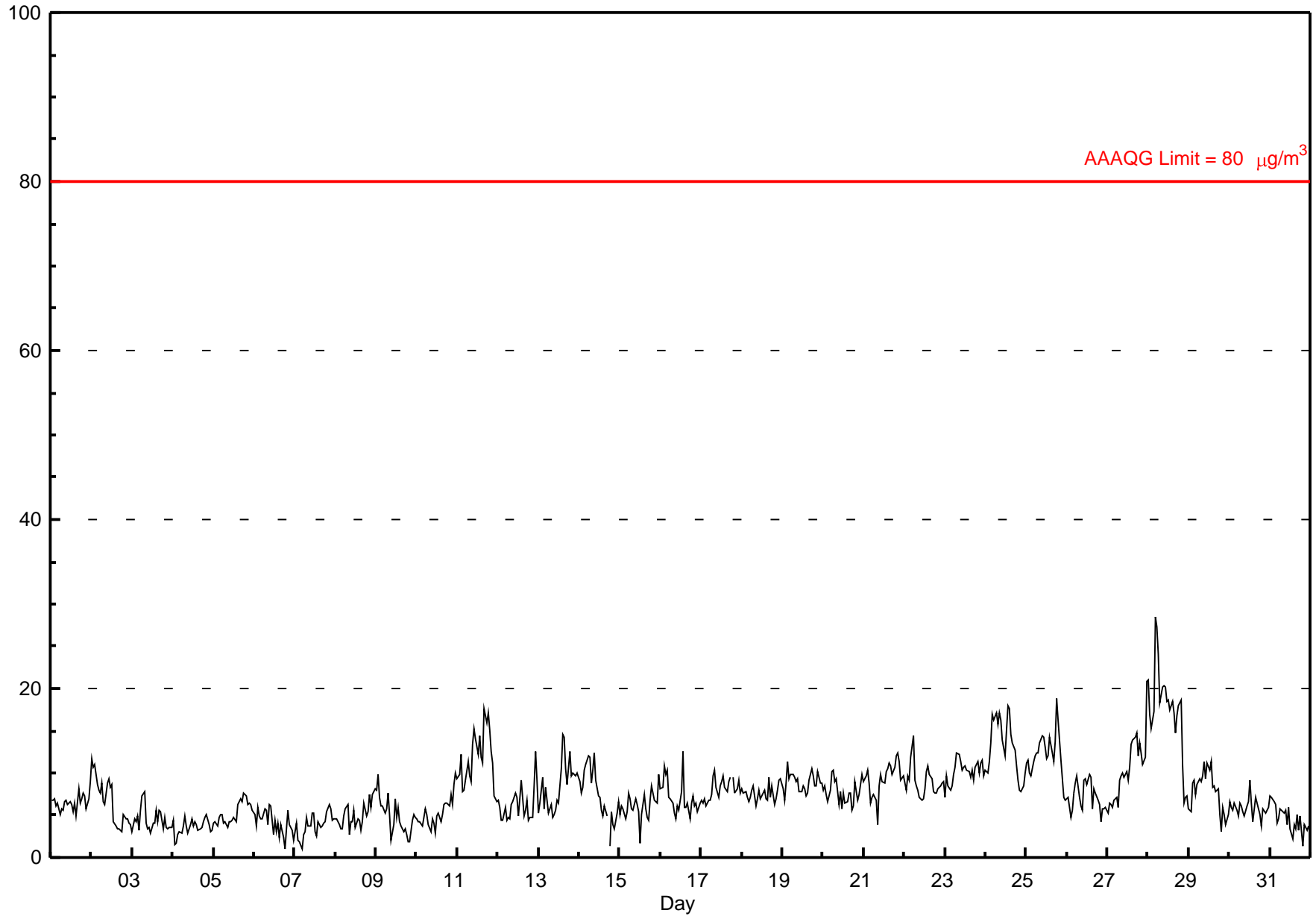
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Beaverlodge - March 2012

| | |
|--|---|
| Number of Exceedences: 1-hr: 0 24-hr: 0 | Hours in Service: 744 |
| Maximum Value: 28.5 µg/m ³ on Mar 28 05:00 | Maximum Daily Average: 17.5 µg/m ³ on Mar 28 |
| Minimum Value: 1 µg/m ³ on Mar 7 05:00 | Hours of Data: 742 |
| Maximum Diurnal Average: 8.3 µg/m ³ at hour 7 | Hours of Missing Data: 2 |
| Monthly Average: 7.62 µg/m ³ | Hours of Calibration: 0 |
| Minimum Daily Average: 3.6 µg/m ³ on Mar 4 | Percent Operational Time: 99.7 |
| Minimum Diurnal Average: 6.9 µg/m ³ at hour 22 | |
| Percentiles: P ₁ = 1.8 P ₁₀ = 3.7 Q ₁ = 5.0 Median = 6.9 Q ₃ = 9.4 P ₉₀ = 12.0 P ₉₉ = 20.1 | |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 7 | 7 | 7 | 6 | 6 | 5 | 6 | 6 | 7 | 7 | 6 | 7 | 6 | 5 | 6 | 5 | 8 | 6 | 7 | 8 | 7 | 6 | 7 | 9 | 6.5 | 8.9 |
| 2-Mar | 12 | 11 | 11 | 9 | 8 | 8 | 9 | 7 | 6 | 9 | 9 | 8 | 9 | 4 | 4 | 3 | 3 | 3 | 3 | 5 | 4 | 5 | 4 | 4 | 6.6 | 11.7 |
| 3-Mar | 3 | 5 | 4 | 5 | 3 | 6 | 7 | 8 | 4 | 3 | 4 | 3 | 4 | 4 | 6 | 4 | 6 | 5 | 3 | 5 | 4 | 3 | 4 | 4 | 4.4 | 7.8 |
| 4-Mar | 4 | 2 | 2 | 3 | 3 | 3 | 4 | 5 | 4 | 3 | 4 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 5 | 5 | 4 | 3 | 3 | 3.6 | 5.0 |
| 5-Mar | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 4 | 6 | 7 | 7 | 7 | 8 | 7 | 6 | 6 | 6 | 6 | 5.3 | 7.7 |
| 6-Mar | 5 | 4 | 6 | 5 | 5 | 5 | 6 | 6 | 4 | 6 | 6 | 3 | 4 | 3 | 4 | 2 | 4 | 2 | 1 | 3 | 6 | 4 | 3 | 2 | 4.1 | 6.2 |
| 7-Mar | 3 | 4 | 2 | 2 | 1 | 3 | 3 | 5 | 4 | 4 | 5 | 5 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 6 | 6 | 4 | 5 | 3.8 | 6.3 |
| 8-Mar | 5 | 5 | 4 | 3 | 3 | 5 | 6 | 6 | 3 | 4 | 4 | 6 | 4 | 5 | 4 | 3 | 4 | 7 | 5 | 5 | 8 | 6 | 7 | 8 | 5.0 | 8.2 |
| 9-Mar | 8 | 10 | 7 | 6 | 6 | 5 | 6 | 8 | 5 | 2 | 4 | 7 | 5 | 6 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 4 | 5 | 5 | 5.0 | 9.9 |
| 10-Mar | 5 | 4 | 4 | 4 | 5 | 6 | 5 | 4 | 3 | 4 | 4 | 3 | 5 | 5 | 4 | 5 | 6 | 6 | 7 | 6 | 7 | 6 | 9 | 10 | 5.3 | 10.1 |
| 11-Mar | 9 | 10 | 12 | 8 | 8 | 9 | 11 | 10 | 9 | 13 | 15 | 14 | 12 | 14 | 12 | 11 | 18 | 16 | 17 | 15 | 13 | 11 | 7 | 7 | 11.8 | 17.7 |
| 12-Mar | 7 | 6 | 4 | 4 | 6 | 4 | 5 | 5 | 6 | 7 | 8 | 7 | 5 | 7 | 9 | 5 | 6 | 7 | 4 | 5 | 5 | 9 | 12 | 9 | 6.3 | 12.5 |
| 13-Mar | 5 | 6 | 10 | 6 | 8 | 7 | 5 | 6 | 5 | 5 | 6 | 7 | 7 | 11 | 15 | 14 | 11 | 9 | 13 | 10 | 10 | 10 | 10 | 10 | 8.4 | 14.6 |
| 14-Mar | 9 | 8 | 8 | 10 | 11 | 12 | 12 | 9 | 10 | 12 | 9 | 7 | 7 | 6 | 5 | 6 | 5 | M | 1 | 5 | 4 | 3 | 5 | 7 | 7.5 | 12.4 |
| 15-Mar | 5 | 6 | 6 | 4 | 5 | 8 | 7 | 6 | 6 | 7 | 6 | 5 | 2 | 5 | 8 | 6 | 5 | 4 | 7 | 9 | 7 | 7 | 7 | 10 | 6.1 | 9.8 |
| 16-Mar | 8 | 8 | 11 | 10 | 10 | 7 | 7 | 6 | 5 | 5 | 6 | 6 | 8 | 12 | 6 | 6 | 6 | 5 | 6 | 7 | 6 | 6 | 5 | 7 | 7.1 | 12.5 |
| 17-Mar | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 10 | 10 | 8 | 7 | 8 | 9 | 10 | 8 | 8 | 9 | 9 | N | 9 | 8 | 8 | 9 | 8 | 8.1 | 10.3 |
| 18-Mar | 8 | 8 | 8 | 7 | 7 | 7 | 8 | 8 | 6 | 7 | 8 | 7 | 7 | 8 | 7 | 7 | 10 | 7 | 9 | 6 | 7 | 8 | 9 | 9 | 7.6 | 9.5 |
| 19-Mar | 8 | 7 | 9 | 11 | 9 | 10 | 10 | 9 | 9 | 9 | 8 | 8 | 8 | 8 | 7 | 8 | 9 | 11 | 10 | 8 | 9 | 10 | 9 | 9 | 8.9 | 11.4 |
| 20-Mar | 8 | 8 | 7 | 7 | 8 | 10 | 10 | 9 | 9 | 6 | 8 | 6 | 8 | 6 | 7 | 8 | 8 | 6 | 6 | 9 | 7 | 7 | 9 | 10 | 7.8 | 10.3 |
| 21-Mar | 9 | 10 | 10 | 9 | 7 | 7 | 8 | 7 | 4 | 9 | 10 | 9 | 9 | 10 | 10 | 11 | 11 | 10 | 11 | 12 | 12 | 11 | 9 | 10 | 9.3 | 12.3 |
| 22-Mar | 9 | 8 | 10 | 9 | 12 | 14 | 9 | 9 | 8 | 7 | 7 | 7 | 8 | 10 | 11 | 10 | 9 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 8.9 | 14.4 |
| 23-Mar | 7 | 10 | 8 | 8 | 8 | 10 | 11 | 12 | 12 | 11 | 10 | 11 | 11 | 10 | 10 | 9 | 10 | 9 | 11 | 11 | 10 | 11 | 11 | 10 | 10.2 | 12.4 |
| 24-Mar | 10 | 10 | 11 | 14 | 17 | 16 | 17 | 16 | 17 | 16 | 14 | 12 | 15 | 18 | 18 | 15 | 14 | 13 | 11 | 9 | 8 | 8 | 8 | 10 | 13.2 | 17.9 |
| 25-Mar | 11 | 12 | 10 | 10 | 11 | 12 | 12 | 12 | 14 | 14 | 14 | 13 | 12 | 12 | 14 | 12 | 11 | 14 | 19 | 16 | 11 | 9 | 7 | 7 | 12.1 | 18.8 |
| 26-Mar | 7 | 7 | 5 | 6 | 8 | 9 | 10 | 7 | 6 | 6 | 9 | 9 | 9 | 10 | 10 | 6 | 8 | 8 | 7 | 6 | 4 | 6 | 6 | 6 | 7.2 | 9.8 |
| 27-Mar | 5 | 6 | 6 | 6 | 7 | 7 | 6 | 9 | 10 | 10 | 9 | 10 | 9 | 11 | 13 | 14 | 14 | 15 | 12 | 14 | 12 | 11 | 12 | 21 | 10.4 | 20.8 |
| 28-Mar | 21 | 17 | 15 | 17 | 28 | 27 | 24 | 18 | 20 | 20 | 19 | 19 | 18 | 18 | 17 | 15 | 17 | 18 | 19 | 11 | 6 | 7 | 7 | 7 | 17.5 | 28.5 |
| 29-Mar | 6 | 5 | 9 | 9 | 7 | 9 | 9 | 9 | 10 | 11 | 9 | 11 | 10 | 11 | 8 | 8 | 8 | 8 | 5 | 3 | 6 | 5 | 4 | 5 | 7.8 | 11.4 |
| 30-Mar | 7 | 6 | 6 | 7 | 6 | 5 | 6 | 6 | 5 | 5 | 6 | 7 | 9 | 6 | 4 | 7 | 6 | 6 | 5 | 4 | 6 | 5 | 6 | 6 | 5.9 | 9.2 |
| 31-Mar | 7 | 7 | 7 | 6 | 4 | 5 | 6 | 6 | 5 | 6 | 4 | 6 | 3 | 2 | 4 | 3 | 5 | 3 | 5 | 1 | 4 | 4 | 3 | 4 | 4.6 | 7.3 |
| | 7.4 | 7.3 | 7.4 | 7.1 | 7.8 | 8.1 | 8.3 | 8.0 | 7.4 | 7.8 | 7.9 | 7.7 | 7.6 | 8.1 | 8.1 | 7.5 | 7.9 | 7.7 | 7.6 | 7.7 | 7.2 | 6.9 | 7.0 | 7.5 | Diurnal Average | |
| | 21.1 | 17.0 | 15.2 | 17.3 | 28.5 | 27.2 | 24.0 | 18.3 | 20.1 | 20.3 | 20.2 | 18.5 | 18.6 | 17.9 | 18.4 | 17.1 | 17.7 | 16.8 | 18.8 | 18.6 | 12.5 | 11.3 | 12.5 | 20.8 | Diurnal Maximum | |

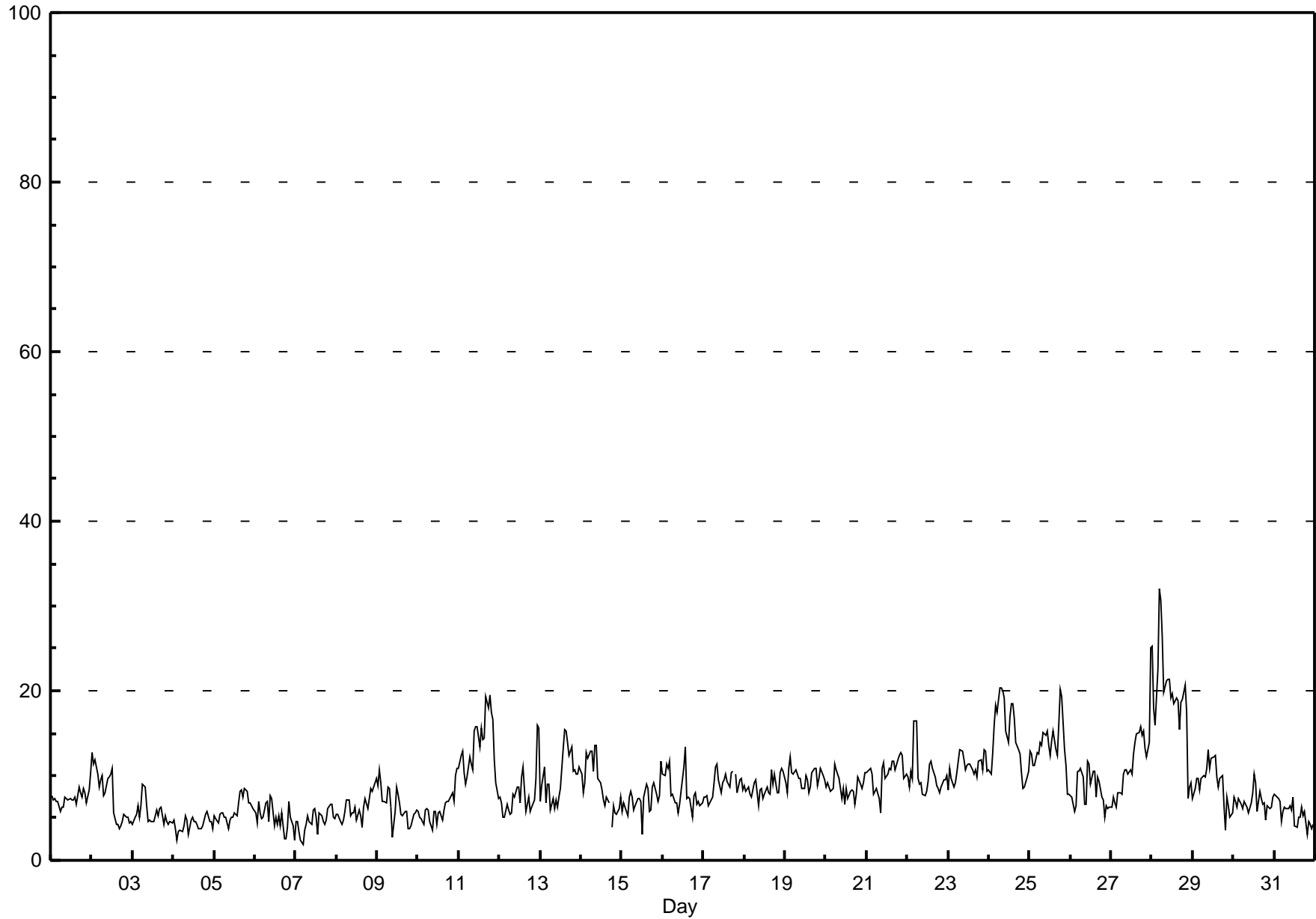
M - Maintenance N - Not Valid
 Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³



Hourly Maximums

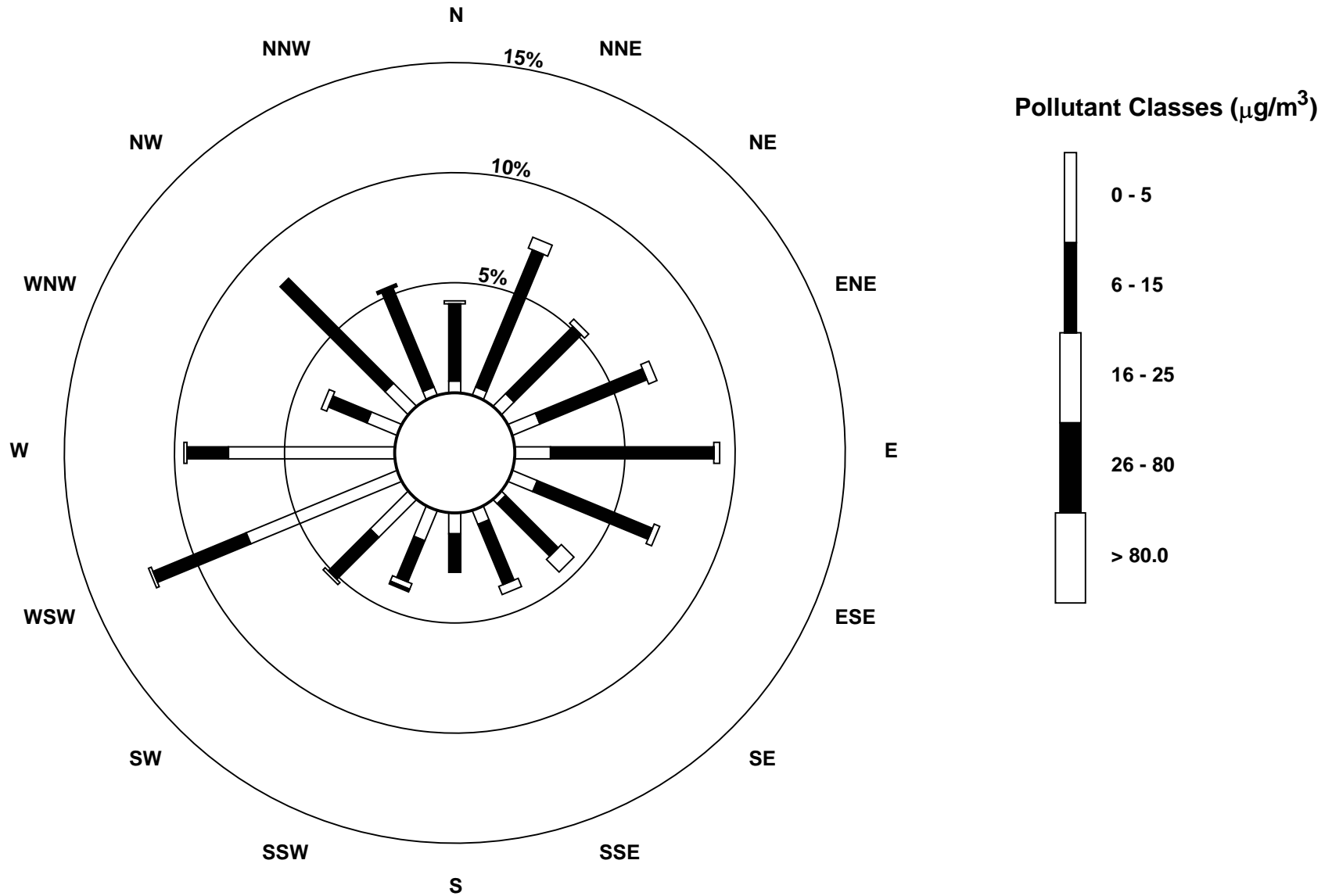
Particulate Matter 2.5 (PM_{2.5}) - µg/m³ Beaverlodge - March 2012

| Maximum Value: 32.0 µg/m ³ on Mar 28 05:00 | | Maximum Daily Average: 19.4 µg/m ³ on Mar 28 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|---|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------|
| Minimum Value: 2 µg/m ³ on Mar 7 05:00 | | Minimum Daily Average: 4.3 µg/m ³ on Mar 4 | | Hours of Data: 742 | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 9.4 µg/m ³ at hour 7 | | Minimum Diurnal Average: 8.0 µg/m ³ at hour 22 | | Hours of Missing Data: 2 | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 8.74 µg/m ³ | | Percentiles: P ₁ = 3.0 P ₁₀ = 4.6 Q ₁ = 6.0 Median = 7.9 Q ₃ = 10.5 P ₉₀ = 13.5 P ₉₉ = 20.2 | | Hours of Calibration: 0 | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 8 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 8 | 8 | 8 | 8 | 7 | 8 | 10 | 7.4 | 10.3 | |
| 2-Mar | 13 | 11 | 12 | 10 | 9 | 9 | 10 | 8 | 8 | 10 | 10 | 10 | 11 | 6 | 4 | 4 | 4 | 4 | 5 | 6 | 5 | 5 | 4 | 5 | 7.5 | 12.6 |
| 3-Mar | 4 | 5 | 6 | 7 | 5 | 6 | 9 | 9 | 6 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 6 | 6 | 4 | 5 | 5 | 4 | 5 | 4 | 5.5 | 8.9 |
| 4-Mar | 5 | 4 | 2 | 3 | 4 | 3 | 4 | 5 | 5 | 3 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 6 | 5 | 5 | 4 | 4.3 | 5.8 |
| 5-Mar | 5 | 5 | 4 | 5 | 6 | 6 | 5 | 5 | 4 | 5 | 5 | 5 | 6 | 5 | 7 | 8 | 8 | 7 | 8 | 8 | 7 | 7 | 7 | 6 | 6.0 | 8.5 |
| 6-Mar | 6 | 4 | 7 | 6 | 5 | 5 | 7 | 7 | 5 | 8 | 7 | 4 | 5 | 4 | 5 | 4 | 6 | 3 | 3 | 4 | 7 | 5 | 4 | 2 | 5.1 | 7.7 |
| 7-Mar | 5 | 5 | 3 | 2 | 2 | 4 | 4 | 5 | 5 | 4 | 6 | 6 | 5 | 3 | 6 | 5 | 5 | 4 | 5 | 6 | 7 | 7 | 5 | 5 | 4.7 | 6.5 |
| 8-Mar | 5 | 5 | 5 | 4 | 5 | 6 | 7 | 7 | 5 | 6 | 6 | 6 | 5 | 6 | 5 | 4 | 6 | 7 | 6 | 7 | 8 | 8 | 9 | 10 | 6.2 | 9.7 |
| 9-Mar | 9 | 11 | 9 | 7 | 7 | 7 | 9 | 9 | 6 | 3 | 6 | 9 | 8 | 7 | 6 | 5 | 6 | 6 | 4 | 4 | 4 | 5 | 6 | 6 | 6.5 | 10.6 |
| 10-Mar | 6 | 5 | 5 | 4 | 6 | 6 | 6 | 5 | 4 | 6 | 6 | 4 | 6 | 6 | 5 | 6 | 7 | 7 | 7 | 8 | 8 | 7 | 10 | 11 | 6.2 | 10.9 |
| 11-Mar | 11 | 12 | 13 | 10 | 9 | 10 | 12 | 11 | 11 | 15 | 16 | 16 | 13 | 16 | 14 | 14 | 19 | 18 | 19 | 17 | 17 | 12 | 9 | 7 | 13.5 | 19.4 |
| 12-Mar | 7 | 7 | 5 | 5 | 7 | 6 | 5 | 6 | 8 | 7 | 9 | 9 | 7 | 10 | 11 | 6 | 7 | 8 | 6 | 6 | 7 | 10 | 16 | 16 | 7.8 | 16.0 |
| 13-Mar | 7 | 9 | 11 | 7 | 9 | 9 | 6 | 7 | 6 | 7 | 6 | 7 | 9 | 13 | 16 | 15 | 14 | 12 | 13 | 10 | 11 | 10 | 10 | 11 | 9.8 | 15.5 |
| 14-Mar | 10 | 8 | 9 | 13 | 12 | 13 | 13 | 10 | 14 | 14 | 10 | 9 | 8 | 7 | 6 | 7 | 7 | M | 4 | 6 | 6 | 5 | 6 | 7 | 8.9 | 13.6 |
| 15-Mar | 6 | 7 | 6 | 5 | 7 | 8 | 8 | 6 | 6 | 7 | 7 | 7 | 3 | 7 | 9 | 8 | 6 | 6 | 9 | 9 | 8 | 7 | 8 | 12 | 7.2 | 11.7 |
| 16-Mar | 10 | 10 | 11 | 11 | 12 | 8 | 8 | 7 | 7 | 6 | 7 | 8 | 11 | 13 | 7 | 7 | 7 | 5 | 8 | 8 | 7 | 7 | 6 | 7 | 8.2 | 13.4 |
| 17-Mar | 8 | 7 | 8 | 7 | 7 | 7 | 9 | 11 | 11 | 9 | 8 | 9 | 9 | 10 | 9 | 9 | 10 | 11 | N | 10 | 8 | 10 | 10 | 8 | 9.0 | 11.4 |
| 18-Mar | 9 | 8 | 9 | 8 | 7 | 8 | 9 | 9 | 6 | 8 | 8 | 7 | 8 | 9 | 8 | 8 | 11 | 9 | 10 | 8 | 8 | 10 | 11 | 10 | 8.7 | 10.9 |
| 19-Mar | 9 | 8 | 11 | 12 | 10 | 10 | 11 | 10 | 10 | 10 | 8 | 9 | 10 | 9 | 8 | 9 | 10 | 11 | 11 | 9 | 10 | 11 | 10 | 9 | 9.8 | 12.1 |
| 20-Mar | 9 | 9 | 9 | 8 | 8 | 11 | 11 | 10 | 10 | 7 | 8 | 7 | 8 | 7 | 8 | 8 | 8 | 7 | 8 | 10 | 9 | 8 | 9 | 10 | 8.7 | 11.4 |
| 21-Mar | 10 | 11 | 11 | 10 | 8 | 8 | 8 | 7 | 6 | 11 | 11 | 10 | 10 | 11 | 11 | 12 | 12 | 11 | 12 | 12 | 13 | 12 | 10 | 10 | 10.3 | 12.7 |
| 22-Mar | 10 | 9 | 10 | 10 | 16 | 16 | 10 | 9 | 9 | 8 | 8 | 8 | 9 | 11 | 12 | 11 | 10 | 9 | 8 | 8 | 9 | 9 | 9 | 10 | 10.0 | 16.5 |
| 23-Mar | 8 | 11 | 10 | 9 | 9 | 10 | 12 | 13 | 13 | 12 | 11 | 11 | 11 | 11 | 11 | 10 | 11 | 10 | 12 | 12 | 11 | 13 | 13 | 10 | 11.0 | 13.1 |
| 24-Mar | 11 | 10 | 13 | 16 | 18 | 17 | 20 | 20 | 20 | 19 | 15 | 14 | 17 | 18 | 18 | 17 | 14 | 13 | 13 | 10 | 8 | 9 | 10 | 10 | 14.7 | 20.4 |
| 25-Mar | 13 | 13 | 11 | 11 | 13 | 13 | 14 | 14 | 15 | 15 | 15 | 14 | 12 | 14 | 15 | 13 | 12 | 16 | 20 | 19 | 13 | 11 | 8 | 8 | 13.4 | 20.2 |
| 26-Mar | 8 | 7 | 6 | 6 | 11 | 11 | 11 | 10 | 7 | 7 | 12 | 11 | 9 | 10 | 10 | 8 | 10 | 9 | 8 | 7 | 5 | 6 | 6 | 6 | 8.4 | 11.6 |
| 27-Mar | 6 | 7 | 7 | 6 | 8 | 8 | 8 | 10 | 11 | 11 | 10 | 11 | 10 | 13 | 14 | 15 | 15 | 16 | 15 | 15 | 13 | 12 | 14 | 25 | 11.7 | 25.2 |
| 28-Mar | 25 | 18 | 16 | 23 | 32 | 31 | 26 | 20 | 21 | 21 | 19 | 20 | 18 | 19 | 19 | 16 | 19 | 19 | 21 | 17 | 7 | 9 | 9 | 19.4 | 32.0 | |
| 29-Mar | 7 | 8 | 10 | 10 | 8 | 10 | 10 | 10 | 11 | 13 | 11 | 12 | 12 | 10 | 9 | 10 | 10 | 7 | 4 | 7 | 7 | 5 | 6 | 9.0 | 13.1 | |
| 30-Mar | 8 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 6 | 7 | 8 | 10 | 9 | 6 | 8 | 7 | 7 | 7 | 5 | 6 | 6 | 6 | 7 | 6.9 | 10.2 |
| 31-Mar | 8 | 8 | 7 | 7 | 5 | 6 | 6 | 6 | 6 | 7 | 6 | 7 | 4 | 4 | 5 | 5 | 6 | 5 | 6 | 3 | 5 | 4 | 4 | 4 | 5.6 | 7.8 |
| 8.5 | | 8.3 | 8.3 | 8.3 | 9.0 | 9.2 | 9.4 | 9.0 | 8.6 | 8.8 | 8.9 | 8.8 | 8.8 | 9.3 | 9.1 | 8.7 | 9.1 | 8.9 | 8.9 | 8.8 | 8.4 | 8.0 | 8.1 | 8.6 | Diurnal Average | |
| 25.2 | | 18.0 | 15.9 | 22.6 | 32.0 | 30.6 | 26.5 | 20.4 | 21.1 | 21.3 | 21.3 | 19.2 | 19.7 | 18.5 | 19.1 | 18.9 | 19.4 | 18.7 | 20.2 | 20.6 | 17.5 | 13.1 | 16.0 | 25.2 | Diurnal Maximum | |
| M - Maintenance | | N - Not Valid | | | | | | | | | | | | | | | | | | | | | | | | |



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Beaverlodge - March 2012



Hourly Averages

External Temperature (ET) - °C

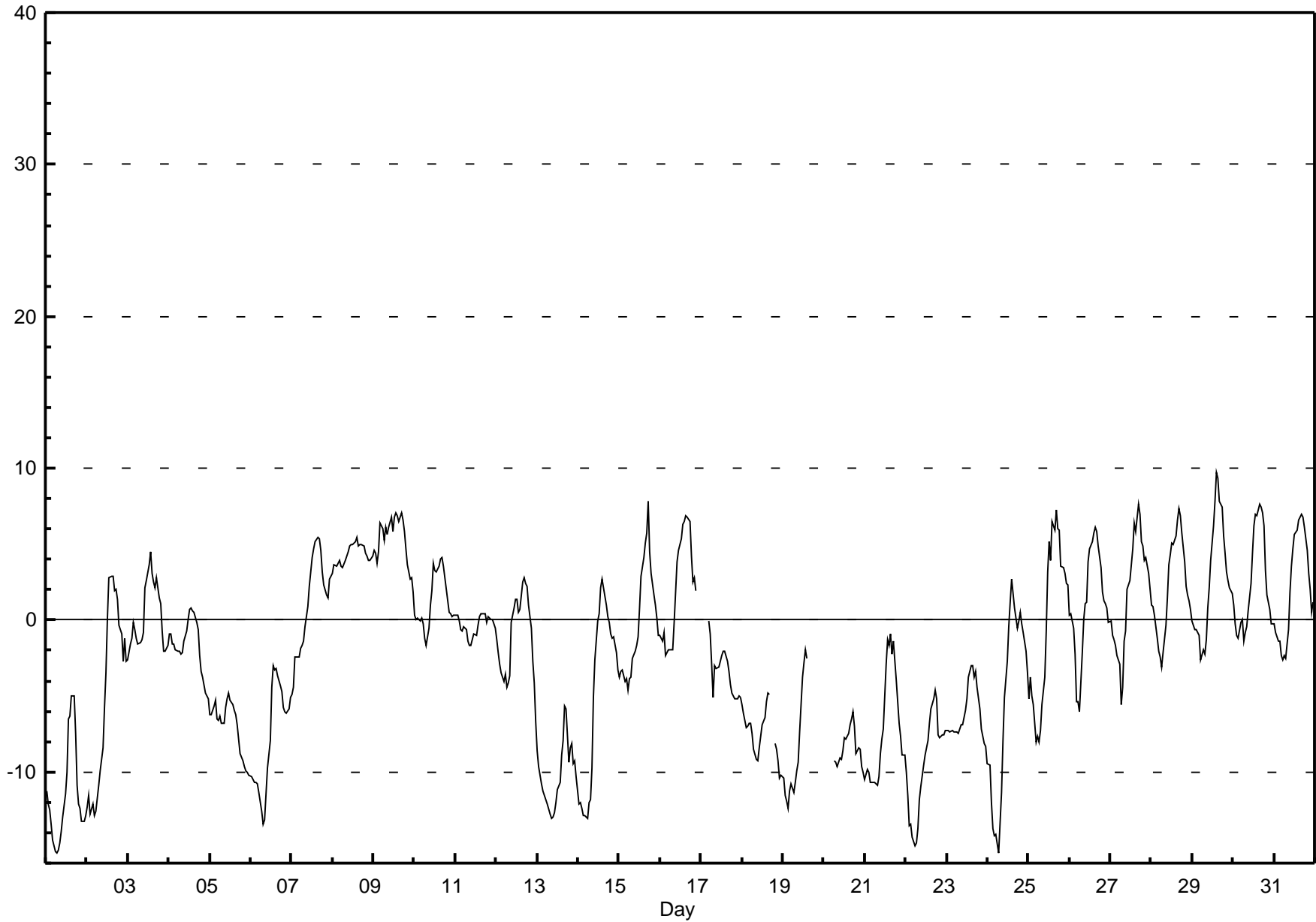
Beaverlodge - March 2012

| Number of Exceedences (AAAQO): | | 1-hr: 0 24-hr: 0 | | Hours in Service: | | 744 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|--|-----|---------------------------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|-----|-----|-----|-----|------|---------------|---------------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|-----------------|
| Maximum Value: 9.8 °C on Mar 29 15:00 | | Maximum Daily Average: 5.3 °C on Mar 9 | | Hours of Data: | | 721 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Minimum Value: -15 °C on Mar 1 07:00 | | Minimum Daily Average: -11.6 °C on Mar 1 | | Hours of Missing Data: | | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 1.6 °C at hour 16 | | Minimum Diurnal Average: -6.0 °C at hour 7 | | Hours of Calibration: | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: -2.42 °C | | Percentiles: P ₁ = -14.5 P ₁₀ = -10.8 Q ₁ = -6.9 Median = -1.6 Q ₃ = 2.1 P ₉₀ = 5.0 P ₉₉ = 7.6 | | Percent Operational Time: | | 96.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Mar | -11 | -12 | -12 | -13 | -14 | -15 | -15 | -15 | -15 | -14 | -13 | -11 | -10 | -6 | -6 | -5 | -5 | -7 | -11 | -12 | -12 | -13 | -13 | -13 | -11.6 | -5.0 | | | | | | | | | | | | | | | | | | | | | | |
| 2-Mar | -12 | -12 | -13 | -12 | -13 | -13 | -12 | -11 | -10 | -8 | -6 | -4 | 0 | 3 | 3 | 3 | 2 | 2 | 1 | 0 | -1 | -3 | -1 | -3 | -4.9 | 2.9 | | | | | | | | | | | | | | | | | | | | | | |
| 3-Mar | -3 | -2 | -1 | 0 | -1 | -1 | -2 | -1 | -1 | -1 | 2 | 3 | 4 | 4 | 3 | 2 | 2 | 3 | 1 | 1 | -1 | -2 | -2 | -2 | 0.3 | 4.5 | | | | | | | | | | | | | | | | | | | | | | |
| 4-Mar | -1 | -1 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -1 | -1 | 0 | 1 | 1 | 1 | 0 | 0 | -1 | -2 | -3 | -4 | -5 | -5 | -5 | -1.7 | 0.8 | | | | | | | | | | | | | | | | | | | | | | |
| 5-Mar | -6 | -6 | -6 | -5 | -7 | -7 | -6 | -7 | -7 | -6 | -5 | -5 | -5 | -6 | -6 | -6 | -7 | -8 | -9 | -9 | -10 | -10 | -10 | -10 | -7.0 | -4.8 | | | | | | | | | | | | | | | | | | | | | | |
| 6-Mar | -10 | -10 | -11 | -11 | -11 | -11 | -13 | -13 | -13 | -11 | -10 | -8 | -4 | -3 | -3 | -3 | -4 | -4 | -5 | -6 | -6 | -6 | -6 | -5 | -7.8 | -3.0 | | | | | | | | | | | | | | | | | | | | | | |
| 7-Mar | -5 | -4 | -2 | -2 | -2 | -2 | -2 | -1 | 0 | 1 | 2 | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 3 | 2 | 2 | 1 | 3 | 3 | 1.2 | 5.5 | | | | | | | | | | | | | | | | | | | | | | |
| 8-Mar | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4.3 | 5.4 | | | | | | | | | | | | | | | | | | | | | | |
| 9-Mar | 5 | 4 | 4 | 5 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 5 | 4 | 3 | 3 | 2 | 5.3 | 7.1 | | | | | | | | | | | | | | | | | | | | | | |
| 10-Mar | 0 | 0 | 0 | 0 | 0 | 0 | -1 | -2 | -1 | 1 | 2 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 1 | 1 | 0 | 0 | 0 | 1.3 | 4.2 | | | | | | | | | | | | | | | | | | | | | | |
| 11-Mar | 0 | 0 | 0 | -1 | -1 | 0 | -1 | -1 | -2 | -2 | -1 | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | -0.4 | 0.4 | | | | | | | | | | | | | | | | | | | | | | |
| 12-Mar | -1 | -2 | -3 | -4 | -4 | -4 | -4 | -4 | -4 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 1 | -1 | -3 | -4 | -7 | -1.2 | 2.8 | | | | | | | | | | | | | | | | | | | | | | |
| 13-Mar | -9 | -10 | -11 | -11 | -12 | -12 | -12 | -13 | -13 | -13 | -13 | -12 | -11 | -11 | -9 | -8 | -6 | -6 | -9 | -8 | -8 | -9 | -9 | -10 | -10.2 | -5.7 | | | | | | | | | | | | | | | | | | | | | | |
| 14-Mar | -12 | -12 | -12 | -13 | -13 | -13 | -12 | -12 | -10 | -5 | -3 | 0 | 0 | 2 | 3 | 2 | 1 | 0 | 0 | -1 | -1 | -1 | -2 | -3 | -4.9 | 2.7 | | | | | | | | | | | | | | | | | | | | | | |
| 15-Mar | -4 | -3 | -3 | -4 | -4 | -5 | -4 | -4 | -2 | -2 | -2 | -1 | 1 | 3 | 4 | 5 | 6 | 8 | 5 | 3 | 2 | 1 | 0 | -1 | -0.1 | 7.9 | | | | | | | | | | | | | | | | | | | | | | |
| 16-Mar | -1 | -1 | -1 | -2 | -2 | -2 | -2 | -2 | 0 | 2 | 4 | 5 | 5 | 6 | 7 | 7 | 7 | 6 | 4 | 2 | 3 | 2 | N | N | 2.1 | 6.9 | | | | | | | | | | | | | | | | | | | | | | |
| 17-Mar | N | N | N | N | 0 | -1 | -3 | -5 | -3 | -3 | -3 | -2 | -2 | -2 | -3 | -3 | -4 | -5 | -5 | -5 | -5 | -5 | -5 | -5 | -3.4 | -0.1 | | | | | | | | | | | | | | | | | | | | | | |
| 18-Mar | -6 | -6 | -7 | -7 | -7 | -7 | -7 | -8 | -9 | -9 | -8 | -8 | -7 | -6 | -5 | -5 | -5 | N | N | N | N | -8 | -9 | -10 | -7.5 | -4.8 | | | | | | | | | | | | | | | | | | | | | | |
| 19-Mar | -10 | -12 | -12 | -12 | -11 | -11 | -11 | -11 | -11 | -10 | -9 | -7 | -4 | -3 | -2 | -2 | N | N | N | N | N | N | N | N | - | -1.9 | | | | | | | | | | | | | | | | | | | | | | |
| 20-Mar | N | N | N | N | N | N | -9 | -9 | -10 | -9 | -9 | -9 | -8 | -8 | -7 | -7 | -7 | -6 | -7 | -9 | -8 | -8 | -10 | -10 | -8.3 | -6.0 | | | | | | | | | | | | | | | | | | | | | | |
| 21-Mar | -10 | -10 | -10 | -11 | -11 | -11 | -11 | -11 | -10 | -9 | -8 | -7 | -3 | -1 | -2 | -1 | -2 | -1 | -4 | -5 | -7 | -8 | -9 | -9 | -7.1 | -0.9 | | | | | | | | | | | | | | | | | | | | | | |
| 22-Mar | -10 | -11 | -14 | -13 | -14 | -15 | -15 | -14 | -12 | -11 | -10 | -9 | -8 | -8 | -7 | -6 | -5 | -5 | -5 | -8 | -8 | -8 | -8 | -7 | -9.5 | -4.6 | | | | | | | | | | | | | | | | | | | | | | |
| 23-Mar | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -6 | -6 | -5 | -4 | -3 | -3 | -4 | -3 | -4 | -6 | -7 | -8 | -8 | -8 | -6.2 | -3.0 | | | | | | | | | | | | | | | | | | | | | | |
| 24-Mar | -9 | -10 | -12 | -14 | -14 | -14 | -15 | -13 | -11 | -8 | -5 | -3 | 0 | 1 | 3 | 2 | 1 | 0 | 0 | 1 | 0 | -1 | -2 | -3 | -5.4 | 2.7 | | | | | | | | | | | | | | | | | | | | | | |
| 25-Mar | -5 | -4 | -5 | -6 | -8 | -8 | -8 | -7 | -6 | -4 | -1 | 3 | 5 | 4 | 7 | 6 | 7 | 6 | 6 | 4 | 3 | 3 | 2 | 2 | -0.1 | 7.2 | | | | | | | | | | | | | | | | | | | | | | |
| 26-Mar | 0 | 0 | 0 | -2 | -5 | -5 | -6 | -2 | 0 | 1 | 1 | 4 | 5 | 5 | 6 | 6 | 6 | 5 | 4 | 2 | 1 | 1 | 1 | 0 | 1.1 | 6.1 | | | | | | | | | | | | | | | | | | | | | | |
| 27-Mar | 0 | -1 | -1 | -2 | -2 | -3 | -6 | -4 | -1 | -1 | 2 | 3 | 4 | 5 | 6 | 6 | 8 | 7 | 5 | 5 | 4 | 4 | 3 | 2 | 1.7 | 7.6 | | | | | | | | | | | | | | | | | | | | | | |
| 28-Mar | 1 | 1 | 0 | -1 | -2 | -2 | -3 | -2 | 0 | 1 | 4 | 4 | 5 | 5 | 6 | 7 | 7 | 7 | 6 | 4 | 2 | 2 | 1 | 1 | 2.2 | 7.4 | | | | | | | | | | | | | | | | | | | | | | |
| 29-Mar | 0 | -1 | -1 | -1 | -1 | -3 | -2 | -2 | -1 | 1 | 2 | 4 | 6 | 8 | 10 | 9 | 8 | 7 | 6 | 4 | 3 | 3 | 2 | 2 | 2.6 | 9.8 | | | | | | | | | | | | | | | | | | | | | | |
| 30-Mar | 1 | 0 | -1 | -1 | 0 | 0 | -1 | -1 | 0 | 1 | 2 | 4 | 6 | 7 | 7 | 8 | 7 | 7 | 6 | 3 | 2 | 1 | 0 | 0 | 2.4 | 7.7 | | | | | | | | | | | | | | | | | | | | | | |
| 31-Mar | 0 | -1 | -1 | -1 | -2 | -3 | -2 | -2 | -1 | 2 | 4 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 5 | 3 | 2 | 0 | 1 | 2.2 | 7.0 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | -4.3 | -4.4 | -4.9 | -5.2 | -5.3 | -5.5 | -6.0 | -5.8 | -4.9 | -3.6 | -2.3 | -1.2 | 0.0 | 0.8 | 1.3 | 1.6 | 1.5 | 1.4 | 0.2 | -1.1 | -1.8 | -2.4 | -2.9 | -3.3 | Diurnal Average |
| | | | | | | | | | | | | | | | | | | | | | | | | 4.6 | 4.4 | 3.7 | 4.5 | 6.4 | 6.0 | 5.2 | 6.1 | 5.7 | 6.1 | 6.8 | 5.8 | 6.8 | 7.8 | 9.8 | 9.3 | 7.8 | 7.9 | 6.2 | 4.9 | 4.2 | 4.1 | 4.0 | 4.2 | Diurnal Maximum |
| N - Not Valid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Hourly Averages

External Temperature (ET) - °C

Beaverlodge - March 2012



Hourly Averages

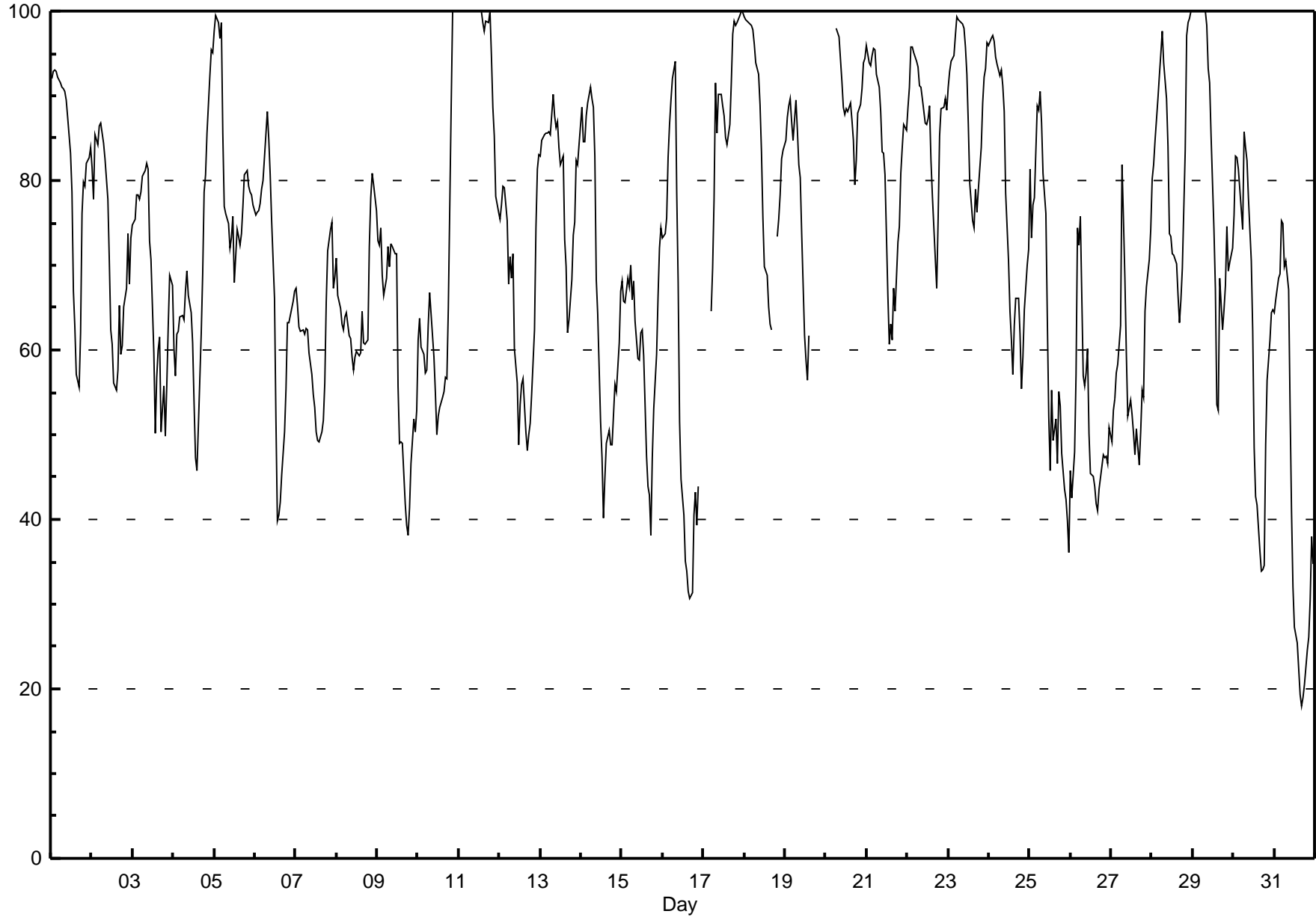
Relative Humidity (RH) - %

Beaverlodge - March 2012

| Number of Exceedences (AAQO): | | 1-hr: 0 | | 24-hr: 0 | | Hours in Service: | | 744 | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|-------|--|-------|-------------------|-------|---------------------------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|------|-------|-------|-------|---------------|-----------------|-------|
| Maximum Value: 100.0 % on Mar 10 21:00 | | Maximum Daily Average: 96.5 % on Mar 11 | | Hours of Data: | | 721 | | Hours of Missing Data: | | 23 | | | | | | | | | | | | | | | | | |
| Minimum Value: 18 % on Mar 31 17:00 | | Minimum Daily Average: 44.1 % on Mar 31 | | Hours of Calibration: | | 0 | | Percent Operational Time: | | 96.9 | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 83.5 % at hour 7 | | Minimum Diurnal Average: 57.8 % at hour 16 | | Percentiles: P ₁ = 25.8 P ₁₀ = 47.8 Q ₁ = 59.5 Median = 72.7 Q ₃ = 86.6 P ₉₀ = 95.8 P ₉₉ = 100.0 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 71.81 % | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 92 | 93 | 93 | 93 | 92 | 92 | 91 | 91 | 91 | 90 | 87 | 83 | 79 | 67 | 63 | 57 | 56 | 62 | 76 | 80 | 79 | 82 | 83 | 84 | 81.4 | 93.0 | |
| 2-Mar | 81 | 78 | 85 | 84 | 86 | 87 | 86 | 84 | 83 | 78 | 70 | 62 | 61 | 56 | 55 | 58 | 65 | 59 | 60 | 65 | 67 | 74 | 68 | 73 | 72.0 | 86.8 | |
| 3-Mar | 75 | 75 | 78 | 78 | 78 | 79 | 81 | 81 | 82 | 81 | 73 | 71 | 60 | 50 | 57 | 60 | 62 | 50 | 56 | 50 | 56 | 63 | 69 | 68 | 68.0 | 82.1 | |
| 4-Mar | 60 | 57 | 62 | 62 | 64 | 64 | 64 | 67 | 69 | 66 | 64 | 61 | 54 | 47 | 46 | 51 | 62 | 69 | 79 | 81 | 86 | 92 | 95 | 95 | 67.4 | 95.4 | |
| 5-Mar | 98 | 99 | 99 | 97 | 99 | 86 | 77 | 76 | 75 | 72 | 73 | 76 | 68 | 74 | 73 | 72 | 74 | 77 | 81 | 81 | 79 | 79 | 78 | 77 | 80.8 | 99.4 | |
| 6-Mar | 76 | 76 | 76 | 77 | 79 | 80 | 85 | 88 | 85 | 81 | 75 | 66 | 52 | 40 | 41 | 42 | 45 | 50 | 56 | 63 | 63 | 64 | 66 | 67 | 66.4 | 88.1 | |
| 7-Mar | 67 | 65 | 63 | 62 | 62 | 62 | 63 | 62 | 60 | 57 | 55 | 53 | 50 | 49 | 49 | 50 | 52 | 56 | 66 | 72 | 74 | 75 | 67 | 69 | 60.9 | 75.1 | |
| 8-Mar | 71 | 67 | 65 | 63 | 62 | 64 | 64 | 62 | 61 | 59 | 58 | 59 | 60 | 59 | 60 | 64 | 61 | 61 | 72 | 78 | 81 | 80 | 77 | 77 | 65.3 | 80.9 | |
| 9-Mar | 73 | 72 | 74 | 69 | 66 | 68 | 72 | 70 | 73 | 72 | 71 | 71 | 56 | 49 | 49 | 49 | 42 | 39 | 38 | 41 | 47 | 52 | 50 | 53 | 59.1 | 74.4 | |
| 10-Mar | 61 | 64 | 60 | 60 | 57 | 58 | 63 | 67 | 62 | 59 | 55 | 50 | 52 | 53 | 54 | 55 | 57 | 57 | 65 | 89 | 100 | 100 | 100 | 100 | 66.5 | 100.0 | |
| 11-Mar | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 98 | 99 | 99 | 100 | 95 | 89 | 85 | 78 | 76 | 96.5 | 100.0 | |
| 12-Mar | 75 | 77 | 79 | 79 | 75 | 68 | 71 | 68 | 71 | 60 | 56 | 49 | 54 | 56 | 57 | 50 | 48 | 50 | 51 | 55 | 62 | 74 | 81 | 83 | 64.7 | 83.0 | |
| 13-Mar | 83 | 85 | 85 | 86 | 86 | 86 | 85 | 90 | 88 | 86 | 87 | 84 | 82 | 83 | 73 | 70 | 62 | 64 | 68 | 74 | 75 | 82 | 82 | 84 | 80.4 | 90.2 | |
| 14-Mar | 89 | 85 | 85 | 88 | 89 | 91 | 90 | 89 | 83 | 68 | 64 | 51 | 47 | 40 | 45 | 49 | 51 | 49 | 49 | 52 | 56 | 55 | 61 | 67 | 66.3 | 91.0 | |
| 15-Mar | 68 | 66 | 66 | 68 | 67 | 70 | 66 | 68 | 63 | 59 | 59 | 62 | 62 | 59 | 48 | 44 | 43 | 38 | 47 | 53 | 59 | 66 | 72 | 74 | 60.4 | 74.4 | |
| 16-Mar | 73 | 74 | 76 | 83 | 87 | 89 | 92 | 94 | 79 | 68 | 51 | 45 | 41 | 35 | 34 | 32 | 31 | 31 | 41 | 43 | 39 | 44 | N | N | 58.2 | 94.0 | |
| 17-Mar | N | N | N | N | 65 | 70 | 78 | 92 | 86 | 90 | 90 | 89 | 88 | 85 | 84 | 87 | 92 | 97 | 99 | 98 | 99 | 99 | 100 | 100 | 89.3 | 100.0 | |
| 18-Mar | 99 | 99 | 99 | 99 | 98 | 98 | 96 | 94 | 93 | 89 | 83 | 76 | 70 | 69 | 65 | 63 | 62 | N | N | N | 73 | 75 | 78 | 83 | 84 | 83.9 | 99.2 |
| 19-Mar | 85 | 87 | 89 | 90 | 87 | 85 | 89 | 86 | 82 | 80 | 74 | 62 | 59 | 56 | 62 | N | N | N | N | N | N | N | N | N | -- | 89.6 | |
| 20-Mar | N | N | N | N | N | N | 98 | 98 | 97 | 92 | 89 | 88 | 88 | 88 | 89 | 87 | 85 | 79 | 82 | 88 | 89 | 91 | 94 | 94 | 89.8 | 97.9 | |
| 21-Mar | 96 | 94 | 94 | 95 | 96 | 95 | 92 | 91 | 88 | 83 | 83 | 81 | 66 | 61 | 63 | 61 | 67 | 65 | 73 | 75 | 81 | 84 | 87 | 86 | 81.5 | 95.9 | |
| 22-Mar | 89 | 91 | 96 | 96 | 95 | 94 | 93 | 91 | 91 | 90 | 87 | 87 | 87 | 89 | 82 | 78 | 71 | 67 | 76 | 85 | 88 | 89 | 90 | 88 | 87.1 | 95.8 | |
| 23-Mar | 91 | 93 | 94 | 95 | 97 | 99 | 99 | 99 | 98 | 98 | 96 | 93 | 87 | 80 | 75 | 74 | 79 | 76 | 79 | 84 | 89 | 92 | 93 | 96 | 89.9 | 99.3 | |
| 24-Mar | 96 | 97 | 97 | 96 | 95 | 94 | 92 | 93 | 91 | 88 | 78 | 71 | 65 | 61 | 57 | 63 | 66 | 66 | 62 | 55 | 59 | 65 | 70 | 72 | 77.0 | 97.1 | |
| 25-Mar | 81 | 73 | 77 | 78 | 89 | 88 | 91 | 87 | 81 | 76 | 64 | 52 | 46 | 55 | 49 | 52 | 47 | 55 | 53 | 48 | 44 | 42 | 40 | 36 | 62.7 | 90.5 | |
| 26-Mar | 46 | 43 | 48 | 57 | 74 | 72 | 76 | 57 | 56 | 57 | 60 | 50 | 45 | 45 | 44 | 42 | 41 | 44 | 46 | 48 | 47 | 48 | 47 | 51 | 51.8 | 75.7 | |
| 27-Mar | 49 | 53 | 54 | 57 | 58 | 63 | 82 | 75 | 68 | 60 | 52 | 54 | 52 | 50 | 48 | 51 | 46 | 50 | 55 | 54 | 65 | 67 | 71 | 74 | 58.8 | 81.9 | |
| 28-Mar | 80 | 82 | 85 | 90 | 92 | 95 | 98 | 94 | 90 | 84 | 74 | 73 | 71 | 71 | 70 | 66 | 63 | 66 | 70 | 83 | 97 | 99 | 99 | 100 | 83.0 | 100.0 | |
| 29-Mar | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 98 | 93 | 92 | 85 | 74 | 67 | 54 | 53 | 68 | 62 | 65 | 68 | 75 | 69 | 70 | 72 | 81.9 | 100.0 |
| 30-Mar | 76 | 83 | 83 | 81 | 77 | 74 | 86 | 84 | 82 | 78 | 70 | 62 | 49 | 43 | 42 | 36 | 34 | 34 | 35 | 49 | 57 | 61 | 64 | 65 | 62.7 | 85.8 | |
| 31-Mar | 64 | 66 | 68 | 69 | 75 | 75 | 70 | 70 | 67 | 53 | 41 | 32 | 27 | 25 | 22 | 19 | 18 | 19 | 21 | 25 | 26 | 30 | 38 | 35 | 44.1 | 75.3 | |
| | | 79.1 | 79.1 | 80.3 | 81.1 | 81.6 | 81.5 | 83.5 | 82.8 | 80.4 | 76.4 | 72.0 | 67.7 | 62.9 | 60.2 | 58.3 | 57.8 | 58.2 | 58.4 | 62.3 | 66.6 | 70.0 | 72.8 | 75.0 | 75.9 | Diurnal Average | |
| | | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 98.6 | 97.7 | 98.9 | 98.6 | 100.0 | 98.2 | 100.0 | 100.0 | 100.0 | 100.0 | Diurnal Maximum | |
| N - Not Valid | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Hourly Averages

Relative Humidity (RH) - %
Beaverlodge - March 2012



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - March 2012

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1 Spd | 10 | 10 | 9 | 11 | 13 | 14 | 13 | 10 | 9 | 8 | 8 | 5 | 4 | 0 | 1 | 4 | 6 | 4 | 4 | 4 | 4 | 2 | 3 | 4 | 4.3 | 13.8 |
| Dir | 11 | 13 | 357 | 317 | 319 | 324 | 327 | 332 | 334 | 340 | 340 | 336 | 18 | 339 | 180 | 100 | 88 | 74 | 88 | 79 | 111 | 143 | 157 | 116 | 353 | 324 |
| 2 Spd | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 20 | 37 | 41 | 38 | 29 | 25 | 22 | 12 | 13 | 1 | 6 | 2 | 8.9 | 41.4 |
| Dir | 154 | 148 | 62 | 73 | 90 | 104 | 100 | 96 | 134 | 128 | 101 | 217 | 256 | 262 | 267 | 268 | 260 | 271 | 279 | 259 | 268 | 160 | 260 | 111 | 262 | 267 |
| 3 Spd | 4 | 2 | 2 | 5 | 4 | 3 | 4 | 3 | 3 | 5 | 20 | 28 | 25 | 22 | 26 | 27 | 25 | 26 | 16 | 25 | 16 | 11 | 14 | 11 | 11.1 | 27.9 |
| Dir | 67 | 194 | 240 | 255 | 175 | 124 | 73 | 74 | 152 | 358 | 283 | 269 | 282 | 303 | 324 | 300 | 279 | 287 | 280 | 268 | 252 | 249 | 249 | 265 | 281 | 269 |
| 4 Spd | 19 | 22 | 15 | 14 | 9 | 13 | 7 | 12 | 11 | 11 | 12 | 12 | 14 | 13 | 14 | 17 | 16 | 13 | 12 | 10 | 8 | 2 | 4 | 3 | 11.2 | 21.6 |
| Dir | 257 | 253 | 244 | 250 | 240 | 237 | 246 | 243 | 242 | 231 | 239 | 253 | 277 | 281 | 278 | 246 | 232 | 238 | 226 | 224 | 209 | 178 | 202 | 188 | 245 | 253 |
| 5 Spd | 3 | 3 | 2 | 2 | 3 | 2 | 8 | 7 | 6 | 12 | 15 | 16 | 19 | 17 | 15 | 17 | 18 | 16 | 13 | 13 | 10 | 12 | 13 | 11 | 9.5 | 18.8 |
| Dir | 169 | 80 | 89 | 260 | 43 | 303 | 295 | 294 | 302 | 310 | 317 | 318 | 327 | 352 | 352 | 336 | 336 | 323 | 324 | 327 | 332 | 327 | 321 | 310 | 327 | 327 |
| 6 Spd | 11 | 9 | 9 | 3 | 3 | 3 | 5 | 6 | 7 | 5 | 8 | 11 | 15 | 31 | 34 | 35 | 31 | 30 | 27 | 20 | 19 | 19 | 21 | 20 | 12.8 | 34.9 |
| Dir | 305 | 315 | 313 | 316 | 51 | 62 | 96 | 91 | 119 | 156 | 202 | 219 | 234 | 258 | 264 | 262 | 249 | 245 | 250 | 248 | 251 | 247 | 248 | 245 | 252 | 262 |
| 7 Spd | 14 | 12 | 30 | 27 | 23 | 25 | 19 | 22 | 32 | 33 | 40 | 39 | 43 | 43 | 40 | 42 | 40 | 31 | 22 | 14 | 8 | 0 | 2 | 11 | 25.3 | 43.3 |
| Dir | 239 | 246 | 259 | 259 | 263 | 267 | 272 | 272 | 266 | 266 | 265 | 265 | 267 | 266 | 265 | 262 | 256 | 251 | 247 | 238 | 232 | 40 | 289 | 247 | 261 | 266 |
| 8 Spd | 18 | 24 | 20 | 30 | 38 | 25 | 25 | 32 | 40 | 27 | 24 | 15 | 12 | 9 | 6 | 4 | 6 | 6 | 7 | 8 | 7 | 9 | 8 | 4 | 12.1 | 39.8 |
| Dir | 242 | 252 | 249 | 249 | 256 | 254 | 250 | 255 | 263 | 262 | 260 | 242 | 234 | 237 | 197 | 115 | 77 | 90 | 99 | 72 | 81 | 100 | 116 | 140 | 248 | 263 |
| 9 Spd | 11 | 14 | 6 | 2 | 25 | 14 | 20 | 33 | 28 | 26 | 29 | 38 | 39 | 41 | 40 | 47 | 40 | 36 | 39 | 33 | 20 | 23 | 28 | 12 | 25.0 | 47.1 |
| Dir | 191 | 183 | 168 | 168 | 230 | 220 | 219 | 233 | 231 | 236 | 246 | 257 | 269 | 266 | 263 | 255 | 261 | 267 | 265 | 266 | 265 | 264 | 259 | 273 | 251 | 255 |
| 10 Spd | 14 | 16 | 10 | 7 | 11 | 13 | 12 | 11 | 8 | 2 | 6 | 6 | 10 | 10 | 12 | 8 | 6 | 6 | 6 | 6 | 6 | 3 | 5 | 6 | 2.8 | 15.7 |
| Dir | 262 | 252 | 245 | 252 | 272 | 261 | 235 | 218 | 239 | 152 | 194 | 193 | 170 | 126 | 118 | 109 | 83 | 50 | 39 | 74 | 29 | 321 | 306 | 99 | 219 | 252 |
| 11 Spd | 6 | 5 | 7 | 6 | 6 | 3 | 4 | 7 | 6 | 8 | 5 | 2 | 5 | 4 | 2 | 5 | 5 | 5 | 7 | 8 | 3 | 8 | 6 | 17 | 1.9 | 17.1 |
| Dir | 121 | 135 | 103 | 107 | 61 | 53 | 200 | 158 | 119 | 125 | 115 | 185 | 21 | 327 | 59 | 133 | 138 | 303 | 273 | 272 | 158 | 238 | 209 | 235 | 165 | 235 |
| 12 Spd | 19 | 18 | 17 | 16 | 6 | 5 | 3 | 4 | 5 | 4 | 8 | 15 | 21 | 22 | 24 | 24 | 26 | 23 | 3 | 6 | 3 | 15 | 16 | 23 | 3.3 | 25.6 |
| Dir | 233 | 228 | 233 | 233 | 250 | 273 | 38 | 55 | 59 | 86 | 123 | 108 | 92 | 80 | 84 | 80 | 75 | 72 | 55 | 26 | 346 | 314 | 320 | 312 | 71 | 75 |
| 13 Spd | 22 | 21 | 18 | 15 | 19 | 19 | 19 | 21 | 16 | 14 | 12 | 14 | 13 | 9 | 8 | 8 | 4 | 5 | 5 | 5 | 3 | 1 | 8 | 10 | 10.9 | 22.0 |
| Dir | 319 | 322 | 323 | 323 | 326 | 324 | 322 | 313 | 319 | 320 | 316 | 315 | 317 | 317 | 323 | 313 | 49 | 106 | 67 | 34 | 24 | 226 | 332 | 11 | 326 | 319 |
| 14 Spd | 10 | 4 | 4 | 6 | 3 | 3 | 3 | 3 | 3 | 0 | 4 | 5 | 9 | 7 | 11 | 19 | 18 | 20 | 21 | 10 | 5 | 3 | 2 | 2 | 5.6 | 21.2 |
| Dir | 16 | 350 | 329 | 50 | 124 | 108 | 84 | 119 | 76 | 85 | 80 | 174 | 154 | 150 | 118 | 93 | 81 | 85 | 96 | 123 | 130 | 78 | 179 | 133 | 96 | 96 |
| 15 Spd | 4 | 5 | 4 | 6 | 4 | 5 | 6 | 9 | 16 | 24 | 21 | 17 | 16 | 14 | 12 | 3 | 3 | 1 | 4 | 6 | 4 | 5 | 5 | 7 | 6.7 | 23.6 |
| Dir | 70 | 60 | 95 | 77 | 110 | 85 | 95 | 116 | 107 | 105 | 99 | 118 | 92 | 97 | 93 | 14 | 147 | 96 | 323 | 9 | 17 | 49 | 324 | 2 | 89 | 105 |
| 16 Spd | 11 | 5 | 4 | 5 | 5 | 6 | 4 | 1 | 8 | 11 | 18 | 28 | 27 | 30 | 32 | 29 | 26 | 19 | 16 | 11 | 7 | 6 | 5 | 2 | 12.0 | 31.6 |
| Dir | 319 | 1 | 300 | 171 | 194 | 220 | 220 | 242 | 241 | 228 | 235 | 238 | 241 | 239 | 238 | 243 | 246 | 246 | 242 | 250 | 276 | 229 | 264 | 117 | 242 | 238 |
| 17 Spd | 2 | 4 | 3 | 10 | 5 | 5 | 12 | 11 | 8 | 17 | 15 | 17 | 18 | 17 | 16 | 15 | 16 | 15 | 14 | 11 | 9 | 10 | 8 | 9 | 8.9 | 17.7 |
| Dir | 107 | 41 | 337 | 332 | 352 | 20 | 321 | 314 | 56 | 66 | 55 | 55 | 45 | 53 | 36 | 19 | 15 | 18 | 13 | 2 | 336 | 313 | 314 | 336 | 18 | 45 |
| 18 Spd | 10 | 7 | 6 | 7 | 12 | 13 | 15 | 15 | 12 | 15 | 15 | 16 | 15 | 12 | 11 | 12 | 12 | 10 | 7 | 6 | 4 | 8 | 11 | 4 | 9.5 | 15.9 |
| Dir | 348 | 326 | 316 | 290 | 300 | 310 | 309 | 309 | 310 | 306 | 299 | 305 | 317 | 332 | 331 | 332 | 1 | 5 | 31 | 27 | 9 | 337 | 29 | 328 | 326 | 305 |
| 19 Spd | 9 | 1 | 5 | 2 | 3 | 1 | 9 | 7 | 10 | 11 | 6 | 4 | 1 | 1 | 4 | 5 | 10 | 11 | 6 | 4 | 8 | 4 | 2 | 5 | 2.8 | 11.4 |
| Dir | 7 | 247 | 277 | 111 | 85 | 351 | 319 | 347 | 16 | 27 | 23 | 74 | 132 | 149 | 76 | 45 | 133 | 134 | 134 | 106 | 54 | 79 | 78 | 70 | 52 | 27 |
| 20 Spd | 2 | 6 | 5 | 5 | 12 | 16 | 16 | 13 | 10 | 7 | 13 | 14 | 8 | 9 | 11 | 9 | 9 | 7 | 4 | 8 | 6 | 10 | 10 | 8 | 7.1 | 16.0 |
| Dir | 178 | 109 | 90 | 86 | 87 | 84 | 95 | 86 | 26 | 67 | 43 | 39 | 3 | 341 | 11 | 23 | 18 | 32 | 117 | 104 | 96 | 110 | 98 | 85 | 64 | 84 |
| 21 Spd | 9 | 8 | 10 | 10 | 8 | 7 | 9 | 5 | 5 | 3 | 12 | 8 | 2 | 3 | 4 | 2 | 7 | 4 | 12 | 7 | 2 | 8 | 9 | 6 | 3.6 | 12.1 |
| Dir | 73 | 72 | 89 | 101 | 99 | 119 | 116 | 129 | 150 | 154 | 120 | 150 | 125 | 39 | 51 | 75 | 20 | 61 | 105 | 39 | 282 | 282 | 287 | 285 | 94 | 120 |
| 22 Spd | 2 | 4 | 1 | 2 | 1 | 3 | 7 | 1 | 9 | 10 | 8 | 9 | 10 | 9 | 11 | 8 | 8 | 8 | 10 | 9 | 4 | 2 | 3 | 4 | 4.8 | 10.5 |
| Dir | 313 | 266 | 288 | 356 | 287 | 351 | 336 | 341 | 11 | 11 | 347 | 347 | 346 | 352 | 349 | 30 | 33 | 27 | 65 | 61 | 13 | 271 | 317 | 12 | 4 | 349 |

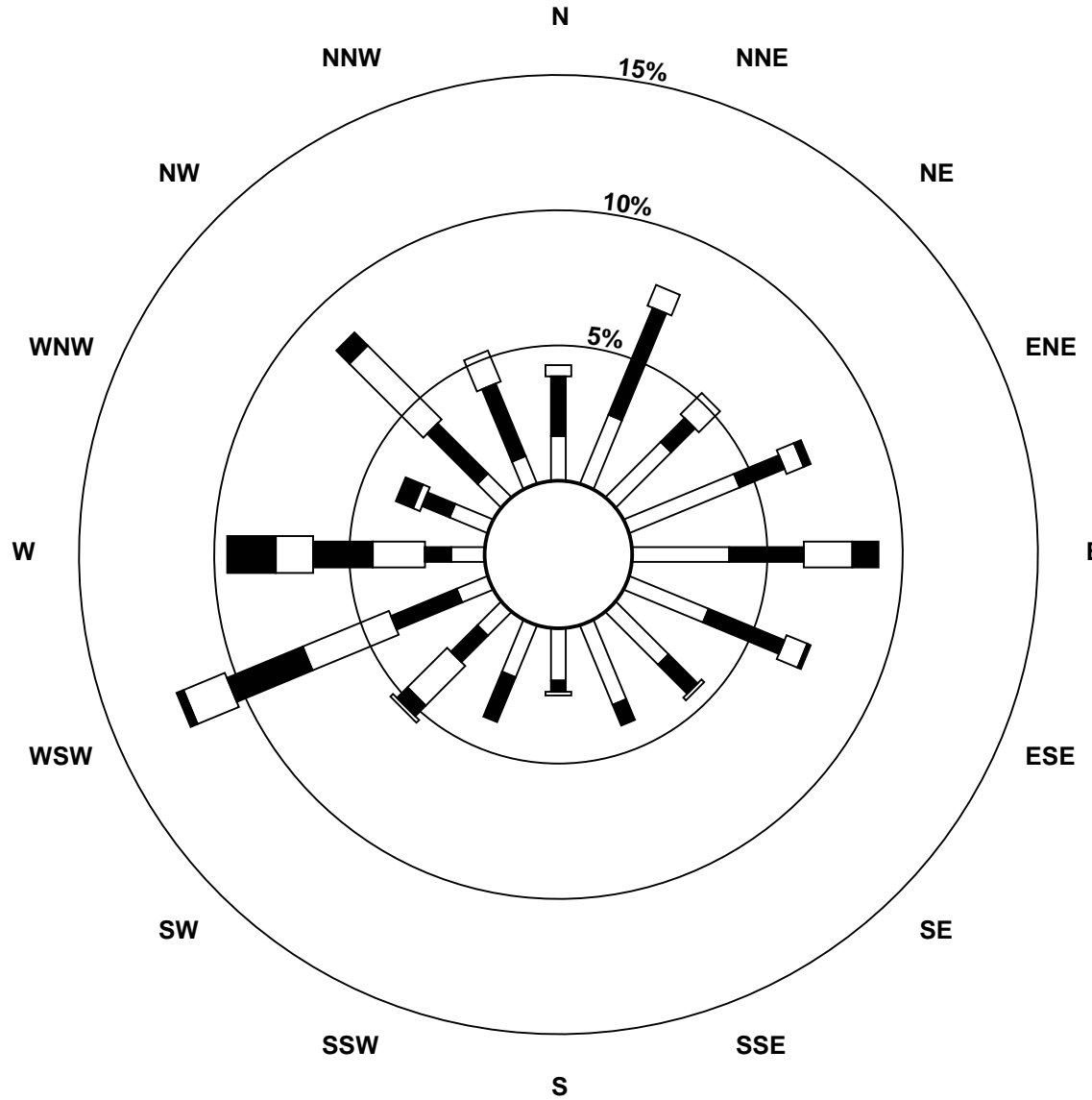
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - March 2012

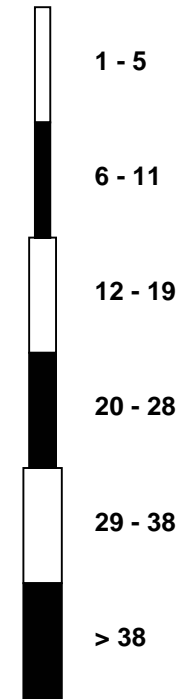
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--|-------------------------------|---|----------|----------|----------|------|-------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 23 Spd | 4 | 6 | 7 | 5 | 5 | 8 | 8 | 5 | 2 | 9 | 11 | 8 | 7 | 6 | 5 | 6 | 12 | 11 | 5 | 5 | 1 | 1 | 1 | 2 | 4.6 | 11.8 |
| Dir | 21 | 32 | 44 | 51 | 38 | 105 | 89 | 32 | 45 | 105 | 96 | 104 | 117 | 80 | 71 | 130 | 126 | 95 | 43 | 13 | 30 | 271 | 115 | 281 | 81 | 126 |
| 24 Spd | 2 | 2 | 4 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 4 | 6 | 14 | 16 | 10 | 11 | 9 | 9 | 6 | 3.2 | 16.2 |
| Dir | 62 | 84 | 229 | 23 | 30 | 29 | 13 | 50 | 206 | 106 | 146 | 129 | 143 | 128 | 152 | 250 | 359 | 342 | 33 | 355 | 24 | 20 | 331 | 21 | 14 | 33 |
| 25 Spd | 5 | 0 | 1 | 3 | 3 | 3 | 2 | 1 | 1 | 3 | 2 | 2 | 2 | 2 | 5 | 4 | 6 | 3 | 5 | 7 | 10 | 9 | 7 | 0.4 | 9.7 | |
| Dir | 78 | 275 | 99 | 62 | 210 | 120 | 128 | 109 | 197 | 180 | 120 | 115 | 37 | 268 | 147 | 23 | 163 | 161 | 159 | 287 | 351 | 319 | 317 | 328 | 360 | 319 |
| 26 Spd | 2 | 7 | 7 | 4 | 4 | 2 | 5 | 8 | 13 | 3 | 5 | 7 | 17 | 18 | 17 | 17 | 16 | 17 | 14 | 13 | 13 | 11 | 4 | 2 | 6.9 | 18.2 |
| Dir | 337 | 325 | 354 | 359 | 189 | 207 | 8 | 351 | 14 | 60 | 190 | 116 | 92 | 88 | 88 | 89 | 70 | 67 | 60 | 55 | 59 | 73 | 74 | 249 | 65 | 88 |
| 27 Spd | 0 | 3 | 4 | 5 | 2 | 1 | 3 | 3 | 0 | 6 | 1 | 3 | 5 | 3 | 4 | 6 | 3 | 7 | 9 | 2 | 7 | 8 | 5 | 3 | 1.3 | 9.2 |
| Dir | 277 | 226 | 153 | 86 | 206 | 35 | 285 | 320 | 13 | 21 | 186 | 200 | 152 | 93 | 70 | 28 | 32 | 17 | 21 | 292 | 14 | 75 | 195 | 234 | 46 | 21 |
| 28 Spd | 4 | 3 | 4 | 4 | 2 | 3 | 5 | 2 | 3 | 6 | 1 | 7 | 8 | 6 | 5 | 5 | 11 | 10 | 8 | 20 | 10 | 10 | 5 | 5 | 0.9 | 20.2 |
| Dir | 75 | 91 | 157 | 203 | 208 | 327 | 73 | 126 | 164 | 111 | 86 | 139 | 140 | 130 | 10 | 72 | 39 | 52 | 32 | 251 | 250 | 16 | 313 | 231 | 82 | 251 |
| 29 Spd | 5 | 5 | 3 | 4 | 5 | 3 | 2 | 2 | 4 | 1 | 3 | 5 | 8 | 6 | 6 | 8 | 7 | 10 | 9 | 3 | 5 | 6 | 5 | 6 | 1.6 | 10.0 |
| Dir | 91 | 83 | 133 | 109 | 116 | 157 | 163 | 245 | 282 | 269 | 247 | 117 | 138 | 133 | 75 | 87 | 325 | 251 | 274 | 227 | 152 | 219 | 198 | 227 | 168 | 251 |
| 30 Spd | 6 | 2 | 8 | 1 | 2 | 5 | 5 | 2 | 6 | 6 | 12 | 12 | 18 | 16 | 10 | 21 | 21 | 25 | 22 | 16 | 17 | 15 | 9 | 8 | 9.6 | 25.0 |
| Dir | 193 | 101 | 197 | 48 | 242 | 40 | 176 | 173 | 208 | 202 | 221 | 223 | 229 | 239 | 258 | 257 | 266 | 262 | 258 | 243 | 242 | 245 | 239 | 256 | 241 | 262 |
| 31 Spd | 5 | 9 | 6 | 6 | 7 | 2 | 5 | 4 | 10 | 22 | 24 | 23 | 23 | 17 | 19 | 20 | 17 | 17 | 10 | 2 | 2 | 4 | 4 | 3 | 9.1 | 23.9 |
| Dir | 234 | 239 | 205 | 208 | 189 | 201 | 240 | 201 | 203 | 240 | 248 | 252 | 272 | 275 | 270 | 263 | 259 | 261 | 283 | 1 | 13 | 17 | 57 | 68 | 253 | 248 |
| Spd | 2.5 | 2.7 | 2.8 | 2.4 | 3.1 | 2.2 | 2.5 | 3.2 | 3.1 | 2.1 | 4.0 | 4.9 | 4.9 | 5.5 | 4.9 | 5.5 | 4.1 | 4.0 | 3.2 | 3.5 | 2.4 | 2.5 | 3.8 | 3.1 | Diurnal Average | |
| Dir | 285 | 270 | 263 | 268 | 260 | 279 | 282 | 273 | 272 | 265 | 259 | 252 | 267 | 276 | 289 | 281 | 284 | 291 | 294 | 286 | 296 | 298 | 282 | 286 | Diurnal Maximum | |
| Spd | 22.0 | 24.4 | 30.3 | 29.9 | 38.4 | 25.1 | 25.1 | 33.4 | 39.8 | 33.5 | 39.5 | 39.1 | 43.0 | 43.3 | 41.4 | 47.1 | 40.4 | 35.6 | 38.6 | 33.1 | 20.2 | 22.6 | 28.4 | 22.6 | Diurnal Maximum | |
| Dir | 319 | 252 | 259 | 249 | 256 | 254 | 250 | 233 | 263 | 266 | 265 | 265 | 267 | 266 | 267 | 255 | 261 | 267 | 265 | 266 | 265 | 264 | 259 | 312 | Diurnal Maximum | |
| Maximum Speed Value: 47 km/h on Mar 9 16:00 | | Minimum Speed Value: 0 km/h on Mar 25 02:00 | | | | | | | | | | Hours in Service: 744 | | | | | | | | | | | | | | |
| Maximum Daily Speed Average: 25.3 km/h on Mar 9 | | Minimum Daily Speed Average: 0.4 km/h on Mar 25 | | | | | | | | | | Hours of Data: 744 | | | | | | | | | | | | | | |
| Maximum Diurnal Speed Average: 5.5 km/h at hour 14 | | Minimum Diurnal Speed Average: 2.1 km/h at hour 10 | | | | | | | | | | Hours of Missing Data: 0 | | | | | | | | | | | | | | |
| Monthly Average Velocity: 3.37 km/h 277.0 deg | | Speed Percentiles: P ₁ = 0.6 P ₁₀ = 2.2 Q ₁ = 3.9 Median = 7.6 Q ₃ = 14.2 P ₉₀ = 22.2 P ₉₉ = 39.5 | | | | | | | | | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | |
| All monthly, daily, and diurnal averages have been calculated using vector methods | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequency Distribution | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Speed Range (km/h) | | | | | | | | | | | | | | | | | | | | | | | | |
| Direction | 0 to 5 | 5 to 11 | 11 to 19 | 19 to 28 | 28 to 38 | > 38 | Total | | | | | | | | | | | | | | | | | | | |
| North | 27 | 38 | 11 | 0 | 0 | 0 | 76 | | | | | | | | | | | | | | | | | | | |
| NorthEast | 38 | 34 | 14 | 0 | 0 | 0 | 86 | | | | | | | | | | | | | | | | | | | |
| East | 54 | 45 | 19 | 10 | 0 | 0 | 128 | | | | | | | | | | | | | | | | | | | |
| SouthEast | 48 | 28 | 4 | 0 | 0 | 0 | 80 | | | | | | | | | | | | | | | | | | | |
| South | 28 | 18 | 1 | 0 | 0 | 0 | 47 | | | | | | | | | | | | | | | | | | | |
| SouthWest | 20 | 25 | 37 | 9 | 7 | 0 | 98 | | | | | | | | | | | | | | | | | | | |
| West | 21 | 20 | 19 | 38 | 16 | 17 | 131 | | | | | | | | | | | | | | | | | | | |
| NorthWest | 16 | 35 | 38 | 9 | 0 | 0 | 98 | | | | | | | | | | | | | | | | | | | |
| Total | 252 | 243 | 143 | 66 | 23 | 17 | 744 | | | | | | | | | | | | | | | | | | | |

Wind Rose

Wind Speed (WS) (km/h)
Beaverlodge - March 2012



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - March 2012

| | | |
|---|---|---------------------------------|
| Maximum Speed: 48 km/h on Mar 9 16:00 | Maximum Daily Speed Average: 27.1 km/h on Mar 9 | Hours in Service: 744 |
| Minimum Speed: 1 km/h on Mar 14 10:00 | Minimum Daily Speed Average: 4.6 km/h on Mar 25 | Hours of Data: 744 |
| Maximum Diurnal Speed Average: 15.7 km/h at hour 16 | Minimum Diurnal Speed Average: 7.9 km/h at hour 24 | Hours of Missing Data: 0 |
| Monthly Average Speed: 10.84 km/h | Percentiles: P ₁ = 2.1 P ₁₀ = 3.3 Q ₁ = 4.8 Median = 8.1 Q ₃ = 14.3 P ₉₀ = 22.6 P ₉₉ = 39.9 | Percent Operational Time: 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 10 | 10 | 9 | 11 | 13 | 14 | 13 | 10 | 9 | 8 | 8 | 6 | 5 | 3 | 3 | 4 | 6 | 4 | 4 | 4 | 5 | 3 | 3 | 4 | 7.1 | 13.8 |
| 2-Mar | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 20 | 38 | 42 | 39 | 29 | 25 | 22 | 12 | 13 | 5 | 7 | 2 | 12.3 | 41.6 |
| 3-Mar | 4 | 4 | 4 | 6 | 4 | 3 | 4 | 3 | 3 | 7 | 20 | 28 | 25 | 22 | 26 | 27 | 25 | 26 | 16 | 25 | 16 | 11 | 14 | 11 | 14.1 | 28.0 |
| 4-Mar | 19 | 22 | 15 | 14 | 9 | 13 | 7 | 12 | 11 | 11 | 12 | 12 | 15 | 14 | 15 | 17 | 16 | 13 | 12 | 10 | 8 | 4 | 5 | 3 | 12.1 | 21.8 |
| 5-Mar | 4 | 3 | 3 | 3 | 3 | 4 | 8 | 7 | 6 | 12 | 15 | 16 | 19 | 18 | 16 | 18 | 18 | 16 | 13 | 13 | 10 | 12 | 13 | 11 | 10.9 | 18.9 |
| 6-Mar | 12 | 9 | 9 | 3 | 3 | 3 | 5 | 6 | 8 | 5 | 8 | 11 | 15 | 32 | 34 | 35 | 31 | 30 | 27 | 20 | 20 | 19 | 21 | 20 | 16.1 | 35.1 |
| 7-Mar | 14 | 13 | 30 | 27 | 23 | 25 | 19 | 22 | 32 | 34 | 40 | 39 | 43 | 43 | 40 | 42 | 40 | 32 | 22 | 15 | 8 | 3 | 3 | 11 | 25.9 | 43.4 |
| 8-Mar | 18 | 25 | 20 | 30 | 39 | 25 | 25 | 32 | 40 | 27 | 24 | 15 | 12 | 9 | 7 | 5 | 6 | 6 | 7 | 8 | 7 | 9 | 8 | 4 | 17.0 | 39.9 |
| 9-Mar | 11 | 14 | 7 | 4 | 25 | 14 | 20 | 33 | 28 | 26 | 30 | 38 | 39 | 42 | 40 | 48 | 41 | 36 | 39 | 33 | 20 | 23 | 29 | 12 | 27.1 | 47.5 |
| 10-Mar | 15 | 16 | 11 | 7 | 12 | 13 | 12 | 12 | 9 | 3 | 6 | 7 | 11 | 11 | 12 | 8 | 6 | 6 | 6 | 7 | 6 | 4 | 5 | 6 | 8.8 | 15.8 |
| 11-Mar | 6 | 5 | 7 | 7 | 7 | 4 | 4 | 8 | 7 | 8 | 5 | 3 | 6 | 4 | 3 | 6 | 7 | 9 | 8 | 9 | 8 | 9 | 8 | 17 | 6.8 | 17.4 |
| 12-Mar | 19 | 18 | 17 | 16 | 7 | 7 | 5 | 5 | 6 | 4 | 8 | 15 | 21 | 22 | 24 | 24 | 26 | 23 | 6 | 7 | 5 | 15 | 16 | 23 | 14.1 | 25.6 |
| 13-Mar | 22 | 21 | 18 | 16 | 20 | 20 | 19 | 21 | 16 | 14 | 12 | 14 | 13 | 10 | 8 | 8 | 5 | 6 | 5 | 5 | 3 | 3 | 8 | 10 | 12.4 | 22.1 |
| 14-Mar | 10 | 4 | 5 | 6 | 3 | 4 | 3 | 3 | 3 | 1 | 4 | 5 | 9 | 8 | 11 | 19 | 19 | 20 | 21 | 11 | 5 | 4 | 2 | 3 | 7.7 | 21.3 |
| 15-Mar | 4 | 5 | 4 | 6 | 6 | 6 | 6 | 9 | 17 | 24 | 21 | 17 | 17 | 14 | 13 | 6 | 5 | 2 | 4 | 7 | 6 | 6 | 9 | 9 | 9.3 | 23.6 |
| 16-Mar | 12 | 6 | 5 | 5 | 5 | 6 | 6 | 3 | 8 | 11 | 19 | 28 | 27 | 30 | 32 | 29 | 26 | 19 | 16 | 11 | 7 | 6 | 6 | 3 | 13.6 | 31.8 |
| 17-Mar | 3 | 5 | 3 | 10 | 8 | 5 | 12 | 11 | 8 | 17 | 15 | 17 | 18 | 17 | 16 | 15 | 16 | 15 | 14 | 12 | 10 | 10 | 8 | 10 | 11.5 | 17.9 |
| 18-Mar | 10 | 7 | 7 | 7 | 12 | 13 | 15 | 15 | 13 | 15 | 16 | 16 | 16 | 12 | 11 | 12 | 13 | 11 | 8 | 7 | 5 | 9 | 11 | 6 | 11.0 | 16.1 |
| 19-Mar | 10 | 7 | 5 | 3 | 3 | 3 | 9 | 8 | 10 | 12 | 6 | 4 | 3 | 3 | 5 | 5 | 10 | 11 | 6 | 4 | 8 | 5 | 4 | 5 | 6.3 | 11.5 |
| 20-Mar | 3 | 6 | 5 | 5 | 12 | 16 | 16 | 13 | 11 | 9 | 14 | 14 | 9 | 10 | 11 | 9 | 9 | 8 | 6 | 8 | 6 | 10 | 10 | 8 | 9.5 | 16.1 |
| 21-Mar | 9 | 8 | 11 | 10 | 8 | 7 | 9 | 5 | 5 | 6 | 12 | 8 | 3 | 4 | 4 | 3 | 7 | 7 | 14 | 7 | 5 | 8 | 9 | 7 | 7.4 | 13.8 |
| 22-Mar | 3 | 4 | 2 | 4 | 3 | 4 | 7 | 2 | 9 | 10 | 8 | 10 | 10 | 9 | 11 | 9 | 8 | 8 | 10 | 9 | 5 | 3 | 3 | 4 | 6.6 | 10.8 |
| 23-Mar | 4 | 6 | 7 | 5 | 5 | 8 | 8 | 6 | 3 | 9 | 12 | 9 | 7 | 7 | 6 | 7 | 12 | 11 | 6 | 6 | 3 | 2 | 2 | 3 | 6.4 | 12.3 |
| 24-Mar | 4 | 4 | 4 | 3 | 5 | 2 | 3 | 2 | 3 | 1 | 4 | 3 | 2 | 3 | 3 | 4 | 10 | 16 | 16 | 13 | 12 | 10 | 9 | 9 | 6.0 | 16.4 |
| 25-Mar | 5 | 2 | 2 | 4 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 5 | 3 | 7 | 5 | 7 | 3 | 8 | 8 | 10 | 9 | 7 | 4.6 | 9.8 |
| 26-Mar | 4 | 8 | 8 | 6 | 5 | 4 | 5 | 9 | 13 | 7 | 6 | 8 | 17 | 18 | 17 | 17 | 16 | 17 | 14 | 13 | 13 | 11 | 5 | 4 | 10.2 | 18.5 |
| 27-Mar | 4 | 4 | 5 | 5 | 2 | 2 | 7 | 4 | 3 | 6 | 4 | 4 | 5 | 5 | 5 | 6 | 4 | 8 | 9 | 4 | 8 | 9 | 6 | 6 | 5.2 | 9.3 |
| 28-Mar | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 3 | 3 | 6 | 3 | 8 | 9 | 7 | 6 | 6 | 11 | 10 | 8 | 22 | 12 | 11 | 10 | 5 | 7.0 | 21.7 |
| 29-Mar | 5 | 6 | 4 | 4 | 5 | 4 | 3 | 3 | 4 | 3 | 4 | 5 | 8 | 7 | 7 | 9 | 9 | 12 | 9 | 5 | 5 | 6 | 6 | 6 | 5.8 | 11.8 |
| 30-Mar | 7 | 4 | 9 | 4 | 4 | 5 | 6 | 3 | 6 | 6 | 12 | 12 | 18 | 16 | 12 | 21 | 21 | 25 | 22 | 16 | 17 | 15 | 9 | 9 | 11.7 | 25.1 |
| 31-Mar | 7 | 10 | 7 | 6 | 7 | 4 | 5 | 5 | 10 | 23 | 24 | 24 | 23 | 18 | 20 | 20 | 18 | 18 | 11 | 3 | 3 | 4 | 4 | 3 | 11.6 | 24.1 |
| | 8.5 | 8.5 | 8.1 | 7.9 | 8.6 | 8.1 | 8.8 | 9.1 | 10.1 | 10.7 | 12.2 | 13.0 | 14.5 | 14.9 | 15.0 | 15.7 | 15.3 | 14.7 | 12.5 | 10.8 | 8.7 | 8.3 | 8.4 | 7.9 | Diurnal Average | |
| | 22.1 | 24.5 | 30.3 | 30.0 | 38.5 | 25.1 | 25.3 | 33.4 | 39.9 | 33.5 | 39.6 | 39.2 | 43.1 | 43.4 | 41.6 | 47.5 | 40.7 | 35.7 | 38.8 | 33.2 | 20.4 | 22.7 | 28.5 | 22.7 | Diurnal Maximum | |

All monthly, daily, and diurnal averages have been calculated using scalar methods

Hourly Standard Deviations

Wind Direction (WD) - deg
Beaverlodge - March 2012

| Maximum Value: 98.5 deg on Mar 25 02:00 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|--|
| Minimum Value: 1.9 deg on Mar 6 21:00 | | Hours of Data: 744 | | | | | | | | | | | | | | | | | | | | | | | | |
| Percentiles: P ₁ = 2.8 P ₁₀ = 4.9 Q ₁ = 7.7 Median = 16.4 Q ₃ = 38.1 P ₉₀ = 61.1 P ₉₉ = 92.5 | | Hours of Missing Data: 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Hours of Calibration: 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 4 | 5 | 20 | 5 | 3 | 5 | 4 | 7 | 7 | 9 | 11 | 24 | 39 | 91 | 77 | 14 | 6 | 22 | 16 | 17 | 45 | 50 | 23 | 13 | 90.7 | |
| 2-Mar | 26 | 13 | 45 | 16 | 38 | 37 | 28 | 17 | 24 | 23 | 34 | 66 | 10 | 7 | 6 | 5 | 4 | 7 | 4 | 8 | 8 | 79 | 40 | 42 | 79.3 | |
| 3-Mar | 28 | 73 | 76 | 43 | 17 | 35 | 32 | 35 | 42 | 43 | 14 | 4 | 8 | 13 | 13 | 11 | 5 | 8 | 5 | 6 | 8 | 9 | 3 | 8 | 75.8 | |
| 4-Mar | 6 | 8 | 3 | 5 | 6 | 4 | 7 | 5 | 2 | 10 | 7 | 18 | 11 | 11 | 19 | 11 | 8 | 10 | 3 | 5 | 4 | 68 | 49 | 16 | 67.8 | |
| 5-Mar | 47 | 24 | 41 | 61 | 40 | 86 | 18 | 6 | 4 | 5 | 5 | 8 | 6 | 20 | 18 | 12 | 8 | 6 | 6 | 7 | 10 | 10 | 5 | 6 | 85.7 | |
| 6-Mar | 7 | 10 | 8 | 33 | 17 | 15 | 6 | 10 | 18 | 15 | 17 | 8 | 16 | 12 | 7 | 6 | 5 | 4 | 5 | 3 | 2 | 2 | 3 | 2 | 32.5 | |
| 7-Mar | 4 | 12 | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 5 | 4 | 4 | 3 | 5 | 9 | 85 | 54 | 5 | 84.6 | |
| 8-Mar | 5 | 6 | 4 | 4 | 4 | 4 | 6 | 5 | 4 | 4 | 4 | 12 | 4 | 6 | 21 | 35 | 8 | 10 | 23 | 14 | 19 | 11 | 16 | 28 | 34.8 | |
| 9-Mar | 9 | 6 | 27 | 68 | 4 | 7 | 7 | 3 | 2 | 5 | 4 | 10 | 6 | 6 | 6 | 7 | 7 | 4 | 5 | 4 | 7 | 4 | 6 | 18 | 68.0 | |
| 10-Mar | 16 | 4 | 64 | 46 | 27 | 11 | 15 | 23 | 26 | 38 | 23 | 21 | 20 | 13 | 7 | 10 | 12 | 18 | 16 | 35 | 9 | 39 | 7 | 50 | 64.4 | |
| 11-Mar | 13 | 22 | 17 | 14 | 21 | 63 | 23 | 18 | 18 | 16 | 24 | 44 | 48 | 38 | 59 | 45 | 41 | 79 | 43 | 36 | 86 | 41 | 32 | 12 | 86.4 | |
| 12-Mar | 4 | 3 | 4 | 4 | 63 | 56 | 54 | 29 | 34 | 19 | 12 | 9 | 7 | 6 | 5 | 4 | 4 | 5 | 67 | 40 | 68 | 9 | 5 | 4 | 67.9 | |
| 13-Mar | 5 | 5 | 6 | 7 | 7 | 7 | 7 | 8 | 20 | 11 | 7 | 11 | 13 | 14 | 14 | 24 | 49 | 17 | 14 | 15 | 46 | 86 | 17 | 7 | 86.5 | |
| 14-Mar | 7 | 25 | 31 | 25 | 16 | 42 | 37 | 25 | 54 | 76 | 29 | 24 | 10 | 16 | 19 | 6 | 8 | 7 | 6 | 28 | 16 | 19 | 54 | 36 | 75.8 | |
| 15-Mar | 33 | 8 | 23 | 11 | 44 | 26 | 11 | 7 | 13 | 4 | 6 | 9 | 11 | 16 | 16 | 60 | 66 | 86 | 60 | 33 | 52 | 49 | 94 | 42 | 94.3 | |
| 16-Mar | 44 | 44 | 58 | 9 | 13 | 15 | 61 | 70 | 8 | 5 | 9 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 5 | 7 | 16 | 27 | 72 | 72.2 | |
| 17-Mar | 48 | 13 | 32 | 17 | 64 | 47 | 14 | 11 | 21 | 11 | 10 | 10 | 8 | 7 | 14 | 6 | 6 | 6 | 9 | 14 | 13 | 7 | 9 | 13 | 64.2 | |
| 18-Mar | 9 | 13 | 12 | 9 | 10 | 6 | 6 | 5 | 8 | 7 | 8 | 11 | 11 | 11 | 15 | 15 | 17 | 19 | 21 | 18 | 31 | 21 | 11 | 50 | 49.9 | |
| 19-Mar | 26 | 80 | 27 | 71 | 62 | 87 | 6 | 19 | 6 | 6 | 17 | 44 | 82 | 89 | 32 | 30 | 32 | 6 | 17 | 25 | 15 | 30 | 85 | 18 | 88.9 | |
| 20-Mar | 56 | 32 | 25 | 24 | 10 | 6 | 6 | 15 | 15 | 43 | 14 | 6 | 23 | 17 | 9 | 9 | 9 | 12 | 54 | 21 | 16 | 8 | 5 | 6 | 56.1 | |
| 21-Mar | 5 | 7 | 11 | 18 | 8 | 13 | 13 | 13 | 28 | 58 | 13 | 15 | 41 | 48 | 32 | 59 | 9 | 53 | 33 | 21 | 64 | 12 | 12 | 13 | 64.5 | |
| 22-Mar | 55 | 45 | 75 | 71 | 65 | 42 | 26 | 93 | 20 | 11 | 17 | 25 | 14 | 17 | 13 | 24 | 14 | 17 | 12 | 10 | 51 | 46 | 33 | 16 | 93.0 | |
| 23-Mar | 15 | 10 | 11 | 21 | 26 | 16 | 15 | 21 | 62 | 19 | 7 | 18 | 16 | 31 | 30 | 22 | 16 | 8 | 28 | 40 | 76 | 70 | 94 | 64 | 93.6 | |
| 24-Mar | 72 | 64 | 26 | 66 | 61 | 61 | 48 | 44 | 89 | 41 | 52 | 50 | 38 | 37 | 59 | 42 | 48 | 28 | 8 | 35 | 28 | 31 | 19 | 52 | 89.0 | |
| 25-Mar | 22 | 99 | 78 | 51 | 27 | 25 | 32 | 57 | 55 | 39 | 58 | 58 | 71 | 92 | 61 | 52 | 39 | 20 | 41 | 56 | 28 | 7 | 8 | 9 | 98.5 | |
| 26-Mar | 69 | 16 | 26 | 65 | 58 | 73 | 32 | 10 | 5 | 68 | 37 | 54 | 9 | 9 | 10 | 8 | 10 | 5 | 5 | 5 | 7 | 7 | 23 | 83 | 83.3 | |
| 27-Mar | 95 | 49 | 28 | 23 | 44 | 67 | 70 | 52 | 88 | 22 | 95 | 42 | 32 | 60 | 42 | 31 | 41 | 18 | 8 | 74 | 32 | 27 | 25 | 62 | 94.5 | |
| 28-Mar | 60 | 64 | 24 | 12 | 57 | 58 | 12 | 63 | 35 | 33 | 96 | 25 | 20 | 34 | 32 | 29 | 15 | 12 | 16 | 39 | 39 | 17 | 60 | 20 | 96.4 | |
| 29-Mar | 18 | 17 | 36 | 39 | 22 | 40 | 45 | 61 | 43 | 78 | 47 | 38 | 27 | 28 | 49 | 36 | 40 | 33 | 15 | 57 | 29 | 20 | 20 | 8 | 78.0 | |
| 30-Mar | 20 | 58 | 22 | 83 | 91 | 8 | 37 | 77 | 9 | 10 | 6 | 7 | 14 | 9 | 34 | 13 | 9 | 5 | 8 | 3 | 3 | 5 | 13 | 41 | 91.2 | |
| 31-Mar | 70 | 23 | 21 | 26 | 11 | 67 | 17 | 46 | 7 | 15 | 8 | 15 | 14 | 19 | 22 | 15 | 16 | 12 | 28 | 47 | 35 | 27 | 13 | 38 | 70.3 | |
| | | 94.5 | 98.5 | 77.9 | 82.6 | 91.2 | 86.9 | 69.7 | 93.0 | 89.0 | 78.0 | 96.4 | 65.9 | 81.6 | 91.6 | 76.7 | 59.7 | 65.7 | 85.8 | 66.6 | 74.2 | 86.4 | 86.5 | 94.3 | 83.3 | |

PAZA

Valleyview Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

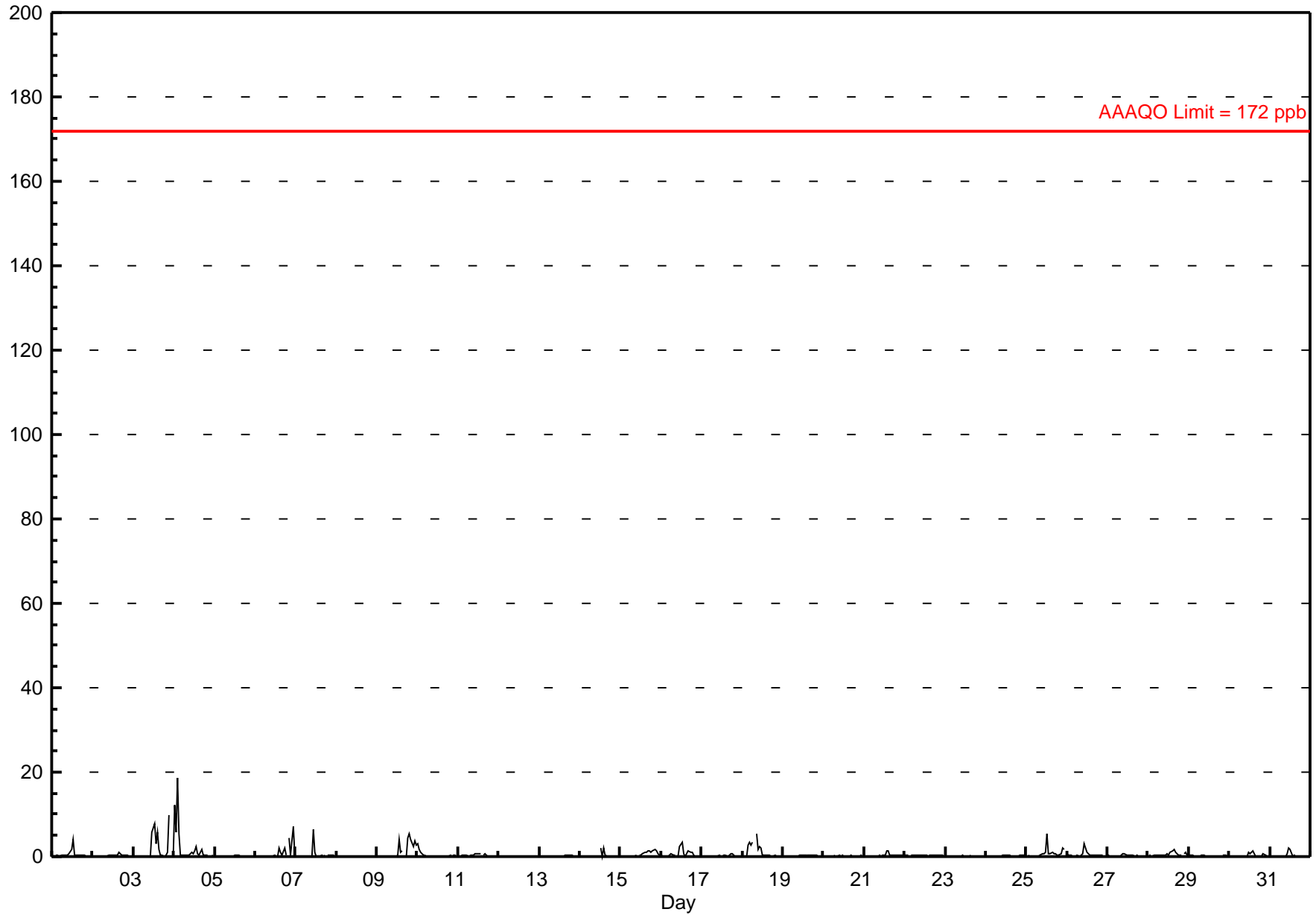
Sulphur Dioxide (SO₂) - ppb

Valleyview - March 2012

| | |
|--|---|
| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 | Hours in Service: 744 |
| Maximum Value: 18.6 ppb on Mar 4 03:00 | Maximum Daily Average: 2.4 ppb on Mar 4 |
| Minimum Value: 0 ppb on Mar 3 06:00 | Hours of Data: 703 |
| Maximum Diurnal Average: 1.2 ppb at hour 13 | Hours of Missing Data: 41 |
| Monthly Average: 0.46 ppb | Hours of Calibration: 39 |
| Minimum Daily Average: 0.0 ppb on Mar 8 | Percent Operational Time: 99.7 |
| Minimum Diurnal Average: 0.1 ppb at hour 8 | |
| Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.3 P ₉₀ = 0.9 P ₉₉ = 5.6 | |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
|--------|-------------------------------|---|----|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|---------------|---------------|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 4.0 | |
| 2-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.9 | |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 8 | 3 | 6 | 2 | 0 | 0 | 0 | 0 | 1 | 10 | A | 0 | 1.6 | 9.7 | |
| 4-Mar | 12 | 6 | 19 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 2.4 | 18.6 | |
| 5-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.1 | 0.4 | |
| 6-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 2 | 0 | A | 5 | 0 | 7 | 0 | 0.8 | 7.1 | | |
| 7-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.4 | 6.5 | |
| 8-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 | |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 1 | A | A | 0 | 4 | 5 | 4 | 2 | 4 | 3 | 1.3 | 5.3 | |
| 10-Mar | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 3.1 | |
| 11-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | A | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.6 | |
| 12-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | C | C | C | C | C | C | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -- | 0.0 | |
| 13-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.4 | |
| 14-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 2.1 | |
| 15-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 0.6 | 1.5 | |
| 16-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | A | 0 | 2 | 3 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.5 | 3.4 | |
| 17-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.8 | |
| 18-Mar | 0 | 0 | 0 | 3 | 3 | 3 | 3 | A | A | 5 | 2 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.1 | 5.4 | |
| 19-Mar | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 20-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 | |
| 21-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.5 | |
| 22-Mar | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.4 | |
| 23-Mar | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N | N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.4 | |
| 24-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 | |
| 25-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 5 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 2 | 2 | A | 0.8 | 5.3 |
| 26-Mar | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0.5 | 3.2 | |
| 27-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.2 | 0.8 | |
| 28-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | A | 1 | 1 | 0 | 0.6 | 1.8 | |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.1 | 0.4 | |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | A | 0 | 1 | 0 | 0 | 0 | 0.2 | 1.4 | |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 2.1 | |

| | | |
|---|---------------|-------------------------------|
| C - Calibration | N - Not Valid | A - Automated Daily Zero Span |
| Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb | | |

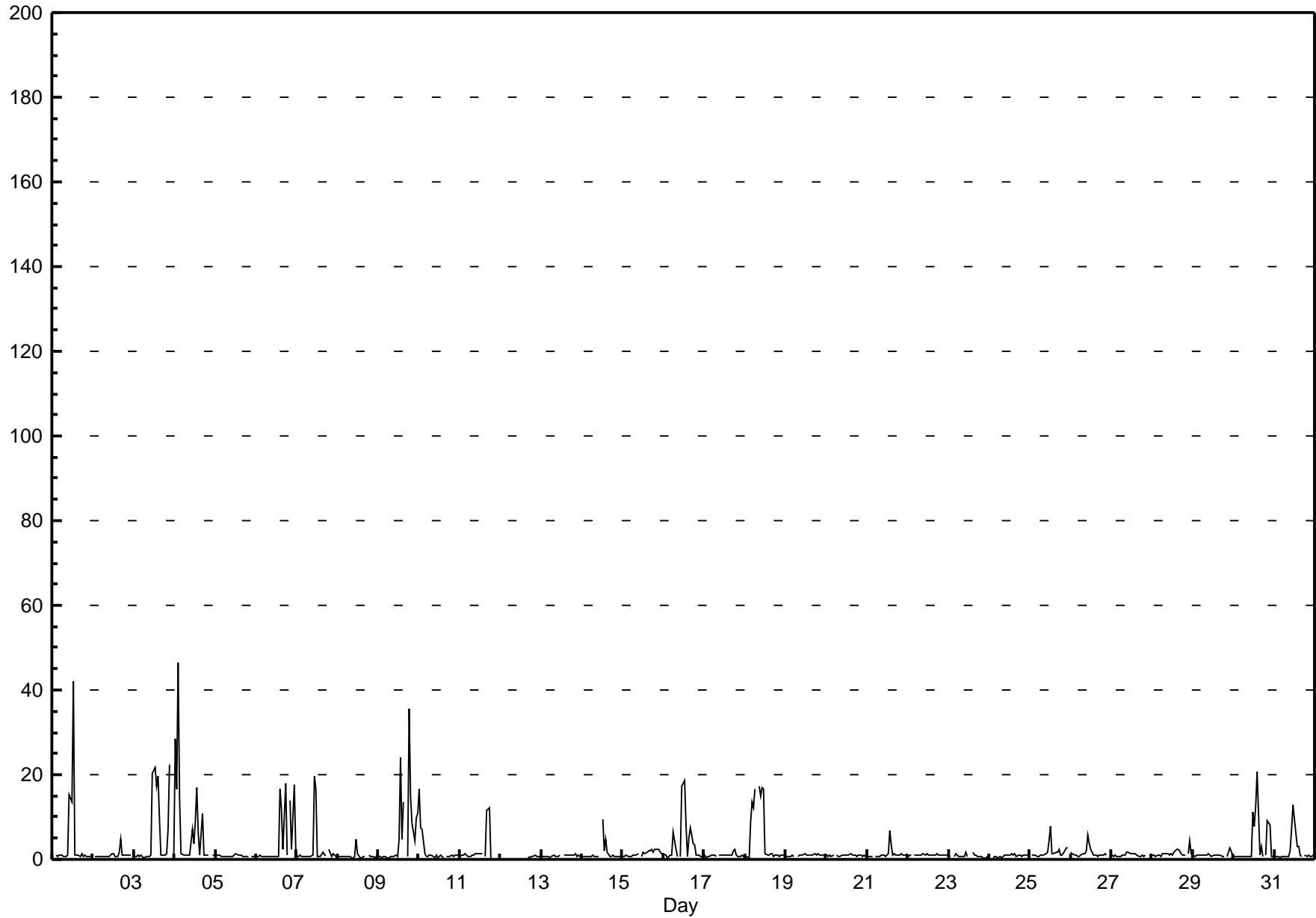


Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

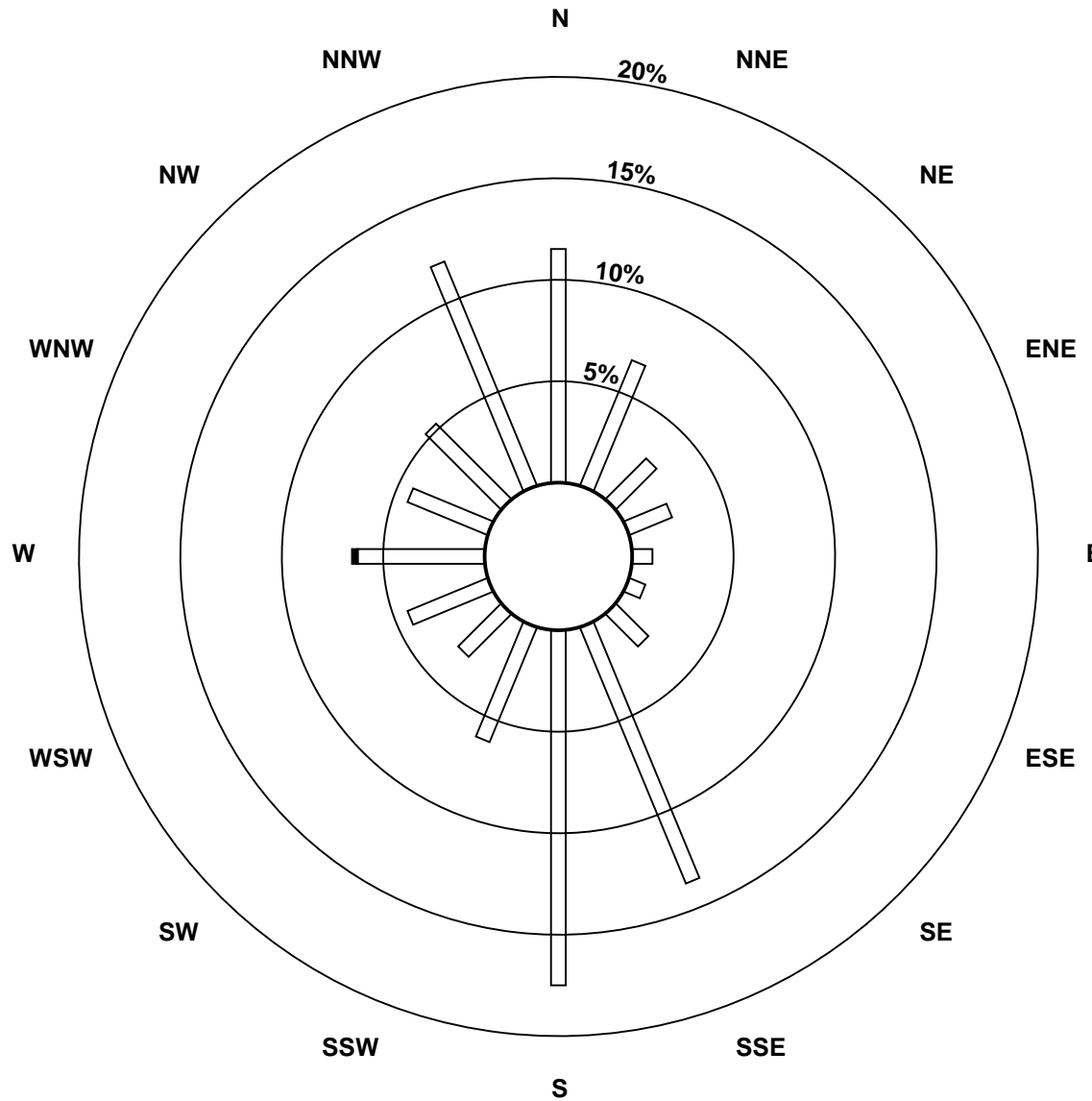
Valleyview - March 2012

| Maximum Value: 46.4 ppb on Mar 4 03:00 | | Maximum Daily Average: 7.5 ppb on Mar 4 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|---|------|--------------------------------|------|------|-------------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|-----------------|--|
| Minimum Value: 0 ppb on Mar 11 19:00 | | Minimum Daily Average: 0.8 ppb on Mar 5 | | Hours of Data: 703 | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 5.5 ppb at hour 13 | | Minimum Diurnal Average: 0.9 ppb at hour 8 | | Hours of Missing Data: 41 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 2.25 ppb | | Percentiles: P ₁ = 0.0 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.9 Q ₃ = 1.2 P ₉₀ = 4.7 P ₉₉ = 21.3 | | Hours of Calibration: 39 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 99.7 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 15 | 14 | 42 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3.9 | 42.1 | |
| 2-Mar | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.1 | 4.7 | |
| 3-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 20 | 22 | 17 | 20 | 9 | 1 | 1 | 1 | 1 | 7 | 23 | A | 1 | 5.7 | 22.5 | |
| 4-Mar | 29 | 17 | 46 | 15 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 4 | 9 | 17 | 6 | 1 | 11 | 1 | 1 | 1 | 1 | A | 1 | 1 | 7.5 | 46.4 | |
| 5-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 0.8 | 1.2 | |
| 6-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 17 | 12 | 2 | 18 | 1 | A | 14 | 3 | 18 | 2 | 4.2 | 18.1 | | |
| 7-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 17 | 1 | 1 | 1 | 2 | 1 | 1 | A | 2 | 1 | 1 | 1 | 1 | 2.4 | 19.5 | |
| 8-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 5 | 1 | 0 | 1 | 1 | A | A | 1 | 1 | 1 | 0 | 1 | 0.8 | 4.9 | | |
| 9-Mar | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 5 | 24 | 5 | 14 | A | 1 | 36 | 15 | 8 | 4 | 10 | 11 | 6.1 | 35.5 | | |
| 10-Mar | 17 | 8 | 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2.1 | 16.6 | | |
| 11-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 11 | 12 | 0 | 0 | 0 | 0 | 0 | 1.7 | 12.3 | | |
| 12-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | C | C | C | C | C | C | C | 1 | 0 | 1 | 1 | 1 | 1 | 1 | -- | 1.0 | | |
| 13-Mar | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.3 | | |
| 14-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 10 | 2 | 5 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.4 | 9.6 | | |
| 15-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1.4 | 2.3 | | |
| 16-Mar | 1 | 1 | 0 | 1 | 1 | 1 | 6 | 2 | 1 | A | 1 | 17 | 19 | 8 | 1 | 5 | 7 | 4 | 3 | 1 | 1 | 1 | 1 | 3.7 | 18.6 | | |
| 17-Mar | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1.0 | 2.4 | | |
| 18-Mar | 1 | 1 | 0 | 9 | 14 | 12 | 17 | A | A | 17 | 15 | 17 | 17 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5.7 | 17.4 | | |
| 19-Mar | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.4 | | |
| 20-Mar | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.3 | | |
| 21-Mar | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.3 | 6.7 | | |
| 22-Mar | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.1 | 1.3 | | |
| 23-Mar | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | N | N | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0.8 | 1.8 | | |
| 24-Mar | 0 | A | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.2 | | |
| 25-Mar | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 5 | 8 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 3 | 3 | A | 1.8 | 7.9 | |
| 26-Mar | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 6 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1.5 | 5.8 | |
| 27-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1.0 | 1.7 | |
| 28-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | A | 1 | 4 | 1 | 1.5 | 4.5 | |
| 29-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2 | 3 | 1 | 1.0 | 2.8 | |
| 30-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 11 | 8 | 12 | 21 | 1 | 3 | 1 | A | 1 | 9 | 8 | 1 | 1 | 3.6 | 20.8 | |
| 31-Mar | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 7 | 13 | 10 | 3 | 3 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 2.2 | 12.9 | | |
| | | 2.3 | 1.6 | 2.5 | 1.5 | 1.2 | 1.1 | 1.5 | 0.9 | 1.4 | 1.5 | 3.3 | 4.9 | 5.5 | 3.8 | 3.5 | 2.4 | 2.1 | 2.1 | 2.2 | 1.5 | 2.2 | 2.1 | 2.0 | 1.2 | Diurnal Average | |
| | | 28.6 | 16.8 | 46.4 | 14.7 | 13.7 | 12.2 | 16.7 | 2.3 | 17.4 | 14.9 | 19.5 | 20.3 | 42.1 | 24.1 | 20.8 | 13.6 | 11.5 | 18.1 | 35.5 | 15.0 | 13.8 | 22.5 | 17.6 | 11.0 | Diurnal Maximum | |
| C - Calibration | | N - Not Valid | | | | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | |

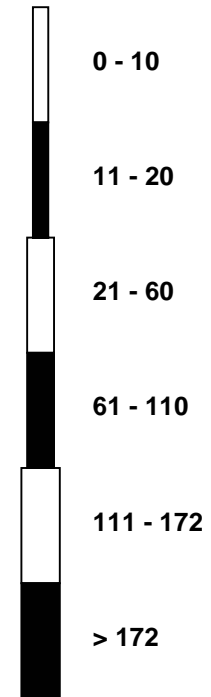


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Valleyview - March 2012

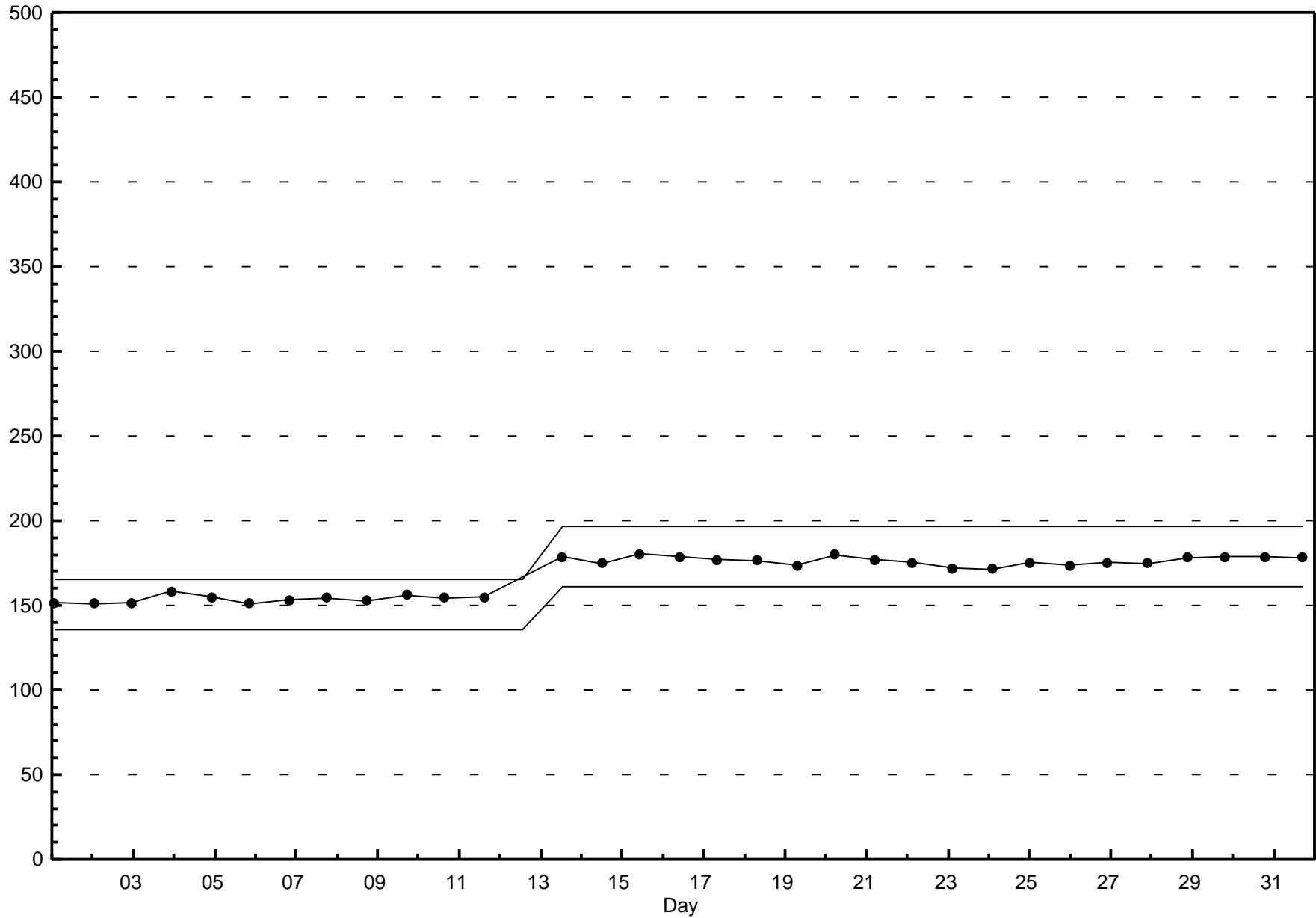


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Valleyview - March 2012



Hourly Averages

Hydrogen Sulphide (H₂S) - ppb

Valleyview - March 2012

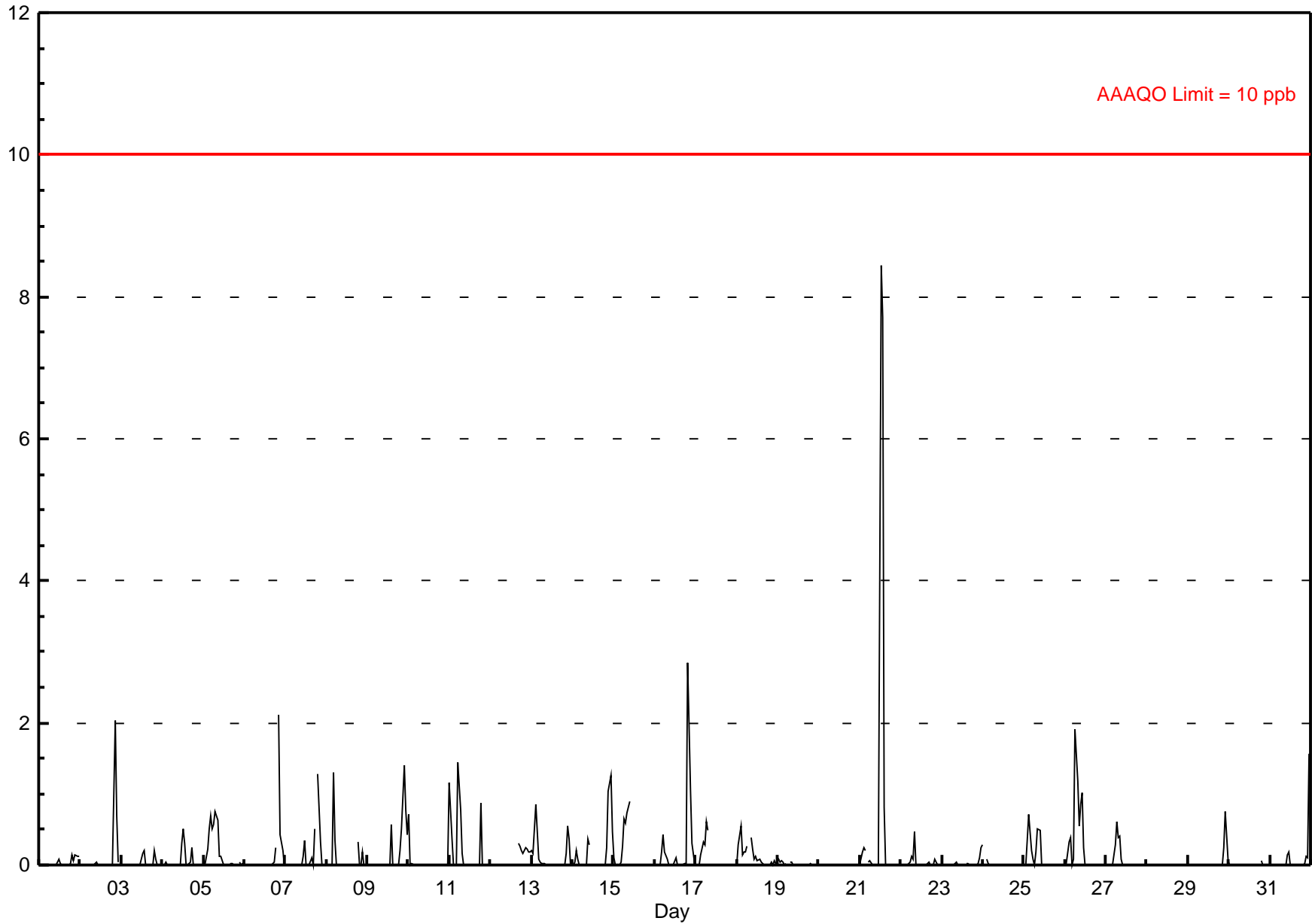
| | | | | |
|---|--|----------|---------------------------|------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 8.4 ppb on Mar 21 13:00 | Maximum Daily Average: 0.8 ppb on Mar 21 | | Hours of Data: | 706 |
| Minimum Value: 0 ppb on Mar 1 01:00 | Minimum Daily Average: 0.0 ppb on Mar 20 | | Hours of Missing Data: | 38 |
| Maximum Diurnal Average: 0.3 ppb at hour 13 | Minimum Diurnal Average: 0.0 ppb at hour 16 | | Hours of Calibration: | 36 |
| Monthly Average: 0.12 ppb | Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.0 P ₉₀ = 0.3 P ₉₉ = 1.9 | | Percent Operational Time: | 99.7 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
|--------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|---------------|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 | |
| 2-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | A | 0.1 | 2.0 |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.0 | 0.2 |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.1 | 0.5 |
| 5-Mar | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.2 | 0.8 |
| 6-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 2 | 0 | 0 | 0 | 0.1 | 2.1 | |
| 7-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | A | 1 | 0 | 0 | 0 | 0 | 0.1 | 1.3 | |
| 8-Mar | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | A | 0 | 0 | 0 | 0 | 0 | 0.1 | 1.3 | |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | A | A | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0.2 | 1.4 | |
| 10-Mar | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.7 | |
| 11-Mar | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1.4 | |
| 12-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | C | C | C | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 | |
| 13-Mar | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0.1 | 0.9 | |
| 14-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0.2 | 1.3 | |
| 15-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.9 | |
| 16-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 1 | 0 | 0 | 0.3 | 2.8 | |
| 17-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.6 | |
| 18-Mar | 0 | 0 | 1 | 0 | 0 | 0 | 0 | A | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.6 | |
| 19-Mar | 0 | 0 | 0 | 0 | 0 | 0 | A | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 | |
| 20-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | |
| 21-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 8.4 | |
| 22-Mar | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.5 | |
| 23-Mar | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N | N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.3 | |
| 24-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.3 | |
| 25-Mar | A | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0.1 | 0.7 | |
| 26-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.3 | 1.9 | |
| 27-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.1 | 0.6 | |
| 28-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.0 | 0.0 | |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 0 | 0.0 | 0.7 | |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 | |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 2 | 0.1 | 1.6 | |
| | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | Diurnal Average | | |
| | 1.2 | 0.4 | 0.9 | 0.7 | 1.3 | 1.4 | 1.9 | 1.2 | 0.7 | 0.9 | 1.0 | 0.3 | 8.4 | 7.7 | 0.8 | 0.1 | 0.3 | 0.5 | 0.9 | 2.8 | 2.1 | 1.4 | 1.3 | 1.6 | Diurnal Maximum | | |

C - Calibration N - Not Valid A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

Hourly Averages

Hydrogen Sulphide (H₂S) - ppb
Valleyview - March 2012

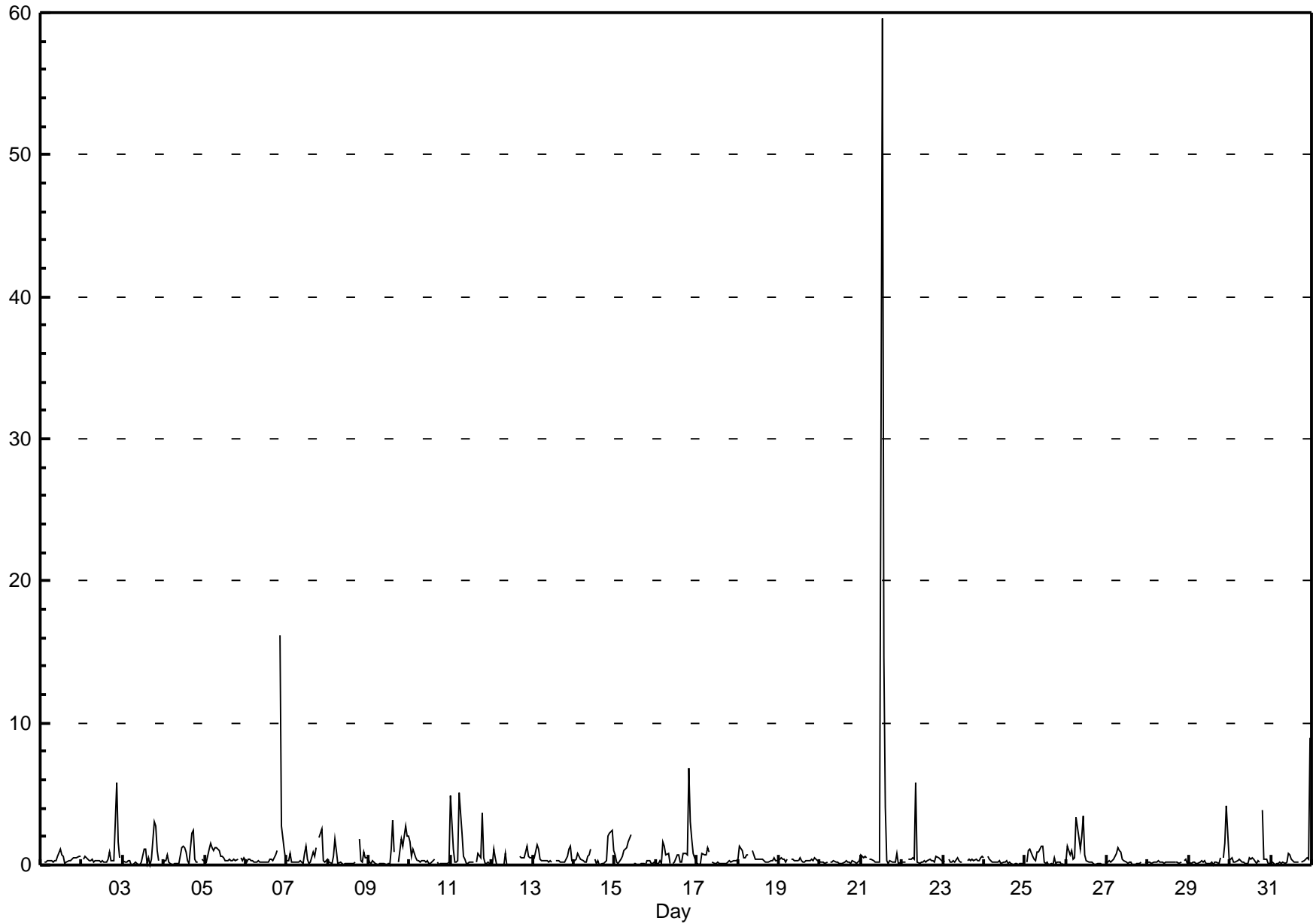


Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb

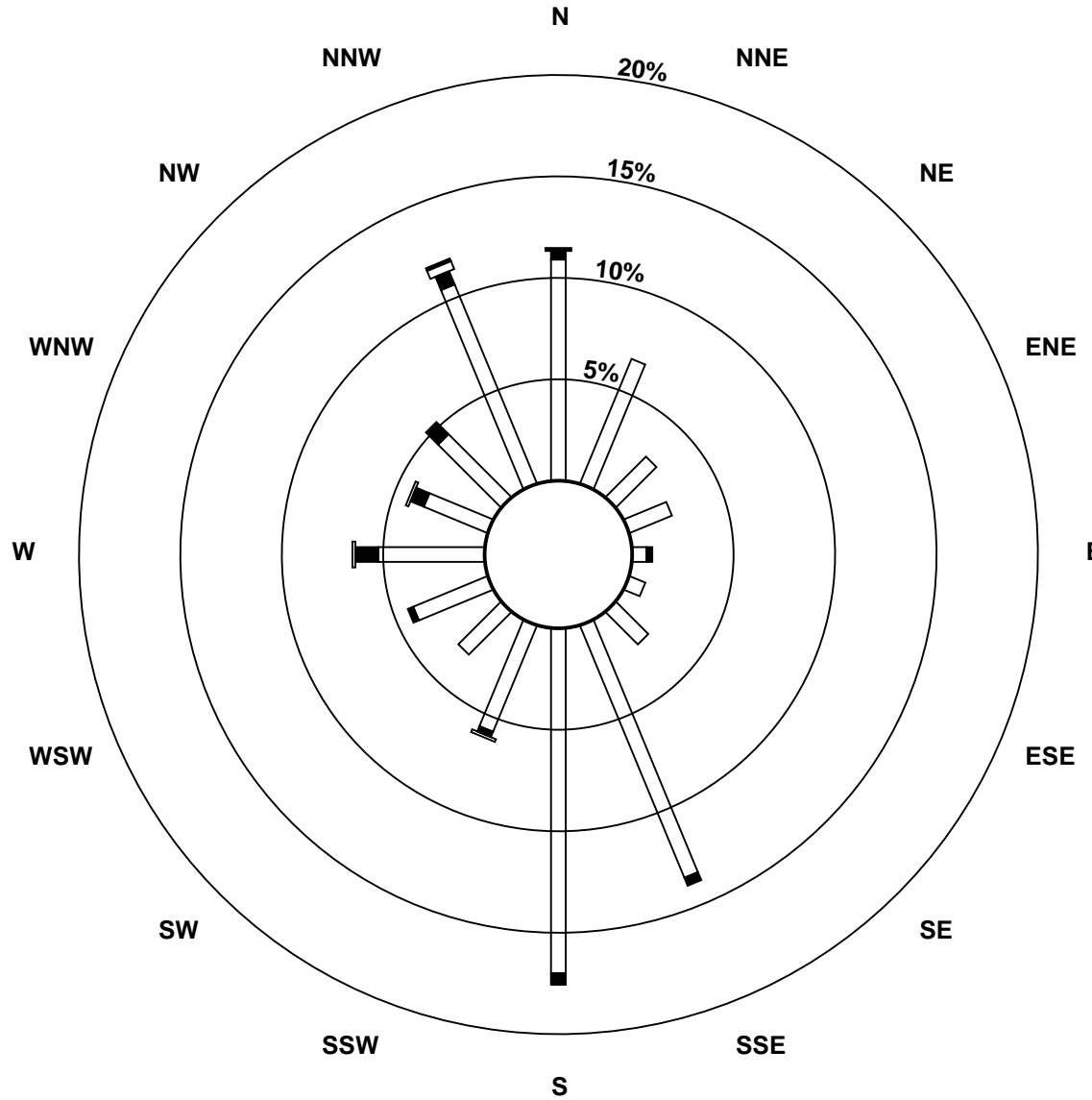
Valleyview - March 2012

| Maximum Value: 59.6 ppb on Mar 21 13:00 | | Maximum Daily Average: 3.7 ppb on Mar 21 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|-----|--------------------------------|-----|-----|-------------------------------|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|------|-----|-----|---------------|-----------------|-----------------|
| Minimum Value: 0 ppb on Mar 3 10:00 | | Minimum Daily Average: 0.2 ppb on Mar 28 | | Hours of Data: 706 | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 2.4 ppb at hour 13 | | Minimum Diurnal Average: 0.3 ppb at hour 16 | | Hours of Missing Data: 38 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 0.63 ppb | | Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.5 P ₉₀ = 1.1 P ₉₉ = 5.7 | | Hours of Calibration: 36 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 99.7 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0.4 | 1.2 | |
| 2-Mar | A | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 6 | 2 | 1 | A | 0.7 | 5.7 | |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 1 | 0 | A | 0 | 0.5 | 3.0 | |
| 4-Mar | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.6 | 2.4 | |
| 5-Mar | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 0.6 | 1.6 | |
| 6-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | A | 16 | 3 | 1 | 0 | 1.2 | 16.2 | |
| 7-Mar | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | A | 2 | 3 | 0 | 0 | 0 | 0.6 | 2.6 | |
| 8-Mar | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 2 | 0 | 0 | 1 | 0 | 1 | 0.4 | 1.9 | |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | A | A | 0 | 1 | 2 | 1 | 3 | 2 | 2 | 0.8 | 3.1 | |
| 10-Mar | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.6 | |
| 11-Mar | 5 | 1 | 0 | 0 | 0 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 1.0 | 5.1 | |
| 12-Mar | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | C | C | C | C | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0.4 | 1.3 | |
| 13-Mar | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0.5 | 1.4 | |
| 14-Mar | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 1 | 0.6 | 2.5 | |
| 15-Mar | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 2.1 | |
| 16-Mar | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 0 | A | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 7 | 3 | 2 | 1 | 0 | 1.0 | 6.8 | |
| 17-Mar | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.2 | |
| 18-Mar | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.4 | |
| 19-Mar | 0 | 0 | 0 | 0 | 0 | 0 | A | A | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.5 | |
| 20-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 21-Mar | 1 | 0 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 15 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3.7 | 59.6 | |
| 22-Mar | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0.5 | 5.8 | |
| 23-Mar | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | N | N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0.3 | 0.6 | |
| 24-Mar | 1 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.6 | |
| 25-Mar | A | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.3 | |
| 26-Mar | 0 | 1 | 1 | 1 | 0 | 1 | 3 | 2 | 1 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.8 | 3.4 | |
| 27-Mar | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.3 | 1.2 | |
| 28-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.2 | 0.4 | |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 2 | 4 | 0.4 | 4.2 | |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | A | 4 | 0 | 0 | 0 | 0.4 | 3.8 | |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 9 | 0.7 | 9.0 | |
| | | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 0.5 | 0.6 | 0.4 | 0.5 | 0.3 | 2.4 | 0.8 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.8 | 1.4 | 0.7 | 0.6 | 0.7 | Diurnal Average |
| | | 4.9 | 1.4 | 1.4 | 1.6 | 1.8 | 5.1 | 3.3 | 1.9 | 5.8 | 2.1 | 3.4 | 1.3 | 59.6 | 14.7 | 4.0 | 0.9 | 2.3 | 2.4 | 3.6 | 6.8 | 16.2 | 2.8 | 4.2 | 9.0 | Diurnal Maximum | |
| C - Calibration | | N - Not Valid | | | | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | | |

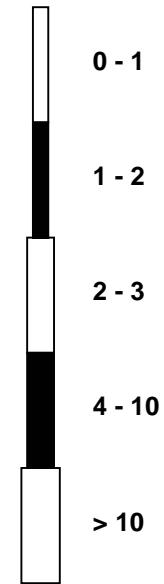


Pollutant Rose

Hydrogen Sulphide (H₂S) - ppb
Valleyview - March 2012

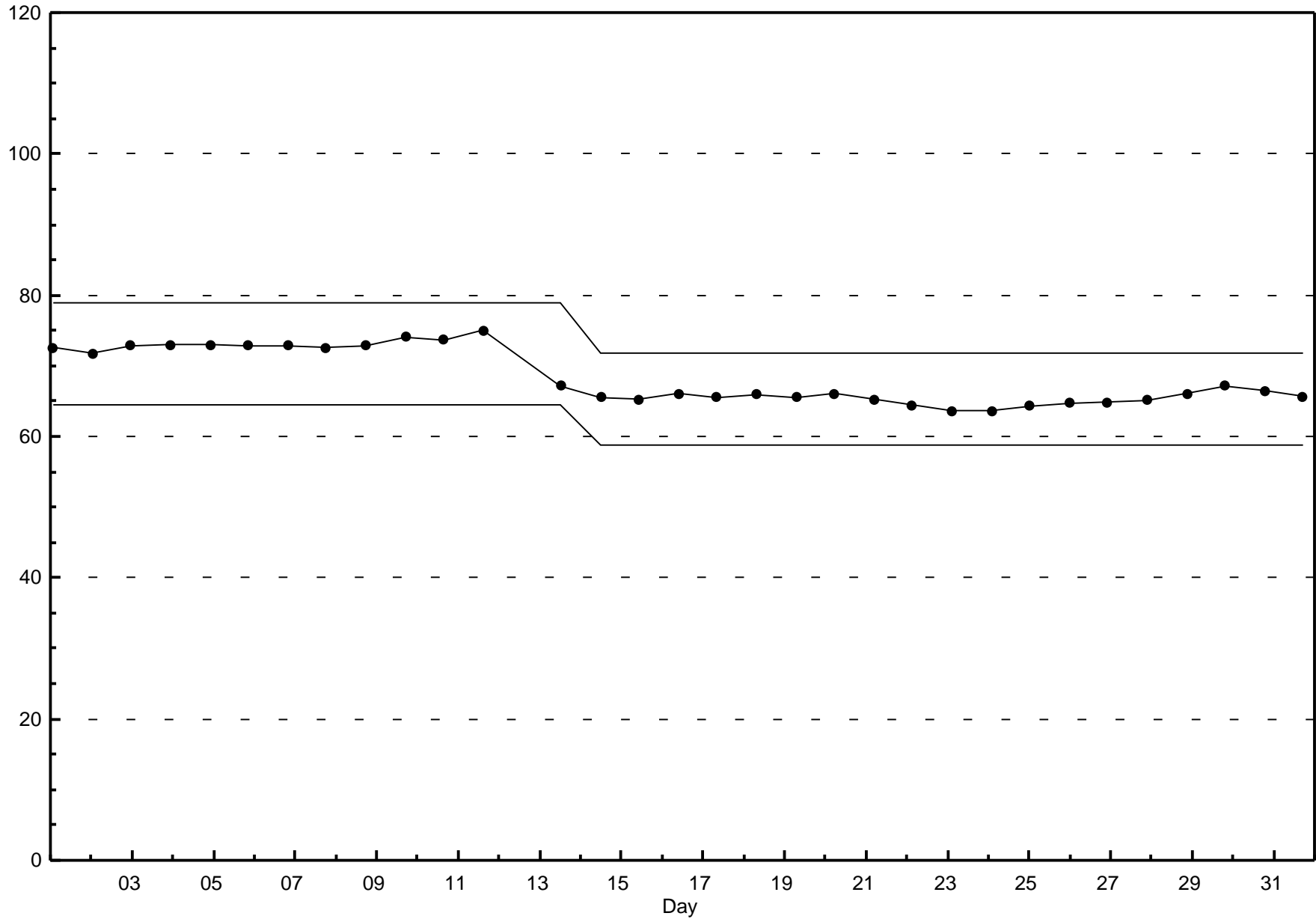


Pollutant Classes (ppb)



Span Responses

Hydrogen Sulphide (H₂S)
Valleyview - March 2012





Peace Airshed Zone Association

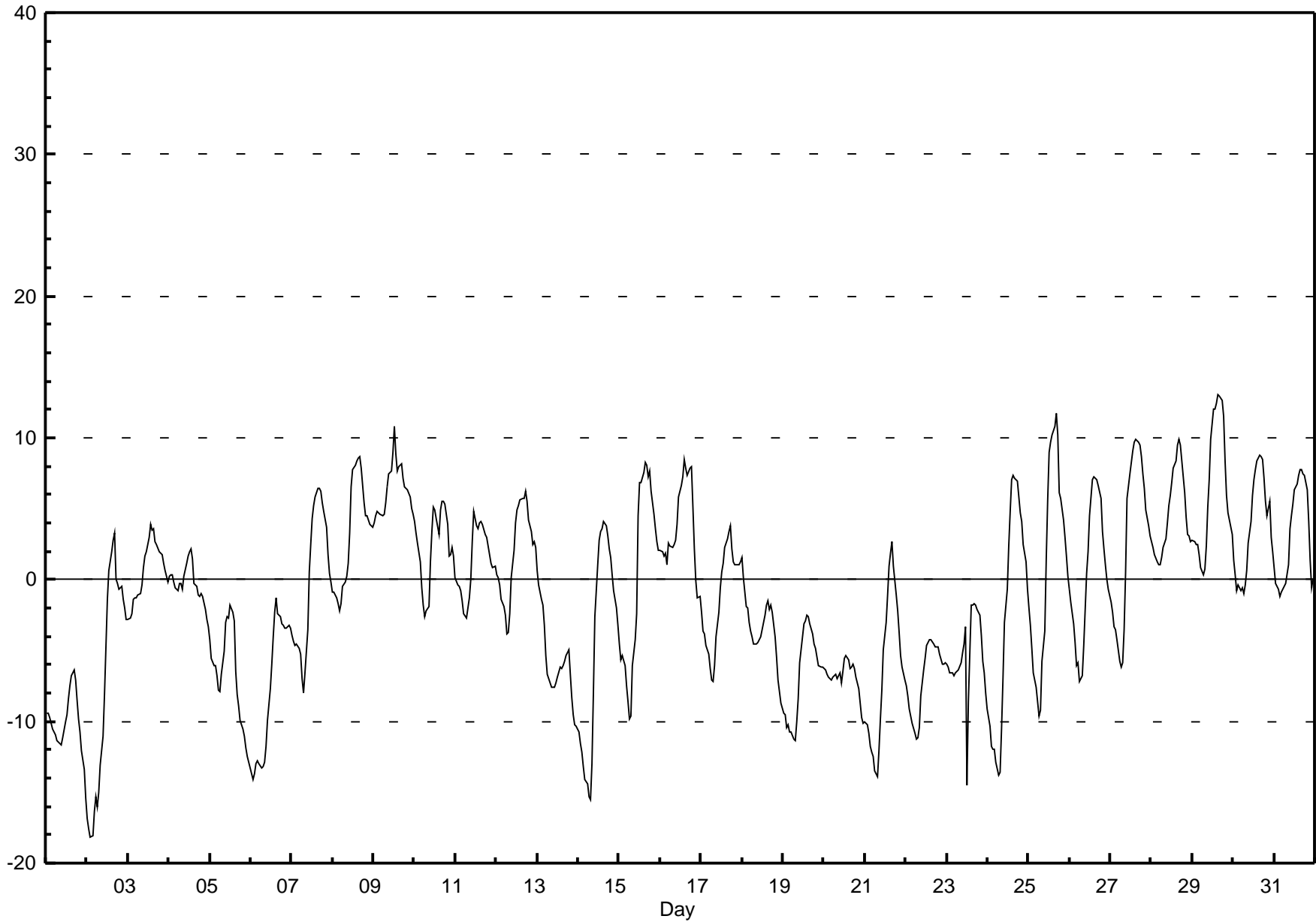
Hourly Averages

External Temperature (ET) - °C

Valleyview - March 2012

| | | | | |
|--|---|----------|---------------------------|-------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 13.0 °C on Mar 29 16:00 | Maximum Daily Average: 6.4 °C on Mar 9 | | Hours of Data: | 744 |
| Minimum Value: -18 °C on Mar 2 03:00 | Minimum Daily Average: -10.1 °C on Mar 1 | | Hours of Missing Data: | 0 |
| Maximum Diurnal Average: 3.4 °C at hour 16 | Minimum Diurnal Average: -6.1 °C at hour 7 | | Hours of Calibration: | 0 |
| Monthly Average: -1.31 °C | Percentiles: P ₁ = -15.4 P ₁₀ = -10.1 Q ₁ = -6.1 Median = -0.9 Q ₃ = 3.4 P ₉₀ = 7.0 P ₉₉ = 11.4 | | Percent Operational Time: | 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|-----|-----|------|------|------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | -9 | -9 | -10 | -10 | -11 | -11 | -11 | -11 | -12 | -12 | -11 | -10 | -10 | -8 | -7 | -7 | -6 | -7 | -8 | -10 | -11 | -12 | -13 | -15 | -10.1 | -6.3 |
| 2-Mar | -17 | -18 | -18 | -18 | -16 | -15 | -16 | -15 | -13 | -11 | -8 | -5 | -1 | 1 | 2 | 3 | 3 | 0 | 0 | -1 | -1 | -1 | -2 | -3 | -7.1 | 3.2 |
| 3-Mar | -3 | -3 | -2 | -1 | -1 | -1 | -1 | -1 | 0 | 1 | 2 | 2 | 3 | 4 | 3 | 4 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 0.7 | 3.9 |
| 4-Mar | 0 | 0 | 0 | 0 | -1 | -1 | 0 | 0 | -1 | 0 | 1 | 2 | 2 | 2 | 1 | 0 | 0 | -1 | -1 | -1 | -1 | -2 | -3 | -3 | -0.3 | 2.1 |
| 5-Mar | -4 | -6 | -6 | -6 | -7 | -8 | -8 | -7 | -5 | -3 | -3 | -3 | -2 | -2 | -3 | -6 | -8 | -9 | -10 | -10 | -11 | -12 | -12 | -13 | -6.8 | -1.8 |
| 6-Mar | -14 | -14 | -14 | -13 | -13 | -13 | -13 | -13 | -13 | -12 | -10 | -8 | -6 | -4 | -2 | -1 | -2 | -3 | -3 | -3 | -3 | -3 | -3 | -3 | -7.8 | -1.3 |
| 7-Mar | -4 | -4 | -5 | -5 | -5 | -5 | -7 | -8 | -7 | -3 | 1 | 2 | 4 | 5 | 6 | 6 | 6 | 6 | 5 | 5 | 4 | 2 | 0 | 0 | 0.0 | 6.5 |
| 8-Mar | -1 | -1 | -1 | -2 | -2 | -2 | 0 | 0 | 0 | 1 | 3 | 7 | 8 | 8 | 8 | 9 | 9 | 8 | 5 | 5 | 5 | 4 | 4 | 4 | 3.2 | 8.7 |
| 9-Mar | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 8 | 9 | 11 | 9 | 8 | 8 | 8 | 7 | 7 | 6 | 6 | 6 | 5 | 5 | 6.4 | 10.8 |
| 10-Mar | 4 | 3 | 3 | 1 | -1 | -2 | -3 | -2 | -2 | 1 | 3 | 5 | 5 | 4 | 3 | 5 | 6 | 6 | 5 | 4 | 2 | 2 | 2 | 2 | 2.4 | 5.6 |
| 11-Mar | 0 | 0 | 0 | -1 | -1 | -2 | -3 | -2 | -1 | 0 | 3 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1.2 | 4.8 |
| 12-Mar | 0 | 0 | 0 | -1 | -2 | -3 | -4 | -4 | -2 | 0 | 2 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 5 | 4 | 3 | 3 | 3 | 2 | 1.9 | 6.2 |
| 13-Mar | 1 | 0 | -1 | -2 | -3 | -5 | -7 | -7 | -8 | -8 | -8 | -7 | -7 | -6 | -6 | -6 | -6 | -5 | -5 | -7 | -8 | -9 | -10 | -10 | -5.9 | 0.7 |
| 14-Mar | -11 | -12 | -12 | -13 | -14 | -14 | -15 | -16 | -13 | -8 | -3 | 1 | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 0 | -1 | -2 | -3 | -4.6 | 4.1 |
| 15-Mar | -5 | -6 | -5 | -6 | -8 | -9 | -10 | -10 | -6 | -4 | -2 | 4 | 7 | 7 | 8 | 8 | 8 | 7 | 8 | 6 | 5 | 4 | 3 | 2 | 0.3 | 8.2 |
| 16-Mar | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 3 | 3 | 4 | 6 | 7 | 7 | 9 | 8 | 7 | 8 | 8 | 5 | 2 | 0 | -1 | -1 | 3.7 | 8.5 |
| 17-Mar | -2 | -4 | -4 | -5 | -5 | -6 | -7 | -7 | -6 | -4 | -2 | -1 | 1 | 1 | 2 | 3 | 3 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | -1.3 | 3.8 |
| 18-Mar | 2 | 0 | -2 | -2 | -3 | -4 | -4 | -5 | -5 | -4 | -4 | -3 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -4 | -5 | -7 | -8 | -9 | -3.5 | 1.6 |
| 19-Mar | -9 | -10 | -10 | -10 | -11 | -11 | -11 | -11 | -10 | -8 | -6 | -4 | -3 | -3 | -3 | -3 | -3 | -4 | -4 | -5 | -6 | -6 | -6 | -6 | -6.8 | -2.5 |
| 20-Mar | -6 | -6 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -6 | -6 | -5 | -6 | -6 | -6 | -6 | -6 | -7 | -8 | -9 | -10 | -10 | -6.9 | -5.4 |
| 21-Mar | -10 | -10 | -11 | -12 | -12 | -12 | -13 | -14 | -12 | -10 | -8 | -5 | -3 | -1 | 1 | 2 | 3 | 1 | -1 | -2 | -4 | -5 | -6 | -7 | -6.4 | 2.7 |
| 22-Mar | -7 | -8 | -9 | -10 | -10 | -11 | -11 | -11 | -10 | -8 | -6 | -6 | -5 | -4 | -4 | -4 | -5 | -5 | -5 | -5 | -5 | -6 | -6 | -6 | -7.0 | -4.2 |
| 23-Mar | -6 | -6 | -7 | -7 | -7 | -7 | -6 | -6 | -6 | -5 | -5 | -3 | -15 | -9 | -2 | -2 | -2 | -2 | -2 | -3 | -4 | -6 | -7 | -8 | -5.4 | -1.7 |
| 24-Mar | -9 | -10 | -12 | -12 | -12 | -13 | -14 | -14 | -11 | -7 | -3 | -1 | 2 | 5 | 7 | 7 | 7 | 7 | 6 | 5 | 4 | 3 | 1 | -1 | -2.6 | 7.3 |
| 25-Mar | -2 | -3 | -5 | -7 | -8 | -9 | -10 | -9 | -6 | -4 | 1 | 6 | 9 | 10 | 10 | 11 | 12 | 10 | 6 | 6 | 4 | 3 | 2 | 0 | 1.2 | 11.7 |
| 26-Mar | -1 | -2 | -3 | -4 | -6 | -6 | -7 | -7 | -5 | -2 | 0 | 2 | 4 | 7 | 7 | 7 | 7 | 7 | 6 | 3 | 2 | 1 | 0 | -1 | 0.5 | 7.3 |
| 27-Mar | -2 | -2 | -3 | -4 | -4 | -6 | -6 | -6 | -3 | 0 | 6 | 7 | 8 | 9 | 10 | 10 | 10 | 10 | 9 | 7 | 6 | 5 | 4 | 3 | 2.8 | 9.9 |
| 28-Mar | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 9 | 10 | 9 | 8 | 6 | 4 | 3 | 3 | 3 | 4.7 | 9.9 |
| 29-Mar | 3 | 3 | 2 | 2 | 2 | 1 | 0 | 1 | 2 | 5 | 7 | 10 | 12 | 12 | 12 | 13 | 13 | 13 | 12 | 8 | 6 | 5 | 4 | 3 | 6.3 | 13.0 |
| 30-Mar | 1 | 0 | -1 | 0 | -1 | -1 | -1 | 0 | 1 | 3 | 4 | 6 | 7 | 8 | 8 | 9 | 9 | 9 | 7 | 5 | 4 | 5 | 3 | 2 | 3.6 | 8.7 |
| 31-Mar | 1 | 0 | -1 | -1 | -1 | -1 | -1 | 0 | 1 | 4 | 5 | 5 | 6 | 7 | 7 | 8 | 8 | 7 | 7 | 6 | 4 | 1 | -1 | 0 | 3.0 | 7.8 |
| | -3.3 | -3.8 | -4.4 | -4.7 | -5.2 | -5.6 | -6.1 | -5.9 | -4.7 | -2.9 | -1.0 | 0.9 | 1.8 | 2.6 | 3.2 | 3.4 | 3.4 | 2.9 | 2.1 | 1.1 | 0.0 | -1.0 | -1.7 | -2.3 | Diurnal Average | |
| | 4.1 | 4.5 | 4.8 | 4.7 | 4.6 | 4.5 | 4.6 | 5.4 | 6.6 | 7.4 | 7.7 | 9.9 | 12.0 | 12.0 | 12.4 | 13.0 | 13.0 | 12.6 | 11.5 | 8.4 | 6.5 | 5.8 | 5.1 | 4.6 | Diurnal Maximum | |



Hourly Averages

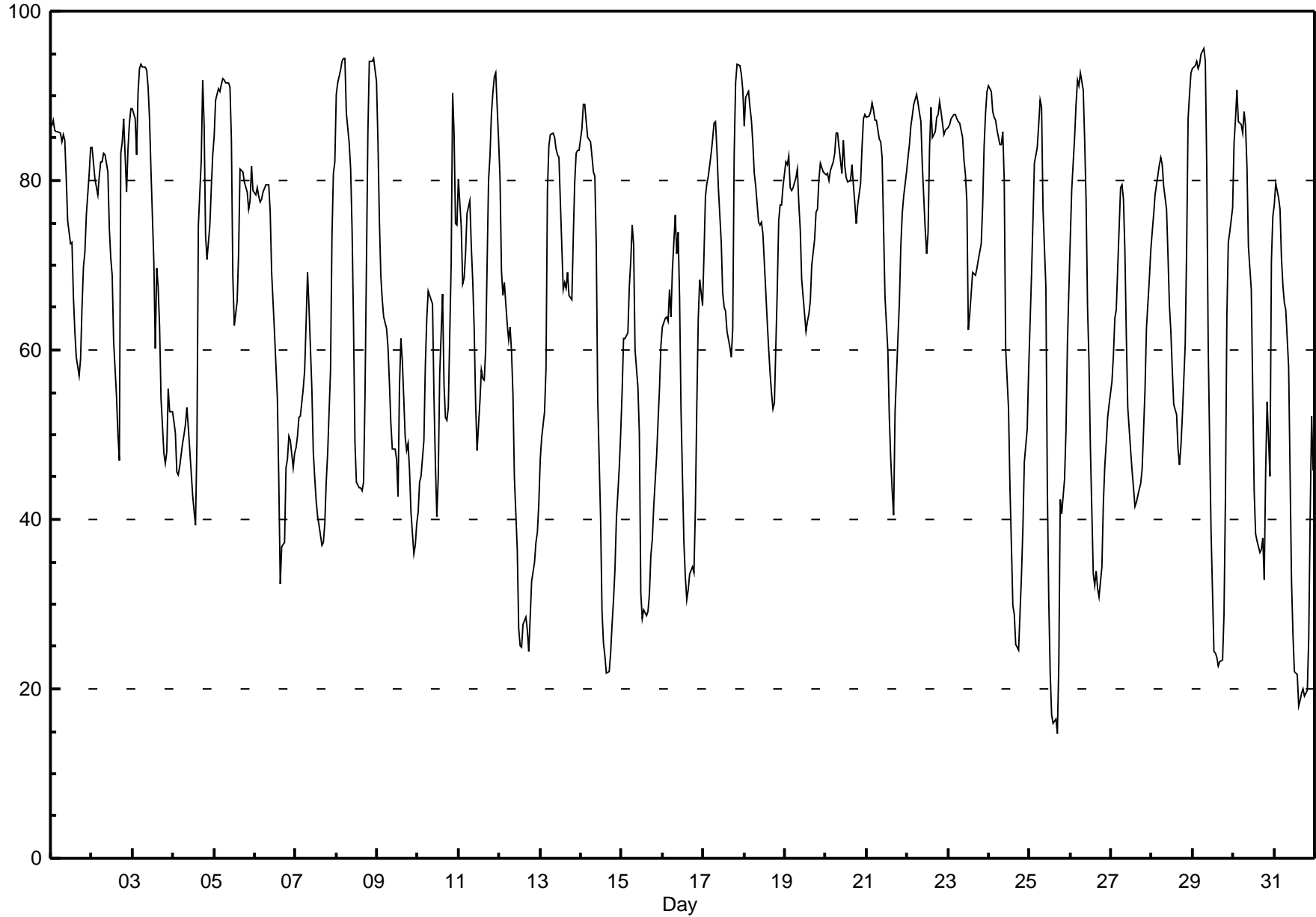
Relative Humidity (RH) - %

Valleyview - March 2012

| Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 95.7 % on Mar 29 07:00 Maximum Daily Average: 84.9 % on Mar 22 | | Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|-----------------|--|
| Minimum Value: 15 % on Mar 25 17:00 Maximum Diurnal Average: 80.2 % at hour 7 Monthly Average: 65.71 % | | Minimum Daily Average: 44.4 % on Mar 12 Minimum Diurnal Average: 48.2 % at hour 17 Percentiles: P ₁ = 19.5 P ₁₀ = 36.4 Q ₁ = 49.9 Median = 69.4 Q ₃ = 82.9 P ₉₀ = 88.0 P ₉₉ = 94.1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 86 | 87 | 86 | 86 | 86 | 86 | 85 | 85 | 85 | 80 | 75 | 73 | 73 | 66 | 62 | 59 | 57 | 59 | 65 | 70 | 72 | 76 | 81 | 84 | 75.9 | 87.1 | |
| 2-Mar | 84 | 82 | 80 | 78 | 80 | 82 | 82 | 83 | 83 | 81 | 74 | 71 | 69 | 61 | 55 | 50 | 47 | 83 | 85 | 87 | 79 | 84 | 87 | 88 | 76.5 | 88.4 | |
| 3-Mar | 88 | 87 | 83 | 90 | 93 | 94 | 93 | 93 | 93 | 91 | 87 | 81 | 70 | 60 | 70 | 67 | 63 | 54 | 48 | 47 | 48 | 56 | 53 | 53 | 73.5 | 93.8 | |
| 4-Mar | 52 | 50 | 46 | 45 | 46 | 49 | 50 | 51 | 53 | 51 | 46 | 43 | 41 | 39 | 49 | 75 | 82 | 92 | 87 | 74 | 71 | 75 | 79 | 83 | 59.5 | 91.9 | |
| 5-Mar | 85 | 89 | 91 | 91 | 91 | 92 | 92 | 91 | 92 | 91 | 85 | 69 | 63 | 66 | 71 | 81 | 81 | 81 | 80 | 79 | 77 | 78 | 82 | 79 | 82.3 | 92.0 | |
| 6-Mar | 78 | 79 | 78 | 77 | 78 | 79 | 79 | 80 | 80 | 76 | 69 | 62 | 58 | 54 | 44 | 32 | 37 | 37 | 46 | 47 | 50 | 49 | 46 | 48 | 61.1 | 79.6 | |
| 7-Mar | 48 | 50 | 52 | 52 | 55 | 58 | 63 | 69 | 65 | 55 | 48 | 45 | 42 | 40 | 39 | 37 | 37 | 40 | 44 | 48 | 58 | 73 | 81 | 82 | 53.5 | 82.2 | |
| 8-Mar | 90 | 91 | 93 | 94 | 94 | 94 | 88 | 84 | 81 | 74 | 63 | 49 | 44 | 44 | 44 | 43 | 44 | 55 | 86 | 94 | 94 | 94 | 94 | 92 | 76.1 | 94.5 | |
| 9-Mar | 85 | 75 | 69 | 66 | 64 | 63 | 60 | 56 | 51 | 48 | 48 | 47 | 43 | 56 | 61 | 59 | 50 | 48 | 49 | 46 | 41 | 36 | 37 | 39 | 54.0 | 84.8 | |
| 10-Mar | 41 | 44 | 45 | 49 | 58 | 64 | 67 | 66 | 65 | 55 | 47 | 40 | 45 | 57 | 67 | 56 | 52 | 52 | 53 | 70 | 90 | 86 | 75 | 75 | 59.1 | 90.3 | |
| 11-Mar | 80 | 75 | 68 | 69 | 71 | 76 | 78 | 72 | 68 | 63 | 54 | 48 | 54 | 58 | 57 | 56 | 60 | 80 | 83 | 88 | 90 | 92 | 93 | 85 | 71.5 | 92.7 | |
| 12-Mar | 80 | 69 | 66 | 68 | 63 | 61 | 63 | 60 | 55 | 45 | 36 | 27 | 25 | 25 | 28 | 28 | 27 | 24 | 28 | 33 | 35 | 37 | 38 | 42 | 44.4 | 80.2 | |
| 13-Mar | 47 | 50 | 53 | 58 | 79 | 84 | 85 | 86 | 85 | 84 | 83 | 83 | 77 | 67 | 68 | 67 | 69 | 66 | 66 | 73 | 80 | 83 | 84 | 84 | 73.3 | 85.6 | |
| 14-Mar | 86 | 89 | 89 | 87 | 85 | 85 | 83 | 81 | 80 | 72 | 54 | 40 | 29 | 26 | 24 | 22 | 22 | 24 | 28 | 31 | 34 | 40 | 46 | 50 | 54.5 | 89.0 | |
| 15-Mar | 55 | 61 | 61 | 62 | 67 | 71 | 75 | 72 | 60 | 56 | 50 | 31 | 28 | 29 | 29 | 29 | 31 | 36 | 38 | 42 | 47 | 52 | 55 | 60 | 49.9 | 74.7 | |
| 16-Mar | 63 | 64 | 64 | 63 | 67 | 64 | 69 | 76 | 71 | 74 | 66 | 53 | 37 | 33 | 30 | 32 | 34 | 34 | 34 | 41 | 54 | 64 | 68 | 65 | 55.0 | 76.0 | |
| 17-Mar | 71 | 78 | 80 | 81 | 83 | 85 | 87 | 87 | 84 | 79 | 73 | 67 | 65 | 65 | 62 | 60 | 59 | 63 | 83 | 92 | 94 | 94 | 92 | 91 | 78.0 | 93.7 | |
| 18-Mar | 86 | 90 | 90 | 89 | 87 | 84 | 81 | 79 | 75 | 75 | 74 | 70 | 63 | 60 | 57 | 55 | 53 | 54 | 67 | 75 | 77 | 77 | 79 | 79 | 73.9 | 90.5 | |
| 19-Mar | 82 | 82 | 83 | 79 | 79 | 79 | 80 | 81 | 77 | 74 | 68 | 64 | 62 | 63 | 64 | 66 | 70 | 73 | 76 | 77 | 80 | 82 | 81 | 81 | 75.2 | 82.9 | |
| 20-Mar | 81 | 81 | 80 | 81 | 82 | 83 | 86 | 86 | 84 | 81 | 85 | 82 | 80 | 80 | 80 | 82 | 80 | 77 | 75 | 77 | 80 | 84 | 87 | 88 | 81.7 | 87.8 | |
| 21-Mar | 87 | 88 | 88 | 89 | 88 | 87 | 87 | 85 | 85 | 83 | 74 | 66 | 60 | 52 | 47 | 43 | 40 | 53 | 61 | 66 | 72 | 76 | 78 | 81 | 72.4 | 89.2 | |
| 22-Mar | 83 | 84 | 87 | 88 | 89 | 90 | 89 | 88 | 87 | 82 | 74 | 71 | 74 | 84 | 89 | 85 | 86 | 88 | 88 | 89 | 88 | 85 | 86 | 86 | 84.9 | 90.1 | |
| 23-Mar | 86 | 87 | 87 | 88 | 88 | 87 | 87 | 87 | 85 | 82 | 81 | 77 | 62 | 64 | 69 | 69 | 69 | 70 | 71 | 73 | 77 | 84 | 88 | 91 | 79.5 | 90.5 | |
| 24-Mar | 91 | 90 | 88 | 87 | 87 | 86 | 84 | 84 | 86 | 80 | 60 | 53 | 44 | 37 | 30 | 29 | 25 | 25 | 29 | 33 | 39 | 47 | 51 | 58 | 59.3 | 91.2 | |
| 25-Mar | 63 | 69 | 75 | 82 | 84 | 87 | 89 | 89 | 77 | 67 | 44 | 31 | 22 | 17 | 16 | 16 | 15 | 23 | 42 | 41 | 45 | 50 | 61 | 67 | 53.0 | 89.5 | |
| 26-Mar | 73 | 79 | 85 | 89 | 92 | 91 | 93 | 91 | 85 | 77 | 65 | 59 | 48 | 34 | 32 | 34 | 32 | 31 | 34 | 42 | 46 | 49 | 52 | 54 | 61.1 | 92.7 | |
| 27-Mar | 56 | 59 | 64 | 65 | 70 | 79 | 79 | 78 | 72 | 62 | 53 | 48 | 46 | 44 | 42 | 42 | 44 | 44 | 46 | 51 | 55 | 63 | 68 | 72 | 58.3 | 79.4 | |
| 28-Mar | 74 | 76 | 78 | 81 | 82 | 83 | 82 | 79 | 77 | 71 | 65 | 62 | 58 | 54 | 52 | 48 | 46 | 49 | 52 | 61 | 72 | 87 | 90 | 93 | 69.7 | 92.7 | |
| 29-Mar | 93 | 94 | 94 | 93 | 94 | 95 | 96 | 94 | 81 | 60 | 49 | 39 | 24 | 24 | 24 | 23 | 23 | 23 | 29 | 42 | 64 | 73 | 74 | 77 | 61.8 | 95.7 | |
| 30-Mar | 84 | 87 | 91 | 87 | 87 | 86 | 88 | 86 | 81 | 72 | 67 | 55 | 43 | 38 | 37 | 36 | 36 | 38 | 33 | 46 | 54 | 45 | 71 | 76 | 63.6 | 90.7 | |
| 31-Mar | 77 | 80 | 78 | 77 | 71 | 68 | 66 | 65 | 58 | 45 | 33 | 27 | 22 | 22 | 18 | 19 | 20 | 20 | 19 | 20 | 26 | 41 | 52 | 46 | 44.4 | 79.7 | |
| | | 75.5 | 76.4 | 76.5 | 77.1 | 78.8 | 79.7 | 80.2 | 79.6 | 76.2 | 70.6 | 63.0 | 56.0 | 51.0 | 49.1 | 49.0 | 48.5 | 48.2 | 51.4 | 55.2 | 59.5 | 64.1 | 68.1 | 71.2 | 72.4 | Diurnal Average | |
| | | 93.2 | 93.6 | 94.0 | 94.0 | 94.5 | 95.0 | 95.7 | 94.1 | 93.1 | 91.0 | 87.3 | 82.7 | 80.3 | 83.7 | 88.6 | 85.0 | 85.7 | 91.9 | 87.7 | 94.0 | 94.0 | 94.1 | 94.3 | 92.7 | Diurnal Maximum | |

Hourly Averages

Relative Humidity (RH) - %
Valleyview - March 2012



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - March 2012

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
|--------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|---------------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1 Spd | 8 | 6 | 8 | 8 | 9 | 9 | 8 | 4 | 3 | 6 | 5 | 3 | 3 | 3 | 3 | 2 | 2 | 4 | 5 | 4 | 5 | 3 | 0 | 1 | 4.5 | 8.9 | |
| Dir | 348 | 351 | 351 | 358 | 350 | 342 | 344 | 353 | 15 | 3 | 353 | 6 | 2 | 27 | 33 | 31 | 2 | 338 | 349 | 342 | 339 | 335 | 211 | 178 | 353 | 342 | |
| 2 Spd | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 4 | 6 | 7 | 5 | 3 | 9 | 20 | 16 | 10 | 2 | 2 | 2 | 3 | 1.1 | 19.6 |
| Dir | 196 | 208 | 187 | 152 | 118 | 160 | 186 | 227 | 216 | 177 | 169 | 162 | 167 | 169 | 166 | 339 | 307 | 346 | 333 | 312 | 288 | 156 | 171 | 199 | 297 | 346 | |
| 3 Spd | 2 | 2 | 3 | 2 | 3 | 4 | 3 | 3 | 3 | 2 | 4 | 9 | 12 | 12 | 12 | 10 | 10 | 6 | 8 | 8 | 9 | 12 | 11 | 6 | 4.7 | 12.3 | |
| Dir | 197 | 199 | 201 | 200 | 177 | 171 | 172 | 173 | 173 | 171 | 180 | 258 | 268 | 271 | 257 | 313 | 337 | 301 | 298 | 274 | 264 | 265 | 262 | 248 | 261 | 271 | |
| 4 Spd | 10 | 11 | 11 | 7 | 6 | 5 | 6 | 5 | 4 | 2 | 5 | 11 | 9 | 8 | 8 | 8 | 4 | 2 | 4 | 5 | 2 | 2 | 2 | 2 | 5.2 | 11.5 | |
| Dir | 260 | 261 | 263 | 257 | 252 | 247 | 257 | 245 | 235 | 200 | 276 | 285 | 283 | 276 | 243 | 245 | 259 | 197 | 191 | 223 | 159 | 178 | 176 | 194 | 252 | 261 | |
| 5 Spd | 1 | 0 | 0 | 2 | 1 | 1 | 3 | 1 | 1 | 1 | 2 | 4 | 4 | 8 | 10 | 14 | 15 | 13 | 13 | 14 | 18 | 17 | 14 | 15 | 6.2 | 17.5 | |
| Dir | 190 | 318 | 150 | 187 | 344 | 7 | 317 | 149 | 160 | 160 | 281 | 320 | 335 | 300 | 341 | 16 | 13 | 15 | 18 | 12 | 4 | 5 | 1 | 355 | 1 | 4 | |
| 6 Spd | 10 | 4 | 4 | 1 | 0 | 1 | 2 | 2 | 4 | 6 | 8 | 8 | 8 | 9 | 4 | 10 | 6 | 11 | 13 | 13 | 13 | 3 | 8 | 3 | 2.8 | 13.2 | |
| Dir | 348 | 327 | 325 | 354 | 73 | 137 | 134 | 149 | 157 | 163 | 164 | 165 | 159 | 162 | 185 | 250 | 346 | 289 | 289 | 270 | 270 | 254 | 266 | 226 | 251 | 289 | |
| 7 Spd | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 3 | 3 | 8 | 16 | 15 | 17 | 15 | 16 | 16 | 16 | 15 | 15 | 8 | 7 | 5 | 4 | 6.1 | 16.6 | |
| Dir | 187 | 186 | 189 | 191 | 189 | 190 | 202 | 183 | 157 | 158 | 266 | 283 | 291 | 296 | 299 | 286 | 289 | 283 | 279 | 279 | 349 | 18 | 27 | 3 | 286 | 296 | |
| 8 Spd | 4 | 0 | 2 | 1 | 2 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 5 | 7 | 4 | 5 | 3 | 6 | 1 | 2 | 0 | 1 | 1 | 3 | 2.1 | 6.8 | |
| Dir | 40 | 349 | 4 | 282 | 194 | 190 | 177 | 189 | 195 | 189 | 184 | 225 | 236 | 232 | 208 | 162 | 148 | 217 | 260 | 122 | 0 | 186 | 196 | 184 | 199 | 232 | |
| 9 Spd | 4 | 7 | 6 | 6 | 6 | 5 | 4 | 5 | 5 | 6 | 3 | 6 | 17 | 15 | 7 | 7 | 13 | 7 | 2 | 6 | 9 | 12 | 9 | 7 | 5.0 | 16.6 | |
| Dir | 174 | 171 | 173 | 177 | 176 | 178 | 181 | 179 | 179 | 174 | 180 | 242 | 250 | 275 | 275 | 265 | 287 | 326 | 269 | 262 | 271 | 275 | 270 | 274 | 244 | 250 | |
| 10 Spd | 8 | 2 | 3 | 2 | 2 | 1 | 2 | 0 | 1 | 3 | 4 | 4 | 6 | 5 | 5 | 2 | 4 | 5 | 3 | 10 | 8 | 3 | 2 | 1 | 2.6 | 10.2 | |
| Dir | 275 | 239 | 251 | 195 | 202 | 202 | 187 | 343 | 126 | 180 | 161 | 182 | 170 | 178 | 165 | 157 | 134 | 129 | 131 | 167 | 154 | 104 | 87 | 319 | 170 | 167 | |
| 11 Spd | 1 | 2 | 4 | 1 | 1 | 1 | 2 | 3 | 6 | 6 | 4 | 2 | 6 | 9 | 9 | 4 | 8 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 0.4 | 8.9 | |
| Dir | 247 | 180 | 171 | 200 | 179 | 300 | 177 | 176 | 175 | 169 | 168 | 134 | 345 | 339 | 3 | 354 | 309 | 33 | 283 | 48 | 153 | 231 | 200 | 228 | 276 | 3 | |
| 12 Spd | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 4 | 5 | 5 | 6 | 8 | 9 | 9 | 11 | 10 | 8 | 7 | 3 | 2 | 2 | 2 | 4.4 | 10.9 | |
| Dir | 200 | 257 | 176 | 181 | 175 | 180 | 204 | 215 | 191 | 169 | 165 | 163 | 148 | 141 | 129 | 155 | 153 | 156 | 166 | 168 | 166 | 180 | 179 | 182 | 163 | 153 | |
| 13 Spd | 2 | 2 | 5 | 4 | 9 | 14 | 14 | 11 | 10 | 9 | 10 | 13 | 10 | 10 | 11 | 10 | 6 | 3 | 0 | 1 | 0 | 1 | 4 | 6 | 5.8 | 14.0 | |
| Dir | 164 | 147 | 350 | 16 | 8 | 4 | 1 | 10 | 9 | 11 | 2 | 333 | 304 | 317 | 313 | 324 | 333 | 50 | 186 | 228 | 93 | 80 | 342 | 345 | 348 | 1 | |
| 14 Spd | 5 | 6 | 1 | 1 | 1 | 1 | 0 | 1 | 3 | 3 | 2 | 2 | 2 | 4 | 5 | 6 | 7 | 6 | 5 | 1 | 2 | 1 | 1 | 1 | 0.9 | 6.8 | |
| Dir | 358 | 334 | 256 | 199 | 186 | 198 | 224 | 168 | 179 | 179 | 172 | 224 | 307 | 349 | 15 | 57 | 69 | 71 | 62 | 63 | 178 | 254 | 190 | 232 | 44 | 69 | |
| 15 Spd | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 4 | 9 | 10 | 10 | 14 | 13 | 11 | 10 | 9 | 9 | 6 | 4 | 4 | 5 | 4.4 | 13.6 | |
| Dir | 201 | 165 | 184 | 344 | 173 | 320 | 359 | 332 | 282 | 311 | 339 | 150 | 153 | 159 | 159 | 154 | 162 | 152 | 167 | 174 | 174 | 171 | 186 | 179 | 163 | 159 | |
| 16 Spd | 5 | 6 | 5 | 3 | 3 | 2 | 3 | 4 | 5 | 5 | 4 | 4 | 9 | 5 | 4 | 2 | 6 | 3 | 1 | 1 | 1 | 2 | 1 | 2 | 1.9 | 8.6 | |
| Dir | 174 | 179 | 182 | 176 | 319 | 260 | 219 | 203 | 170 | 175 | 186 | 237 | 282 | 316 | 276 | 353 | 303 | 304 | 277 | 334 | 192 | 181 | 164 | 202 | 230 | 282 | |
| 17 Spd | 1 | 0 | 1 | 2 | 1 | 3 | 1 | 2 | 5 | 6 | 7 | 9 | 10 | 14 | 11 | 12 | 9 | 7 | 5 | 3 | 3 | 4 | 4 | 3 | 4.3 | 13.7 | |
| Dir | 171 | 173 | 185 | 1 | 16 | 323 | 95 | 3 | 354 | 355 | 7 | 4 | 4 | 20 | 26 | 24 | 33 | 107 | 104 | 10 | 39 | 358 | 356 | 53 | 21 | 20 | |
| 18 Spd | 2 | 9 | 9 | 7 | 12 | 10 | 13 | 15 | 13 | 10 | 7 | 8 | 8 | 7 | 8 | 9 | 14 | 10 | 6 | 9 | 7 | 6 | 6 | 5 | 6.8 | 14.6 | |
| Dir | 48 | 285 | 275 | 258 | 269 | 270 | 278 | 277 | 277 | 285 | 291 | 280 | 309 | 328 | 359 | 24 | 343 | 336 | 345 | 357 | 353 | 348 | 0 | 360 | 309 | 277 | |
| 19 Spd | 3 | 2 | 5 | 6 | 6 | 4 | 4 | 2 | 3 | 7 | 6 | 7 | 12 | 13 | 14 | 13 | 13 | 13 | 9 | 6 | 6 | 6 | 7 | 5 | 6.7 | 13.6 | |
| Dir | 23 | 352 | 23 | 26 | 17 | 22 | 337 | 333 | 357 | 342 | 348 | 295 | 332 | 340 | 345 | 353 | 349 | 355 | 360 | 12 | 5 | 326 | 333 | 2 | 350 | 345 | |
| 20 Spd | 4 | 3 | 2 | 3 | 3 | 2 | 4 | 5 | 7 | 6 | 10 | 11 | 10 | 13 | 13 | 17 | 14 | 9 | 7 | 4 | 1 | 1 | 0 | 1 | 5.4 | 16.7 | |
| Dir | 32 | 72 | 75 | 48 | 29 | 31 | 69 | 56 | 48 | 58 | 358 | 19 | 25 | 13 | 2 | 340 | 345 | 6 | 11 | 26 | 73 | 253 | 171 | 159 | 16 | 340 | |
| 21 Spd | 2 | 1 | 2 | 2 | 2 | 1 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 7 | 9 | 8 | 7 | 6 | 7 | 7 | 5 | 4.1 | 9.0 | |
| Dir | 351 | 46 | 4 | 315 | 21 | 347 | 344 | 9 | 17 | 342 | 325 | 338 | 345 | 349 | 348 | 1 | 4 | 354 | 4 | 2 | 348 | 352 | 348 | 342 | 353 | 354 | |
| 22 Spd | 6 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 4 | 6 | 9 | 16 | 14 | 14 | 14 | 18 | 16 | 13 | 7 | 4 | 5 | 5 | 3 | 1 | 6.6 | 18.0 | |
| Dir | 339 | 3 | 348 | 8 | 14 | 9 | 11 | 354 | 354 | 0 | 353 | 343 | 338 | 333 | 332 | 341 | 340 | 337 | 316 | 313 | 258 | 247 | 232 | 200 | 337 | 341 | |

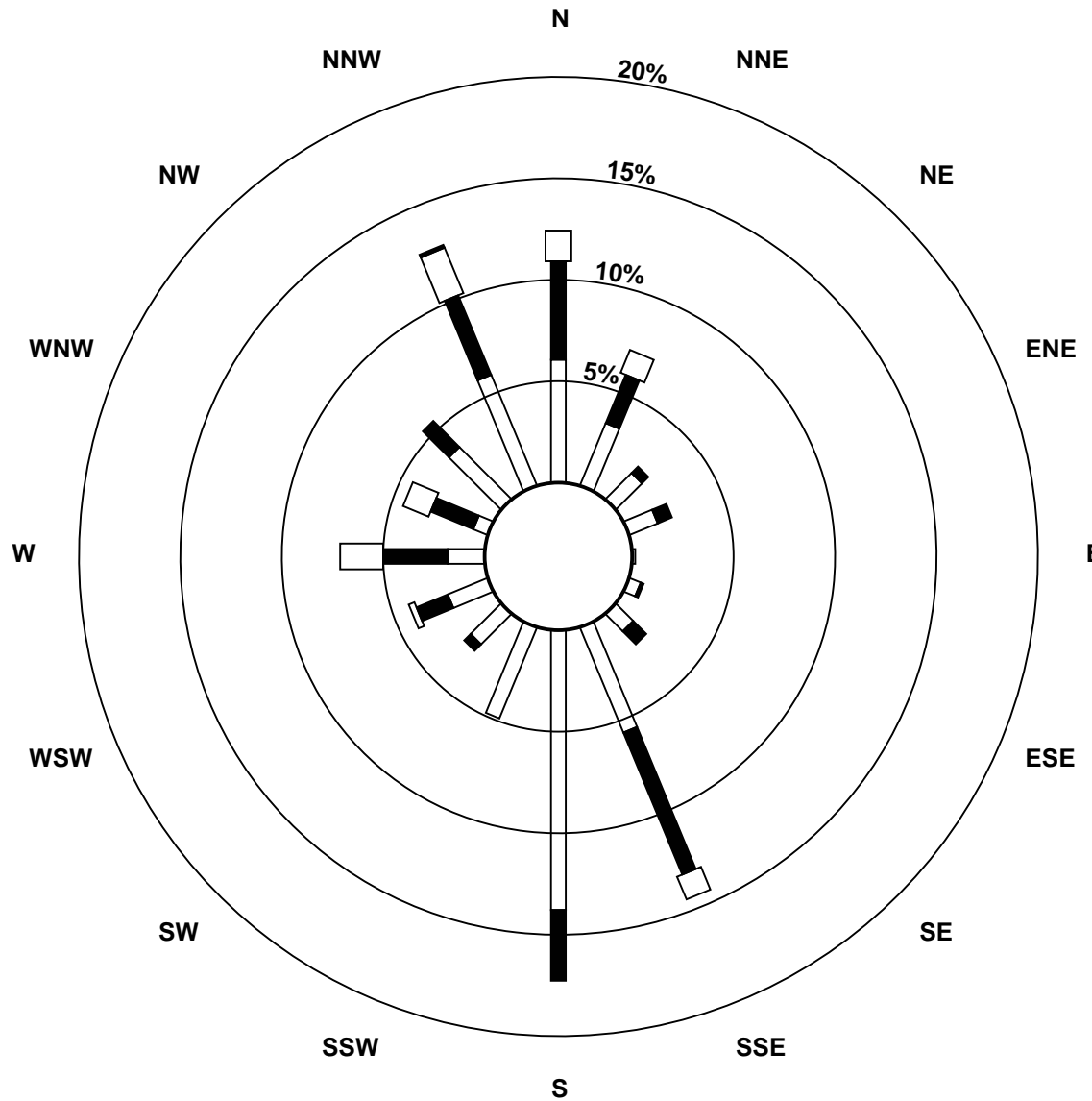
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - March 2012

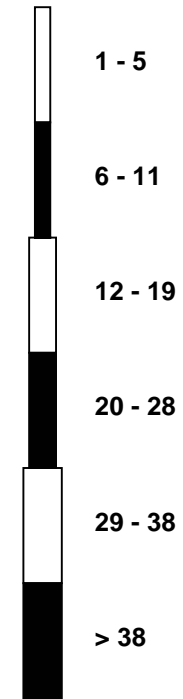
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--|-------------------------------|--|----------|----------|----------|------|-------|------|------|------|------|------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 23 Spd | 2 | 2 | 2 | 1 | 2 | 1 | 0 | 1 | 1 | 2 | 4 | 4 | 5 | 8 | 11 | 12 | 11 | 9 | 8 | 5 | 4 | 5 | 1 | 0 | 3.1 | 11.9 |
| Dir | 185 | 178 | 182 | 181 | 181 | 181 | 80 | 142 | 54 | 314 | 337 | 316 | 319 | 332 | 341 | 342 | 345 | 6 | 16 | 43 | 344 | 332 | 298 | 36 | 344 | 342 |
| 24 Spd | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 4 | 6 | 6 | 5 | 4 | 2 | 5 | 7 | 5 | 4 | 5 | 4 | 2 | 1 | 1.8 | 6.9 | |
| Dir | 326 | 294 | 172 | 188 | 230 | 203 | 51 | 159 | 52 | 164 | 173 | 160 | 171 | 167 | 161 | 346 | 50 | 67 | 67 | 73 | 109 | 126 | 77 | 89 | 129 | 160 |
| 25 Spd | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 6 | 6 | 4 | 10 | 11 | 9 | 5 | 4 | 8 | 0 | 4 | 4 | 5 | 4 | 2.2 | 10.9 |
| Dir | 84 | 356 | 201 | 213 | 275 | 261 | 27 | 3 | 320 | 319 | 168 | 169 | 160 | 168 | 161 | 154 | 159 | 339 | 339 | 134 | 179 | 184 | 173 | 169 | 169 | 161 |
| 26 Spd | 3 | 1 | 0 | 1 | 1 | 1 | 4 | 0 | 2 | 1 | 3 | 5 | 6 | 4 | 7 | 11 | 11 | 11 | 10 | 9 | 6 | 4 | 3 | 3 | 3.7 | 11.5 |
| Dir | 170 | 296 | 45 | 314 | 303 | 216 | 346 | 345 | 321 | 347 | 316 | 339 | 334 | 53 | 41 | 11 | 23 | 34 | 27 | 13 | 18 | 11 | 16 | 1 | 13 | 23 |
| 27 Spd | 3 | 3 | 3 | 3 | 0 | 0 | 1 | 1 | 1 | 1 | 12 | 12 | 13 | 12 | 11 | 12 | 10 | 7 | 7 | 7 | 8 | 9 | 9 | 10 | 5.2 | 12.8 |
| Dir | 8 | 338 | 349 | 333 | 28 | 168 | 311 | 206 | 253 | 29 | 164 | 161 | 161 | 166 | 168 | 166 | 157 | 157 | 151 | 147 | 152 | 157 | 162 | 165 | 160 | 161 |
| 28 Spd | 13 | 11 | 8 | 8 | 6 | 8 | 9 | 11 | 11 | 10 | 9 | 11 | 11 | 8 | 7 | 6 | 6 | 7 | 6 | 8 | 11 | 5 | 4 | 3 | 7.8 | 12.7 |
| Dir | 168 | 169 | 172 | 169 | 175 | 169 | 172 | 166 | 162 | 156 | 164 | 172 | 168 | 170 | 167 | 161 | 136 | 126 | 128 | 147 | 167 | 205 | 253 | 218 | 166 | 168 |
| 29 Spd | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 4 | 5 | 7 | 6 | 8 | 9 | 10 | 9 | 8 | 8 | 4 | 8 | 11 | 2 | 3 | 1 | 3.3 | 10.6 |
| Dir | 193 | 182 | 181 | 174 | 155 | 138 | 157 | 170 | 166 | 170 | 160 | 162 | 180 | 156 | 152 | 153 | 144 | 179 | 306 | 299 | 292 | 242 | 276 | 147 | 179 | 292 |
| 30 Spd | 1 | 1 | 2 | 2 | 2 | 1 | 0 | 0 | 2 | 3 | 2 | 3 | 8 | 8 | 5 | 5 | 3 | 3 | 3 | 5 | 6 | 7 | 4 | 4 | 2.3 | 7.9 |
| Dir | 208 | 168 | 171 | 189 | 203 | 206 | 101 | 142 | 159 | 185 | 198 | 268 | 301 | 278 | 277 | 261 | 313 | 342 | 316 | 239 | 218 | 240 | 193 | 180 | 246 | 278 |
| 31 Spd | 3 | 3 | 3 | 2 | 4 | 3 | 2 | 3 | 4 | 5 | 12 | 9 | 4 | 6 | 3 | 4 | 5 | 7 | 5 | 3 | 2 | 4 | 2 | 2 | 1.4 | 11.7 |
| Dir | 181 | 165 | 197 | 161 | 190 | 201 | 200 | 192 | 187 | 223 | 275 | 278 | 279 | 325 | 334 | 37 | 13 | 15 | 8 | 14 | 14 | 345 | 334 | 336 | 293 | 275 |
| Spd | 0.5 | 0.9 | 0.9 | 0.5 | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 | 1.0 | 2.2 | 2.7 | 2.5 | 1.7 | 2.6 | 3.7 | 3.1 | 2.7 | 1.6 | 1.2 | 1.4 | 1.2 | 0.6 | Diurnal Average | |
| Dir | 261 | 234 | 239 | 236 | 267 | 269 | 284 | 219 | 185 | 189 | 241 | 263 | 278 | 294 | 317 | 338 | 347 | 357 | 344 | 312 | 297 | 295 | 294 | 266 | | |
| Spd | 12.7 | 11.5 | 10.6 | 8.0 | 12.1 | 13.7 | 14.0 | 14.6 | 12.9 | 10.1 | 11.8 | 16.5 | 16.6 | 16.6 | 15.3 | 18.0 | 16.4 | 19.6 | 16.3 | 14.5 | 17.5 | 17.4 | 14.2 | 14.9 | Diurnal Maximum | |
| Dir | 168 | 261 | 263 | 358 | 269 | 4 | 1 | 277 | 277 | 285 | 164 | 283 | 250 | 296 | 299 | 341 | 340 | 346 | 333 | 279 | 4 | 5 | 1 | 355 | | |
| Maximum Speed Value: 20 km/h on Mar 2 18:00 | | Minimum Speed Value: 0 km/h on Mar 24 07:00 | | | | | | | | | | | | | | | | Hours in Service: 744 | | | | | | | | |
| Maximum Daily Speed Average: 7.8 km/h on Mar 18 | | Minimum Daily Speed Average: 0.4 km/h on Mar 14 | | | | | | | | | | | | | | | | Hours of Data: 744 | | | | | | | | |
| Maximum Diurnal Speed Average: 3.7 km/h at hour 17 | | Minimum Diurnal Speed Average: 0.5 km/h at hour 4 | | | | | | | | | | | | | | | | Hours of Missing Data: 0 | | | | | | | | |
| Monthly Average Velocity: 1.07 km/h 301.0 deg | | Speed Percentiles: P ₁ = 0.2 P ₁₀ = 0.9 Q ₁ = 2.1 Median = 4.2 Q ₃ = 7.8 P ₉₀ = 11.3 P ₉₉ = 16.6 | | | | | | | | | | | | | | | | Percent Operational Time: 100.0 | | | | | | | | |
| All monthly, daily, and diurnal averages have been calculated using vector methods | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequency Distribution | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Speed Range (km/h) | | | | | | | | | | | | | | | | | | | | | | | | |
| Direction | 0 to 5 | 5 to 11 | 11 to 19 | 19 to 28 | 28 to 38 | > 38 | Total | | | | | | | | | | | | | | | | | | | |
| North | 77 | 66 | 30 | 1 | 0 | 0 | 174 | | | | | | | | | | | | | | | | | | | |
| NorthEast | 32 | 13 | 4 | 0 | 0 | 0 | 49 | | | | | | | | | | | | | | | | | | | |
| East | 18 | 3 | 0 | 0 | 0 | 0 | 21 | | | | | | | | | | | | | | | | | | | |
| SouthEast | 28 | 26 | 1 | 0 | 0 | 0 | 55 | | | | | | | | | | | | | | | | | | | |
| South | 157 | 61 | 11 | 0 | 0 | 0 | 229 | | | | | | | | | | | | | | | | | | | |
| SouthWest | 36 | 11 | 0 | 0 | 0 | 0 | 47 | | | | | | | | | | | | | | | | | | | |
| West | 25 | 36 | 26 | 0 | 0 | 0 | 87 | | | | | | | | | | | | | | | | | | | |
| NorthWest | 44 | 30 | 8 | 0 | 0 | 0 | 82 | | | | | | | | | | | | | | | | | | | |
| Total | 417 | 246 | 80 | 1 | 0 | 0 | 744 | | | | | | | | | | | | | | | | | | | |

Wind Rose

Wind Speed (WS) (km/h)
Valleyview - March 2012



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - March 2012

| | | |
|--|--|---------------------------------|
| Maximum Speed: 20 km/h on Mar 2 18:00 | Maximum Daily Speed Average: 9.0 km/h on Mar 18 | Hours in Service: 744 |
| Minimum Speed: 1 km/h on Mar 1 23:00 | Minimum Daily Speed Average: 3.2 km/h on Mar 14 | Hours of Data: 744 |
| Maximum Diurnal Speed Average: 9.1 km/h at hour 14 | Minimum Diurnal Speed Average: 3.1 km/h at hour 4 | Hours of Missing Data: 0 |
| Monthly Average Speed: 5.63 km/h | Percentiles: P ₁ = 0.7 P ₁₀ = 1.3 Q ₁ = 2.4 Median = 4.6 Q ₃ = 8.2 P ₉₀ = 11.4 P ₉₉ = 16.6 | Percent Operational Time: 100.0 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 8 | 6 | 8 | 8 | 9 | 9 | 8 | 4 | 4 | 6 | 5 | 3 | 4 | 3 | 3 | 3 | 3 | 5 | 5 | 4 | 5 | 4 | 1 | 1 | 4.9 | 8.9 |
| 2-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | 4 | 6 | 7 | 5 | 5 | 10 | 20 | 16 | 10 | 2 | 2 | 2 | 3 | 4.4 | 19.8 |
| 3-Mar | 2 | 2 | 3 | 2 | 3 | 4 | 4 | 3 | 3 | 2 | 4 | 9 | 12 | 13 | 12 | 11 | 11 | 7 | 8 | 8 | 10 | 12 | 11 | 6 | 6.7 | 12.6 |
| 4-Mar | 10 | 12 | 11 | 7 | 6 | 5 | 6 | 5 | 4 | 2 | 6 | 12 | 9 | 8 | 9 | 9 | 4 | 3 | 4 | 6 | 2 | 2 | 2 | 2 | 6.1 | 11.6 |
| 5-Mar | 1 | 1 | 1 | 2 | 1 | 2 | 4 | 1 | 1 | 1 | 2 | 4 | 4 | 8 | 11 | 14 | 15 | 13 | 13 | 14 | 18 | 17 | 14 | 15 | 7.4 | 17.7 |
| 6-Mar | 10 | 4 | 4 | 1 | 1 | 1 | 2 | 2 | 4 | 6 | 8 | 8 | 8 | 9 | 6 | 10 | 8 | 12 | 13 | 13 | 13 | 4 | 8 | 3 | 6.7 | 13.4 |
| 7-Mar | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 9 | 17 | 16 | 17 | 16 | 16 | 16 | 16 | 16 | 15 | 10 | 7 | 5 | 4 | 8.5 | 16.8 |
| 8-Mar | 4 | 1 | 2 | 2 | 2 | 3 | 4 | 3 | 3 | 3 | 4 | 5 | 5 | 7 | 5 | 5 | 3 | 8 | 3 | 2 | 1 | 2 | 1 | 3 | 3.3 | 7.6 |
| 9-Mar | 4 | 7 | 6 | 6 | 6 | 5 | 4 | 5 | 6 | 6 | 3 | 7 | 17 | 16 | 8 | 8 | 13 | 8 | 3 | 6 | 9 | 12 | 9 | 7 | 7.5 | 16.7 |
| 10-Mar | 8 | 2 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 3 | 4 | 4 | 6 | 6 | 6 | 2 | 4 | 5 | 3 | 10 | 8 | 4 | 2 | 2 | 3.9 | 10.3 |
| 11-Mar | 2 | 2 | 4 | 1 | 1 | 1 | 2 | 3 | 6 | 6 | 4 | 3 | 6 | 9 | 9 | 6 | 9 | 6 | 3 | 3 | 1 | 2 | 2 | 3 | 3.9 | 9.1 |
| 12-Mar | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 4 | 5 | 5 | 6 | 9 | 10 | 9 | 11 | 11 | 8 | 7 | 3 | 2 | 2 | 2 | 5.0 | 11.0 |
| 13-Mar | 2 | 2 | 6 | 5 | 10 | 14 | 14 | 11 | 11 | 9 | 10 | 13 | 10 | 11 | 11 | 10 | 6 | 3 | 1 | 1 | 1 | 2 | 5 | 6 | 7.2 | 14.2 |
| 14-Mar | 5 | 6 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 6 | 7 | 6 | 6 | 3 | 2 | 1 | 1 | 1 | 3.2 | 6.9 |
| 15-Mar | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 5 | 10 | 10 | 11 | 14 | 13 | 11 | 11 | 9 | 9 | 6 | 4 | 4 | 5 | 5.7 | 13.7 |
| 16-Mar | 6 | 6 | 5 | 3 | 4 | 3 | 3 | 5 | 5 | 5 | 4 | 5 | 9 | 6 | 5 | 3 | 6 | 3 | 1 | 2 | 1 | 2 | 2 | 2 | 4.0 | 9.2 |
| 17-Mar | 1 | 1 | 1 | 2 | 2 | 4 | 3 | 2 | 5 | 6 | 7 | 9 | 11 | 14 | 11 | 12 | 10 | 8 | 6 | 3 | 3 | 4 | 4 | 3 | 5.5 | 13.9 |
| 18-Mar | 2 | 9 | 9 | 7 | 13 | 10 | 13 | 15 | 13 | 10 | 8 | 9 | 8 | 7 | 9 | 9 | 14 | 10 | 7 | 9 | 7 | 7 | 6 | 5 | 9.0 | 14.7 |
| 19-Mar | 3 | 2 | 6 | 6 | 6 | 4 | 5 | 3 | 3 | 7 | 7 | 7 | 12 | 13 | 14 | 13 | 13 | 13 | 9 | 6 | 6 | 6 | 7 | 5 | 7.3 | 13.7 |
| 20-Mar | 4 | 4 | 3 | 3 | 3 | 2 | 4 | 5 | 8 | 7 | 10 | 12 | 10 | 13 | 13 | 17 | 14 | 9 | 7 | 4 | 2 | 1 | 1 | 1 | 6.5 | 16.8 |
| 21-Mar | 2 | 1 | 2 | 3 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 7 | 9 | 8 | 7 | 7 | 7 | 7 | 5 | 4.4 | 9.0 |
| 22-Mar | 6 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 4 | 6 | 10 | 16 | 14 | 14 | 14 | 18 | 16 | 13 | 7 | 4 | 5 | 5 | 3 | 1 | 7.5 | 18.0 |
| 23-Mar | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 3 | 4 | 5 | 6 | 8 | 11 | 12 | 11 | 9 | 8 | 5 | 5 | 5 | 1 | 1 | 4.5 | 11.9 |
| 24-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 6 | 7 | 6 | 5 | 4 | 2 | 5 | 7 | 5 | 5 | 5 | 5 | 2 | 1 | 3.3 | 7.1 |
| 25-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 6 | 6 | 4 | 10 | 11 | 9 | 5 | 7 | 8 | 2 | 4 | 4 | 5 | 4 | 4.0 | 11.1 |
| 26-Mar | 3 | 1 | 1 | 2 | 3 | 2 | 4 | 2 | 2 | 2 | 3 | 5 | 6 | 6 | 9 | 11 | 12 | 11 | 10 | 9 | 6 | 4 | 4 | 3 | 5.0 | 11.9 |
| 27-Mar | 4 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 12 | 13 | 13 | 12 | 11 | 12 | 10 | 7 | 7 | 7 | 8 | 9 | 9 | 11 | 6.7 | 13.1 |
| 28-Mar | 13 | 11 | 8 | 8 | 6 | 8 | 9 | 11 | 11 | 10 | 9 | 11 | 11 | 8 | 7 | 6 | 7 | 7 | 6 | 9 | 11 | 6 | 4 | 4 | 8.4 | 12.8 |
| 29-Mar | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 4 | 5 | 7 | 6 | 8 | 10 | 10 | 9 | 8 | 8 | 5 | 9 | 11 | 3 | 4 | 2 | 5.4 | 10.8 |
| 30-Mar | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 3 | 3 | 2 | 5 | 8 | 9 | 6 | 6 | 4 | 3 | 3 | 6 | 7 | 8 | 4 | 4 | 3.9 | 8.8 |
| 31-Mar | 3 | 3 | 3 | 2 | 4 | 3 | 2 | 3 | 4 | 5 | 12 | 9 | 6 | 6 | 5 | 5 | 7 | 7 | 5 | 3 | 2 | 4 | 3 | 2 | 4.6 | 12.2 |
| | 3.8 | 3.5 | 3.6 | 3.1 | 3.3 | 3.2 | 3.7 | 3.5 | 4.0 | 4.5 | 6.0 | 7.5 | 8.4 | 9.1 | 8.8 | 8.9 | 9.1 | 8.6 | 6.9 | 6.5 | 5.8 | 5.0 | 4.4 | 3.8 | Diurnal Average | |
| | 12.8 | 11.6 | 10.7 | 8.0 | 12.6 | 13.9 | 14.2 | 14.7 | 13.1 | 10.4 | 12.2 | 16.7 | 16.7 | 16.8 | 15.5 | 18.0 | 16.5 | 19.8 | 16.3 | 14.6 | 17.7 | 17.5 | 14.4 | 15.0 | Diurnal Maximum | |

All monthly, daily, and diurnal averages have been calculated using scalar methods

Hourly Standard Deviations

Wind Direction (WD) - deg

Valleyview - March 2012

| Maximum Value: 99.6 deg on Mar 26 08:00 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|
| Minimum Value: 4.5 deg on Mar 22 17:00 | | Hours of Data: 744 | | | | | | | | | | | | | | | | | | | | | | | |
| Percentiles: P ₁ = 5.7 P ₁₀ = 7.7 Q ₁ = 10.2 Median = 16.8 Q ₃ = 31.4 P ₉₀ = 63.3 P ₉₉ = 92.6 | | Hours of Missing Data: 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | | Hours of Calibration: 0 | | | | | | | | | | | | | | | | | | | | | | | |
| | | Percent Operational Time: 100.0 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| 1-Mar | 7 | 7 | 7 | 8 | 10 | 6 | 9 | 10 | 12 | 17 | 16 | 19 | 19 | 29 | 30 | 33 | 27 | 18 | 13 | 7 | 9 | 19 | 65 | 35 | 65.0 |
| 2-Mar | 16 | 22 | 27 | 58 | 89 | 23 | 27 | 41 | 33 | 75 | 38 | 11 | 8 | 7 | 18 | 64 | 26 | 9 | 5 | 15 | 52 | 22 | 22 | 9 | 88.8 |
| 3-Mar | 8 | 11 | 10 | 12 | 6 | 12 | 7 | 10 | 8 | 15 | 9 | 32 | 13 | 14 | 11 | 30 | 30 | 33 | 20 | 17 | 17 | 8 | 8 | 15 | 32.5 |
| 4-Mar | 10 | 8 | 8 | 12 | 11 | 10 | 9 | 16 | 21 | 17 | 39 | 11 | 12 | 19 | 31 | 12 | 30 | 58 | 16 | 31 | 36 | 32 | 18 | 6 | 58.2 |
| 5-Mar | 19 | 95 | 64 | 29 | 49 | 93 | 66 | 35 | 19 | 17 | 47 | 19 | 26 | 16 | 31 | 7 | 8 | 9 | 8 | 9 | 8 | 6 | 9 | 7 | 94.6 |
| 6-Mar | 8 | 10 | 12 | 65 | 50 | 22 | 34 | 21 | 14 | 10 | 10 | 9 | 12 | 10 | 53 | 12 | 45 | 21 | 10 | 17 | 14 | 28 | 13 | 26 | 64.8 |
| 7-Mar | 6 | 8 | 6 | 10 | 10 | 17 | 22 | 29 | 13 | 14 | 31 | 9 | 11 | 9 | 9 | 9 | 11 | 8 | 7 | 6 | 38 | 18 | 13 | 31 | 38.1 |
| 8-Mar | 28 | 87 | 29 | 50 | 32 | 24 | 7 | 10 | 9 | 11 | 8 | 30 | 15 | 15 | 27 | 10 | 12 | 33 | 92 | 66 | 92 | 26 | 49 | 7 | 91.6 |
| 9-Mar | 7 | 5 | 6 | 9 | 7 | 7 | 7 | 8 | 8 | 7 | 16 | 31 | 7 | 21 | 23 | 29 | 10 | 32 | 49 | 17 | 12 | 9 | 16 | 20 | 49.2 |
| 10-Mar | 18 | 53 | 28 | 60 | 28 | 23 | 25 | 82 | 60 | 9 | 17 | 13 | 11 | 13 | 12 | 46 | 22 | 14 | 15 | 10 | 16 | 24 | 19 | 93 | 93.4 |
| 11-Mar | 52 | 15 | 8 | 57 | 35 | 72 | 17 | 17 | 7 | 10 | 19 | 66 | 20 | 8 | 13 | 36 | 20 | 81 | 46 | 66 | 37 | 40 | 46 | 15 | 80.6 |
| 12-Mar | 29 | 33 | 36 | 15 | 14 | 7 | 11 | 13 | 23 | 12 | 16 | 15 | 17 | 20 | 10 | 13 | 11 | 11 | 9 | 6 | 7 | 25 | 42 | 16 | 42.3 |
| 13-Mar | 29 | 60 | 35 | 54 | 17 | 9 | 9 | 13 | 14 | 16 | 10 | 17 | 10 | 12 | 19 | 16 | 23 | 29 | 69 | 27 | 86 | 78 | 18 | 13 | 86.0 |
| 14-Mar | 15 | 7 | 63 | 24 | 25 | 69 | 74 | 67 | 18 | 8 | 44 | 64 | 58 | 12 | 21 | 21 | 15 | 13 | 20 | 68 | 61 | 57 | 52 | 44 | 74.0 |
| 15-Mar | 18 | 23 | 61 | 63 | 78 | 59 | 47 | 43 | 92 | 28 | 50 | 14 | 31 | 13 | 10 | 9 | 11 | 10 | 10 | 7 | 7 | 9 | 7 | 9 | 91.8 |
| 16-Mar | 5 | 6 | 8 | 51 | 53 | 57 | 28 | 38 | 10 | 10 | 8 | 30 | 22 | 43 | 44 | 72 | 20 | 43 | 45 | 92 | 52 | 28 | 80 | 11 | 92.2 |
| 17-Mar | 33 | 76 | 51 | 44 | 95 | 42 | 74 | 33 | 8 | 9 | 11 | 12 | 15 | 8 | 9 | 8 | 25 | 21 | 30 | 16 | 25 | 10 | 12 | 28 | 95.1 |
| 18-Mar | 28 | 31 | 26 | 20 | 16 | 19 | 13 | 8 | 12 | 15 | 23 | 28 | 20 | 17 | 26 | 21 | 6 | 11 | 18 | 8 | 13 | 14 | 14 | 17 | 31.5 |
| 19-Mar | 17 | 90 | 16 | 11 | 9 | 69 | 53 | 70 | 21 | 9 | 14 | 19 | 8 | 6 | 6 | 9 | 9 | 11 | 14 | 15 | 10 | 12 | 8 | 20 | 89.6 |
| 20-Mar | 21 | 25 | 29 | 30 | 22 | 20 | 24 | 24 | 25 | 29 | 10 | 19 | 12 | 11 | 10 | 6 | 9 | 14 | 14 | 22 | 69 | 75 | 68 | 80 | 80.4 |
| 21-Mar | 46 | 41 | 23 | 34 | 59 | 54 | 12 | 23 | 16 | 19 | 10 | 15 | 10 | 14 | 20 | 20 | 15 | 8 | 8 | 9 | 33 | 9 | 7 | 10 | 59.1 |
| 22-Mar | 10 | 13 | 12 | 12 | 12 | 14 | 12 | 30 | 11 | 8 | 10 | 7 | 6 | 7 | 8 | 6 | 5 | 7 | 12 | 13 | 22 | 16 | 24 | 24 | 29.6 |
| 23-Mar | 19 | 12 | 11 | 79 | 12 | 29 | 58 | 54 | 72 | 31 | 11 | 23 | 10 | 13 | 10 | 5 | 6 | 11 | 11 | 18 | 28 | 11 | 54 | 78 | 79.3 |
| 24-Mar | 84 | 84 | 33 | 23 | 42 | 47 | 94 | 9 | 94 | 61 | 9 | 12 | 11 | 12 | 19 | 35 | 23 | 12 | 13 | 34 | 23 | 16 | 35 | 50 | 94.1 |
| 25-Mar | 66 | 78 | 49 | 67 | 68 | 74 | 82 | 68 | 47 | 26 | 25 | 12 | 27 | 10 | 11 | 13 | 16 | 83 | 14 | 81 | 26 | 8 | 8 | 10 | 82.8 |
| 26-Mar | 11 | 85 | 81 | 79 | 69 | 75 | 15 | 100 | 47 | 77 | 36 | 8 | 9 | 60 | 31 | 14 | 15 | 10 | 12 | 6 | 9 | 12 | 52 | 19 | 99.6 |
| 27-Mar | 16 | 16 | 17 | 23 | 91 | 88 | 34 | 62 | 65 | 86 | 17 | 10 | 13 | 11 | 9 | 9 | 11 | 13 | 10 | 10 | 11 | 11 | 9 | 9 | 91.1 |
| 28-Mar | 7 | 7 | 6 | 7 | 8 | 8 | 6 | 7 | 10 | 14 | 13 | 9 | 8 | 9 | 11 | 18 | 22 | 14 | 10 | 14 | 8 | 24 | 24 | 21 | 24.0 |
| 29-Mar | 31 | 23 | 7 | 9 | 16 | 21 | 14 | 7 | 11 | 9 | 12 | 10 | 16 | 13 | 12 | 13 | 15 | 20 | 37 | 25 | 14 | 40 | 59 | 60 | 59.8 |
| 30-Mar | 29 | 49 | 31 | 11 | 13 | 61 | 84 | 64 | 18 | 14 | 31 | 58 | 24 | 25 | 35 | 29 | 31 | 21 | 24 | 28 | 27 | 18 | 18 | 7 | 84.3 |
| 31-Mar | 8 | 19 | 9 | 18 | 9 | 9 | 14 | 7 | 7 | 32 | 18 | 22 | 50 | 41 | 60 | 52 | 70 | 16 | 12 | 18 | 40 | 22 | 70 | 72 | 71.9 |
| | 83.7 | 94.6 | 80.7 | 79.3 | 95.1 | 93.0 | 94.1 | 99.6 | 93.8 | 85.7 | 49.6 | 65.9 | 58.5 | 60.2 | 60.4 | 71.6 | 69.9 | 82.8 | 91.6 | 92.2 | 91.6 | 78.0 | 80.2 | 93.4 | |

PAZA

Portable – Sunset House Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Sunset House - March 2012

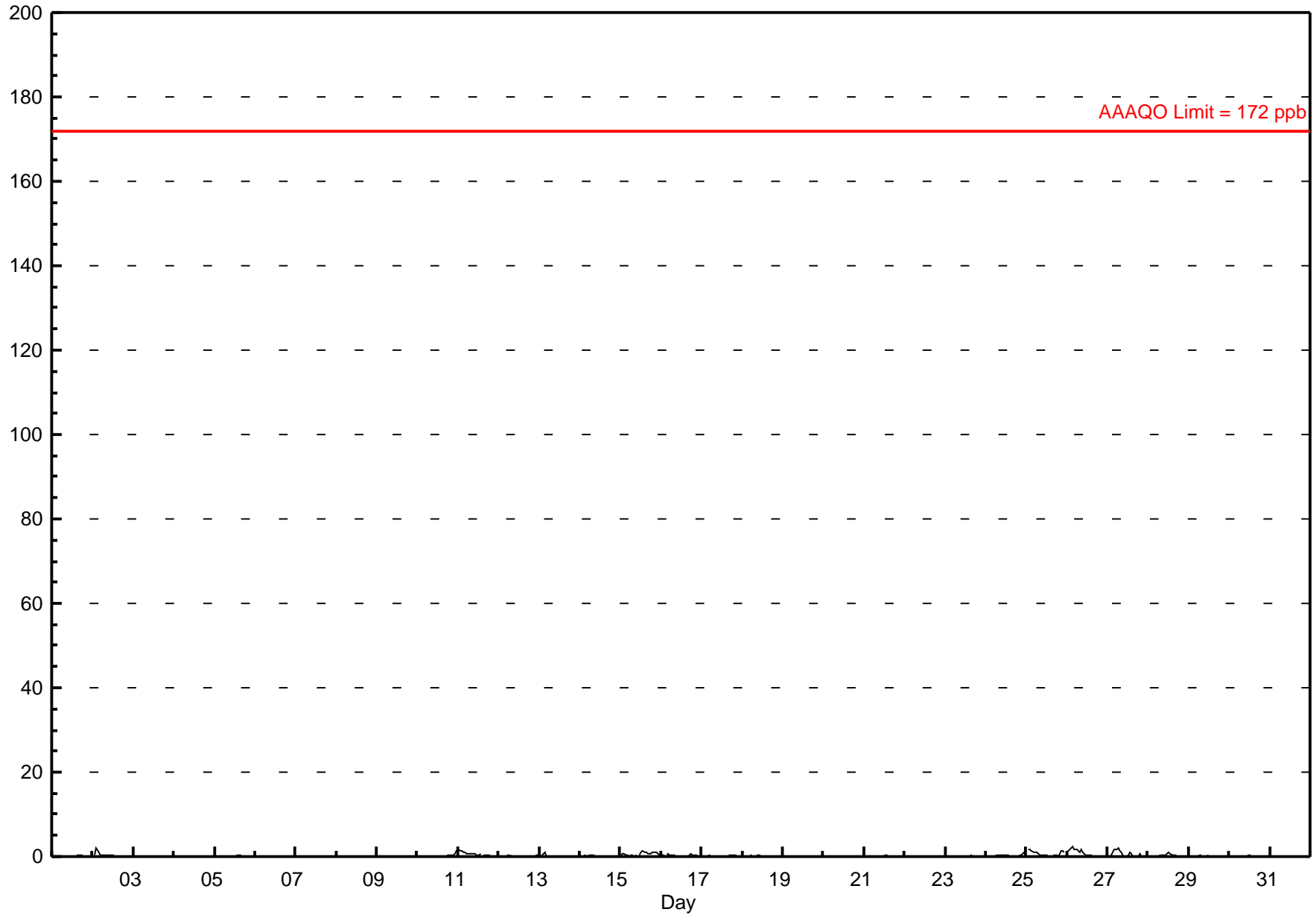
| | |
|--|--|
| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 | Hours in Service: 744 |
| Maximum Value: 2.4 ppb on Mar 26 04:00 | Maximum Daily Average: 0.8 ppb on Mar 26 |
| Minimum Value: 0 ppb on Mar 1 08:00 | Hours of Data: 704 |
| Maximum Diurnal Average: 0.3 ppb at hour 3 | Hours of Missing Data: 40 |
| Monthly Average: 0.17 ppb | Hours of Calibration: 37 |
| Minimum Daily Average: 0.0 ppb on Mar 7 | Percent Operational Time: 99.6 |
| Minimum Diurnal Average: 0.1 ppb at hour 17 | |
| Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.2 P ₉₀ = 0.5 P ₉₉ = 1.6 | |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 |
| 2-Mar | A | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.9 |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.0 | 0.1 |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.0 | 0.0 |
| 5-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.1 | 0.4 |
| 6-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 7-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 8-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.2 |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 10-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0.2 | 1.3 |
| 11-Mar | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 1.6 |
| 12-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | C | C | C | C | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 |
| 13-Mar | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.9 |
| 14-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.4 |
| 15-Mar | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0.6 | 1.5 |
| 16-Mar | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.7 |
| 17-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 |
| 18-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 |
| 19-Mar | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 |
| 20-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |
| 21-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.3 |
| 22-Mar | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 |
| 23-Mar | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.2 |
| 24-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0.2 | 0.9 |
| 25-Mar | A | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0.7 | 1.7 |
| 26-Mar | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.8 | 2.4 |
| 27-Mar | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | A | 0 | 0 | 0.5 | 2.1 |
| 28-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.2 | 1.1 |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | D | D | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.1 | 0.5 |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.0 | 0.5 |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 |

C - Calibration D - DAS Failure A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Sunset House - March 2012



Hourly Maximums

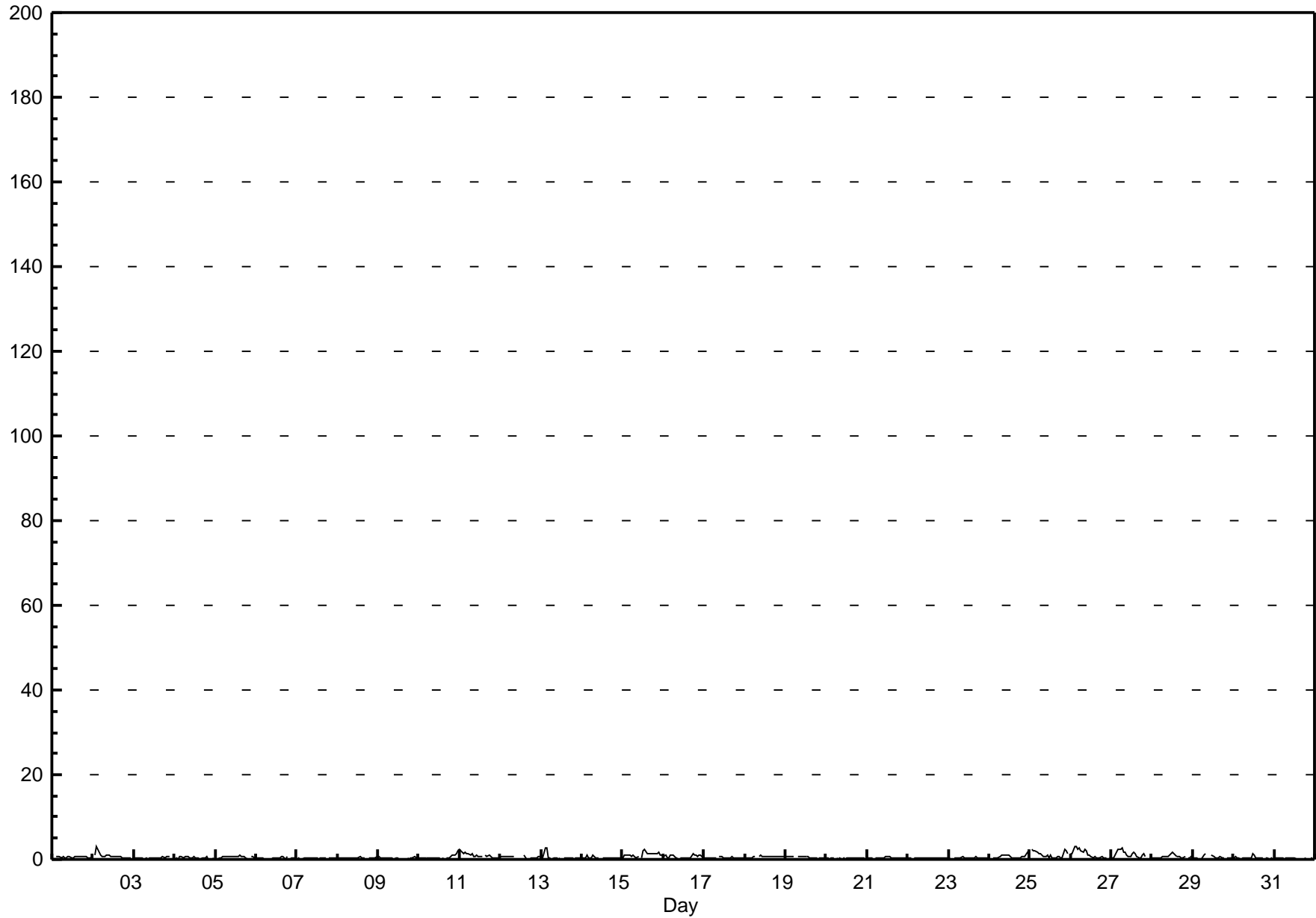
Sulphur Dioxide (SO₂) - ppb

Sunset House - March 2012

| Maximum Value: 3.1 ppb on Mar 2 03:00 | | Maximum Daily Average: 1.3 ppb on Mar 26 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|--|-----|--------------------------------|-----|-----|-----|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|-----------------|-----|
| Minimum Value: 0 ppb on Mar 3 09:00 | | Minimum Daily Average: 0.2 ppb on Mar 31 | | Hours of Data: 704 | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 0.8 ppb at hour 4 | | Minimum Diurnal Average: 0.5 ppb at hour 16 | | Hours of Missing Data: 40 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 0.56 ppb | | Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.4 Q ₃ = 0.6 P ₉₀ = 1.0 P ₉₉ = 2.5 | | Hours of Calibration: 37 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 99.6 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 1 | A | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0.6 | 0.7 | |
| 2-Mar | A | 1 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0.8 | 3.1 |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0.4 | 0.5 | |
| 4-Mar | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | A | 0 | 0 | 0.3 | 0.5 | |
| 5-Mar | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | A | 1 | 1 | 0 | 0.5 | 1.1 | |
| 6-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | A | 0 | 1 | 0 | 0 | 0.3 | 0.5 | |
| 7-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 8-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 0.3 | 0.7 | |
| 9-Mar | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0.2 | 0.7 | |
| 10-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 0.5 | 1.9 | |
| 11-Mar | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1.0 | 2.4 | |
| 12-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | C | C | C | C | C | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0.5 | 1.0 | |
| 13-Mar | 1 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 2.8 | |
| 14-Mar | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.9 | |
| 15-Mar | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | A | 0 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1.1 | 2.4 | |
| 16-Mar | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0.7 | 1.5 | |
| 17-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.7 | |
| 18-Mar | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1.0 | |
| 19-Mar | 1 | 1 | 1 | 1 | 1 | 1 | A | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.6 | |
| 20-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 21-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.8 | |
| 22-Mar | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 23-Mar | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.6 | |
| 24-Mar | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 0.6 | 1.6 | |
| 25-Mar | A | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 2 | 1 | A | 1.1 | 2.3 | |
| 26-Mar | 1 | 1 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | A | 0 | 1.3 | 3.0 | |
| 27-Mar | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | A | 0 | 0 | 1.1 | 2.8 | |
| 28-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | A | 0 | 0 | 1 | 0.6 | 1.8 | |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | D | D | D | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0.5 | 1.4 | |
| 30-Mar | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.4 | 1.3 | |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| | | 0.5 | 0.6 | 0.7 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | Diurnal Average | |
| | | 2.4 | 2.3 | 3.1 | 3.0 | 2.5 | 2.6 | 2.8 | 1.8 | 2.4 | 1.9 | 1.2 | 1.3 | 1.9 | 2.4 | 1.5 | 1.4 | 1.4 | 1.5 | 1.4 | 1.4 | 2.2 | 1.9 | 1.6 | 1.9 | Diurnal Maximum | |
| C - Calibration | | D - DAS Failure | | | | | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | |

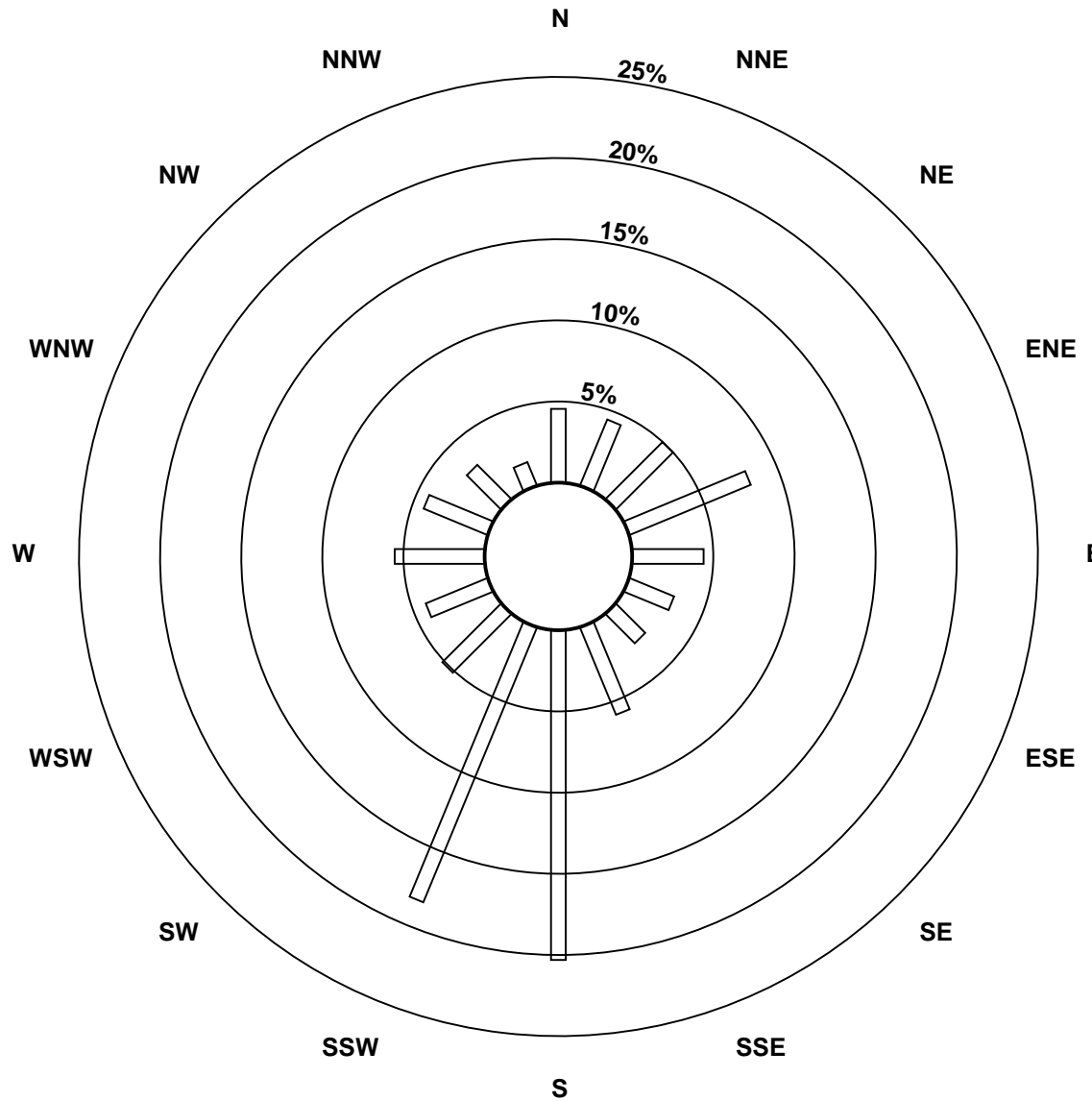
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Sunset House - March 2012

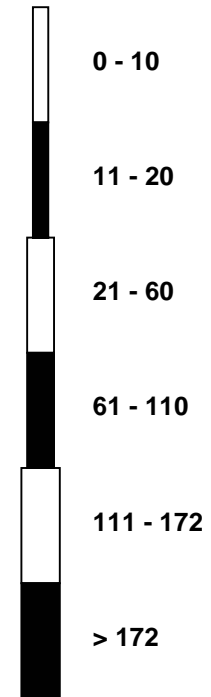


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Sunset House - March 2012

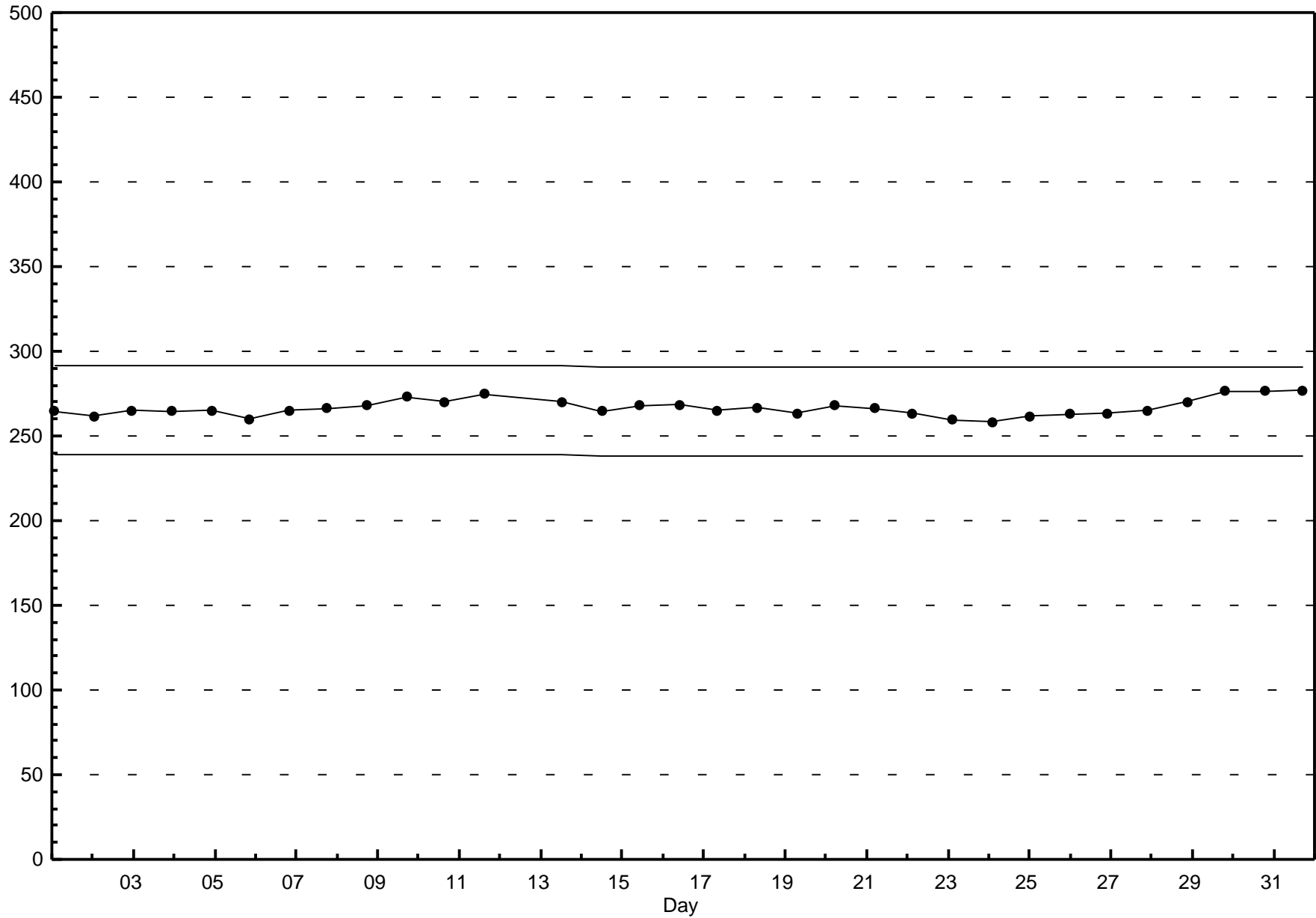


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Sunset House - March 2012



Hourly Averages

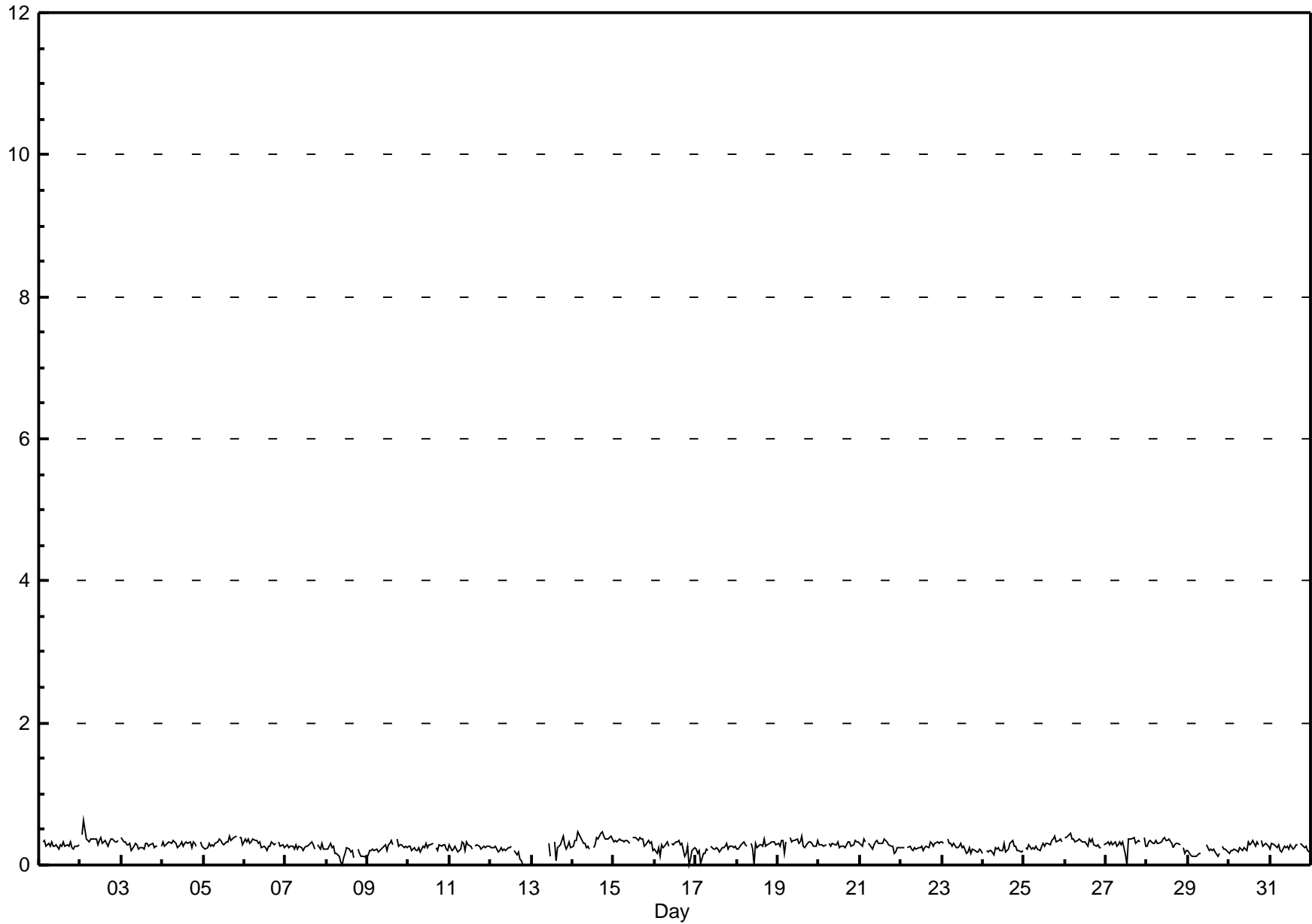
Total Reduced Sulphur (TRS) - ppb

Sunset House - March 2012

| | | | | |
|---|--|----------|---------------------------|------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 0.6 ppb on Mar 2 03:00 | Maximum Daily Average: 0.4 ppb on Mar 2 | | Hours of Data: | 704 |
| Minimum Value: 0 ppb on Mar 8 10:00 | Minimum Daily Average: 0.2 ppb on Mar 12 | | Hours of Missing Data: | 40 |
| Maximum Diurnal Average: 0.3 ppb at hour 17 | Minimum Diurnal Average: 0.2 ppb at hour 24 | | Hours of Calibration: | 37 |
| Monthly Average: 0.27 ppb | Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.3 P ₉₀ = 0.4 P ₉₉ = 0.4 | | Percent Operational Time: | 99.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
|--------|-------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---------------|---------------|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 2-Mar | A | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0.4 | 0.6 |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.3 | 0.4 | |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.3 | 0.3 | |
| 5-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.3 | 0.4 | |
| 6-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 7-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.3 | |
| 8-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 10-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 11-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.3 | |
| 12-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 13-Mar | 0 | 0 | 0 | 0 | 0 | 0 | C | C | C | C | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.4 | |
| 14-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.5 | |
| 15-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 16-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 17-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 18-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 19-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 20-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.3 | |
| 21-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 22-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.3 | |
| 23-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 24-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.4 | |
| 25-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0.3 | 0.4 | |
| 26-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 27-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 28-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 | |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | |

| | | |
|---|-----------------|-------------------------------|
| C - Calibration | D - DAS Failure | A - Automated Daily Zero Span |
| Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb | | |

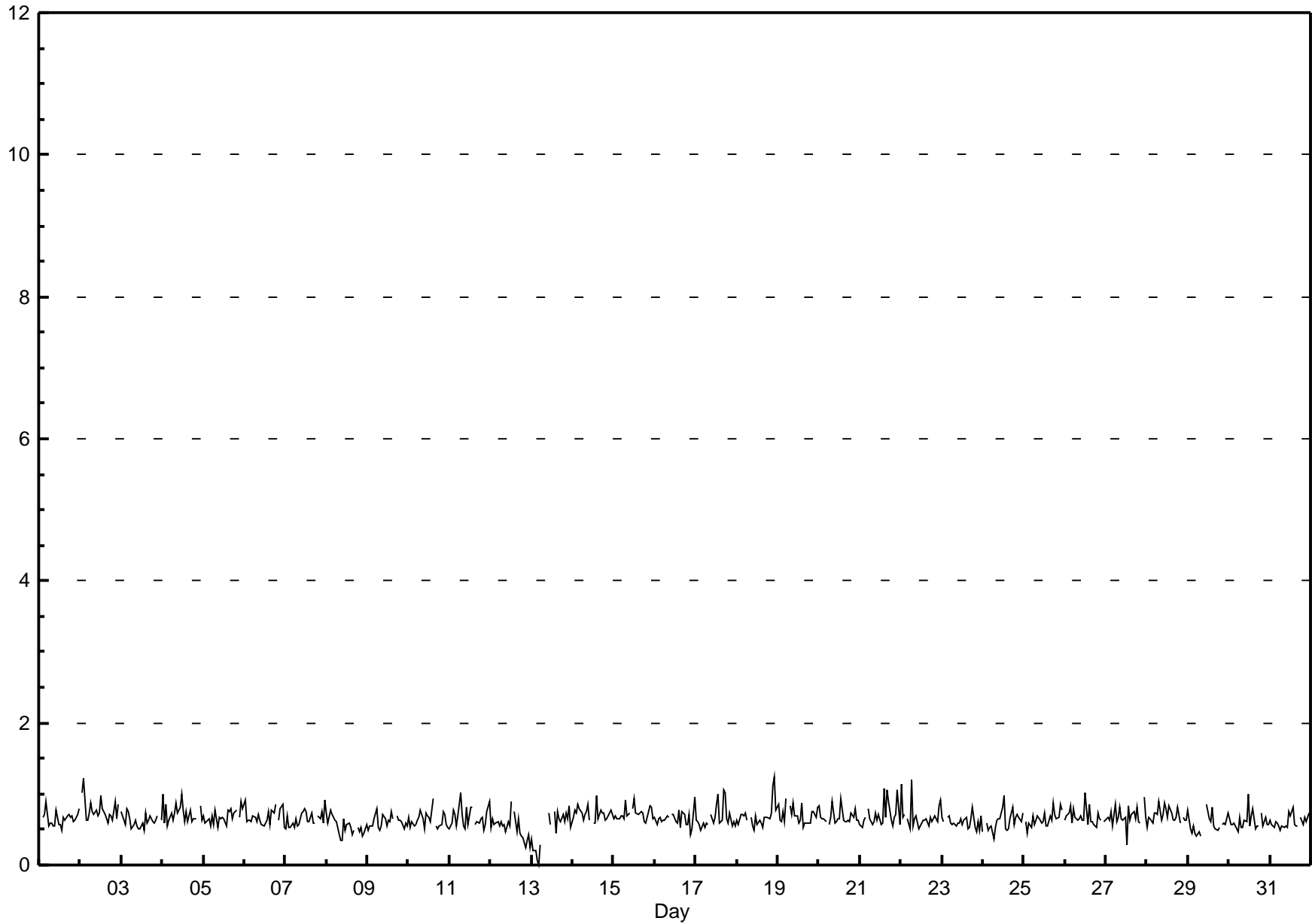


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

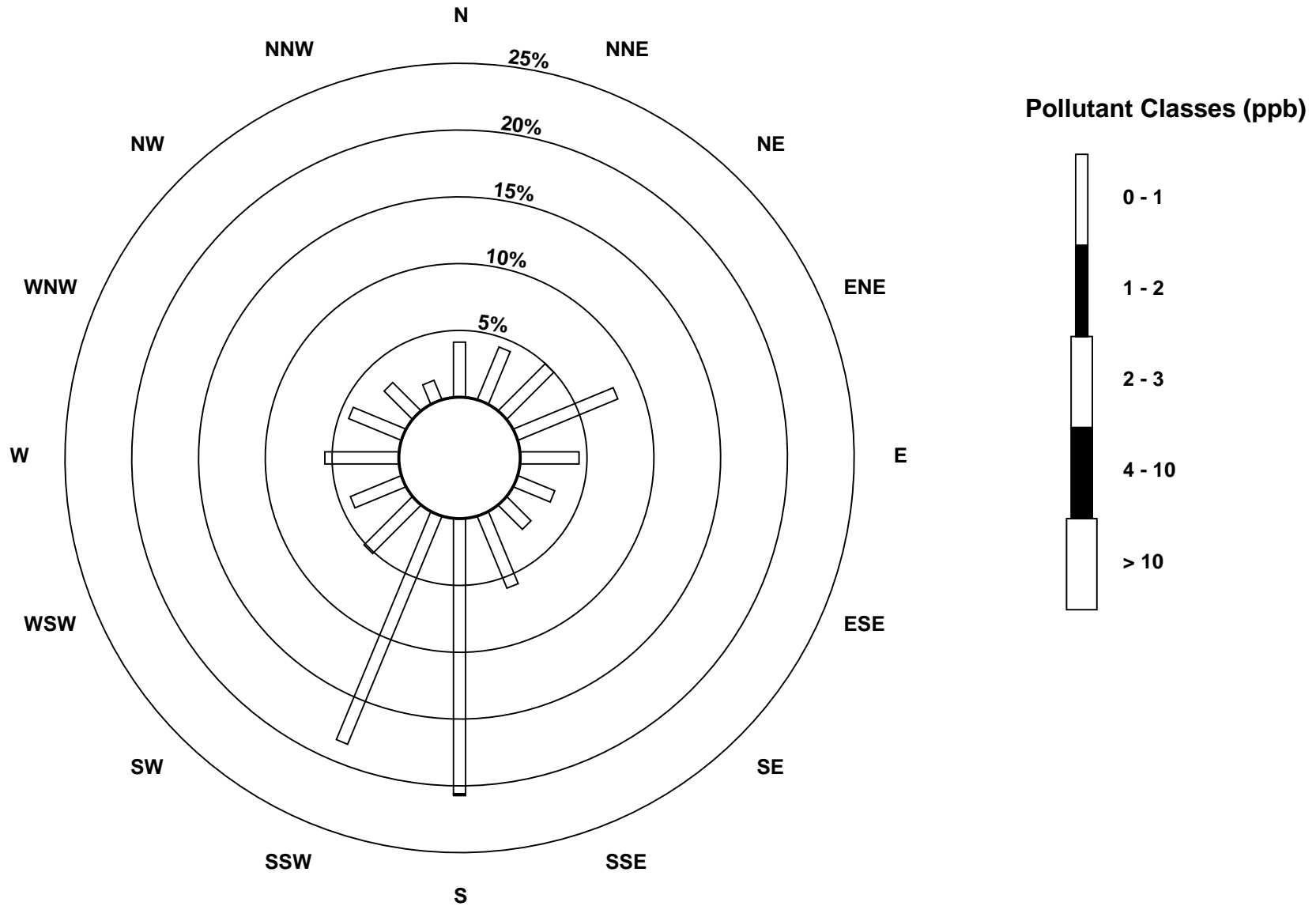
Sunset House - March 2012

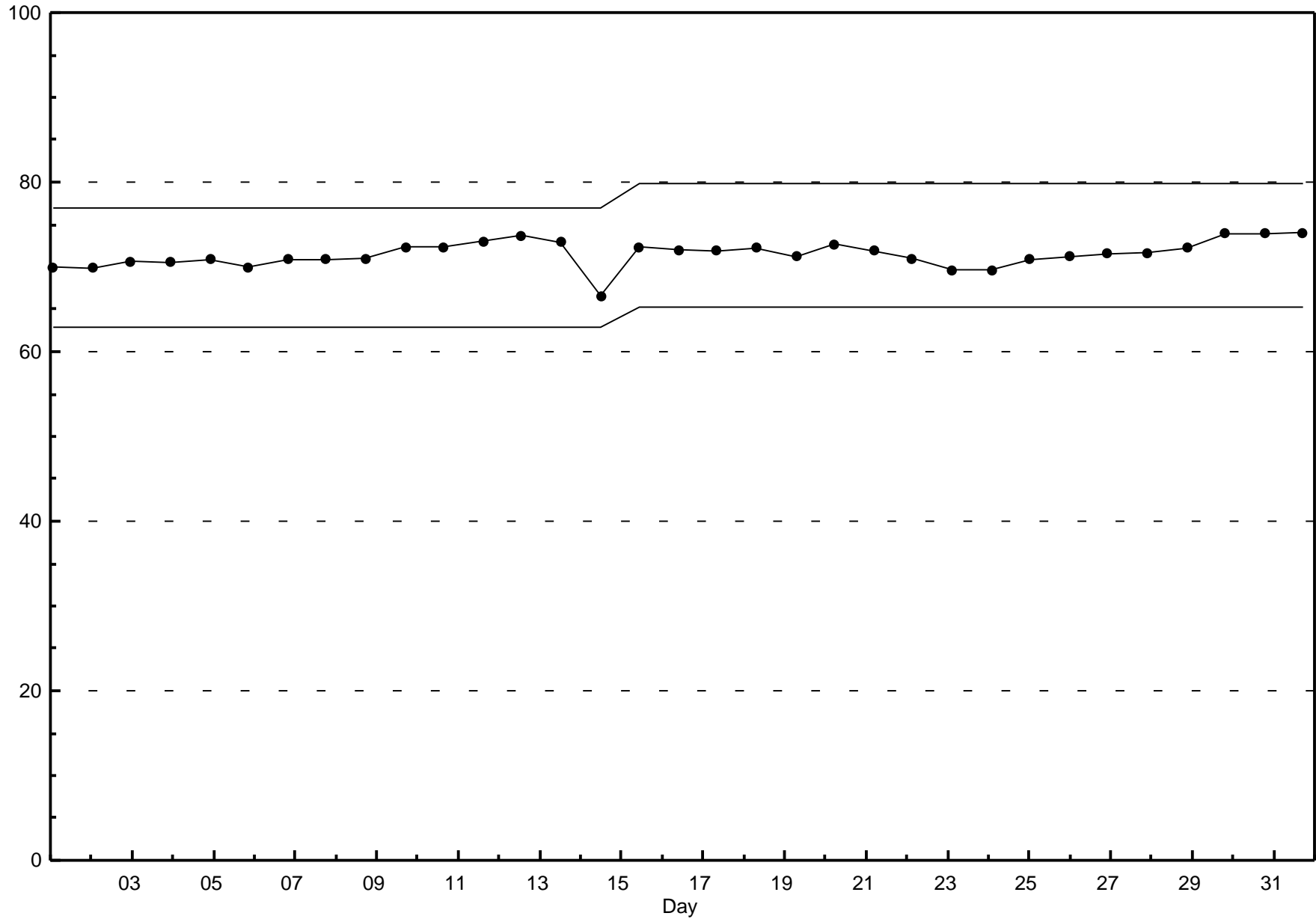
| Maximum Value: 1.2 ppb on Mar 18 23:00 | | Maximum Daily Average: 0.8 ppb on Mar 2 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|-----|--------------------------------|-----|-----|-----|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|---------------|
| Minimum Value: 0 ppb on Mar 13 05:00 | | Minimum Daily Average: 0.5 ppb on Mar 13 | | Hours of Data: 704 | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 0.7 ppb at hour 23 | | Minimum Diurnal Average: 0.6 ppb at hour 5 | | Hours of Missing Data: 40 | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 0.65 ppb | | Percentiles: P ₁ = 0.3 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.6 Q ₃ = 0.7 P ₉₀ = 0.8 P ₉₉ = 1.1 | | Hours of Calibration: 37 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 99.6 | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 2-Mar | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.2 |
| 3-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0.6 | 0.8 |
| 4-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 0.7 | 1.0 |
| 5-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 0.7 | 0.9 |
| 6-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 7-Mar | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.9 |
| 8-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | A | A | 1 | 0 | 1 | 0 | 0 | 1 | 0.5 | 0.8 |
| 9-Mar | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.8 |
| 10-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.9 |
| 11-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0.7 | 1.0 |
| 12-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | A | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.9 |
| 13-Mar | 0 | 0 | 0 | 0 | 0 | 0 | C | C | C | C | 1 | 1 | A | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.5 | 0.8 |
| 14-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.0 |
| 15-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 16-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0.6 | 0.9 |
| 17-Mar | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.1 |
| 18-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.2 |
| 19-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 20-Mar | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.9 |
| 21-Mar | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.1 |
| 22-Mar | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.2 |
| 23-Mar | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0.6 | 0.8 |
| 24-Mar | 0 | A | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1.0 |
| 25-Mar | A | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 0.6 | 0.9 |
| 26-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0.7 | 1.0 |
| 27-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0.7 | 1.0 |
| 28-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 0.7 | 0.9 |
| 29-Mar | 1 | 1 | 0 | 1 | 0 | 0 | 0 | D | D | D | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | A | 1 | 1 | 1 | 1 | 0.6 | 0.9 |
| 30-Mar | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0.6 | 1.0 |
| 31-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.8 |
| | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | Diurnal Average | |
| | 1.1 | 1.0 | 1.2 | 0.9 | 0.9 | 0.9 | 1.2 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 | 1.0 | 1.1 | 0.8 | 1.1 | 1.0 | 0.9 | 0.8 | 0.9 | 1.1 | 1.2 | Diurnal Maximum | |
| C - Calibration | | D - DAS Failure | | | | | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | |



Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Sunset House - March 2012





Hourly Averages

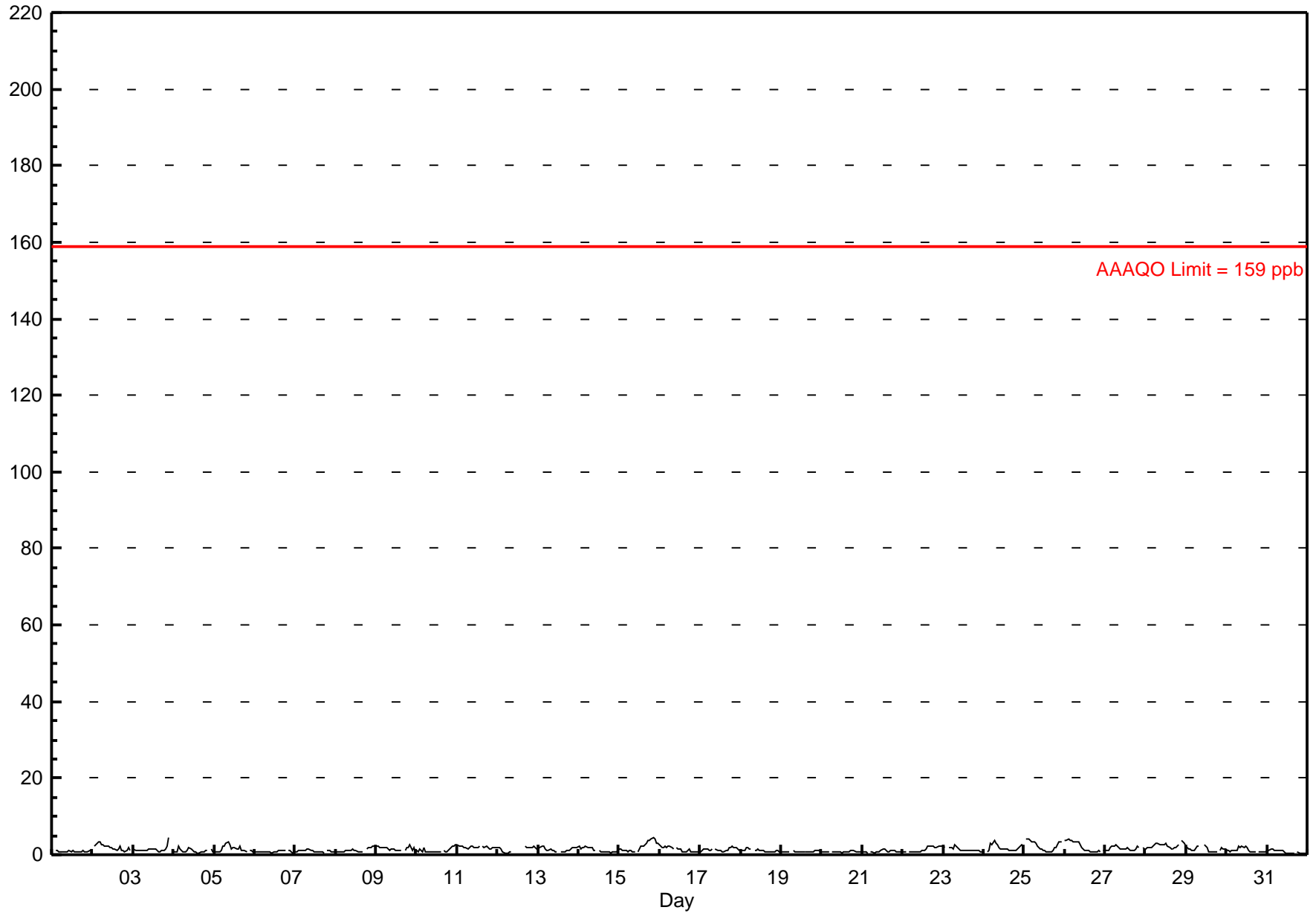
Nitrogen Dioxide (NO₂) - ppb

Sunset House - March 2012

| | |
|--|--|
| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 | Hours in Service: 744 |
| Maximum Value: 4.4 ppb on Mar 15 21:00 | Maximum Daily Average: 2.4 ppb on Mar 28 |
| Minimum Value: 0 ppb on Apr 1 00:00 | Hours of Data: 702 |
| Maximum Diurnal Average: 1.7 ppb at hour 22 | Hours of Missing Data: 42 |
| Monthly Average: 1.38 ppb | Hours of Calibration: 39 |
| Minimum Daily Average: 0.8 ppb on Mar 31 | Percent Operational Time: 99.6 |
| Minimum Diurnal Average: 1.0 ppb at hour 15 | |
| Percentiles: P ₁ = 0.4 P ₁₀ = 0.7 Q ₁ = 0.8 Median = 1.1 Q ₃ = 1.8 P ₉₀ = 2.4 P ₉₉ = 4.0 | |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.5 |
| 2-Mar | A | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | A | 1.9 | 3.3 |
| 3-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 4 | A | 1 | 1.4 | 4.3 |
| 4-Mar | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1.0 | 2.1 |
| 5-Mar | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1.5 | 3.4 |
| 6-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0.8 | 1.2 |
| 7-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.3 |
| 8-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 2 | 2 | 2 | 2 | 2 | 2 | 1.2 | 2.1 |
| 9-Mar | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1.6 | 2.4 |
| 10-Mar | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 1.1 | 2.6 |
| 11-Mar | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | A | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2.0 | 2.7 |
| 12-Mar | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | C | C | C | C | C | C | C | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | -- | 2.2 |
| 13-Mar | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1.4 | 2.3 |
| 14-Mar | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1.2 | 2.4 |
| 15-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2.1 | 4.4 |
| 16-Mar | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | A | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.4 | 2.5 |
| 17-Mar | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | A | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1.4 | 2.2 |
| 18-Mar | 1 | 1 | 1 | 2 | 2 | 2 | 2 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.1 | 1.9 |
| 19-Mar | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.0 |
| 20-Mar | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.2 |
| 21-Mar | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.5 |
| 22-Mar | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1.4 | 2.4 |
| 23-Mar | 2 | 2 | A | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.4 | 2.6 |
| 24-Mar | 1 | A | 1 | 1 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 1.8 | 3.7 |
| 25-Mar | A | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | A | 2.3 | 4.1 | |
| 26-Mar | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2.1 | 3.9 |
| 27-Mar | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | A | 2 | 2 | 1.7 | 2.7 | |
| 28-Mar | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | A | 4 | 3 | 3 | 2.4 | 3.7 |
| 29-Mar | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | D | D | D | 3 | 2 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2 | 2 | 1 | 1.4 | 2.6 | |
| 30-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1.2 | 2.4 |
| 31-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 1 | 0 | 0 | 0 | 0 | 0.8 | 1.5 |
| | 1.4 | 1.5 | 1.5 | 1.6 | 1.6 | 1.5 | 1.6 | 1.6 | 1.5 | 1.4 | 1.3 | 1.3 | 1.2 | 1.1 | 1.0 | 1.1 | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.7 | 1.5 | 1.3 | Diurnal Average | |
| | 3.6 | 4.0 | 4.1 | 4.0 | 3.7 | 3.4 | 3.7 | 3.3 | 3.4 | 2.7 | 2.5 | 2.7 | 2.8 | 2.4 | 2.1 | 2.5 | 2.8 | 3.5 | 3.7 | 4.2 | 4.4 | 4.3 | 3.2 | 3.0 | Diurnal Maximum | |

C - Calibration D - DAS Failure A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb



Hourly Maximums

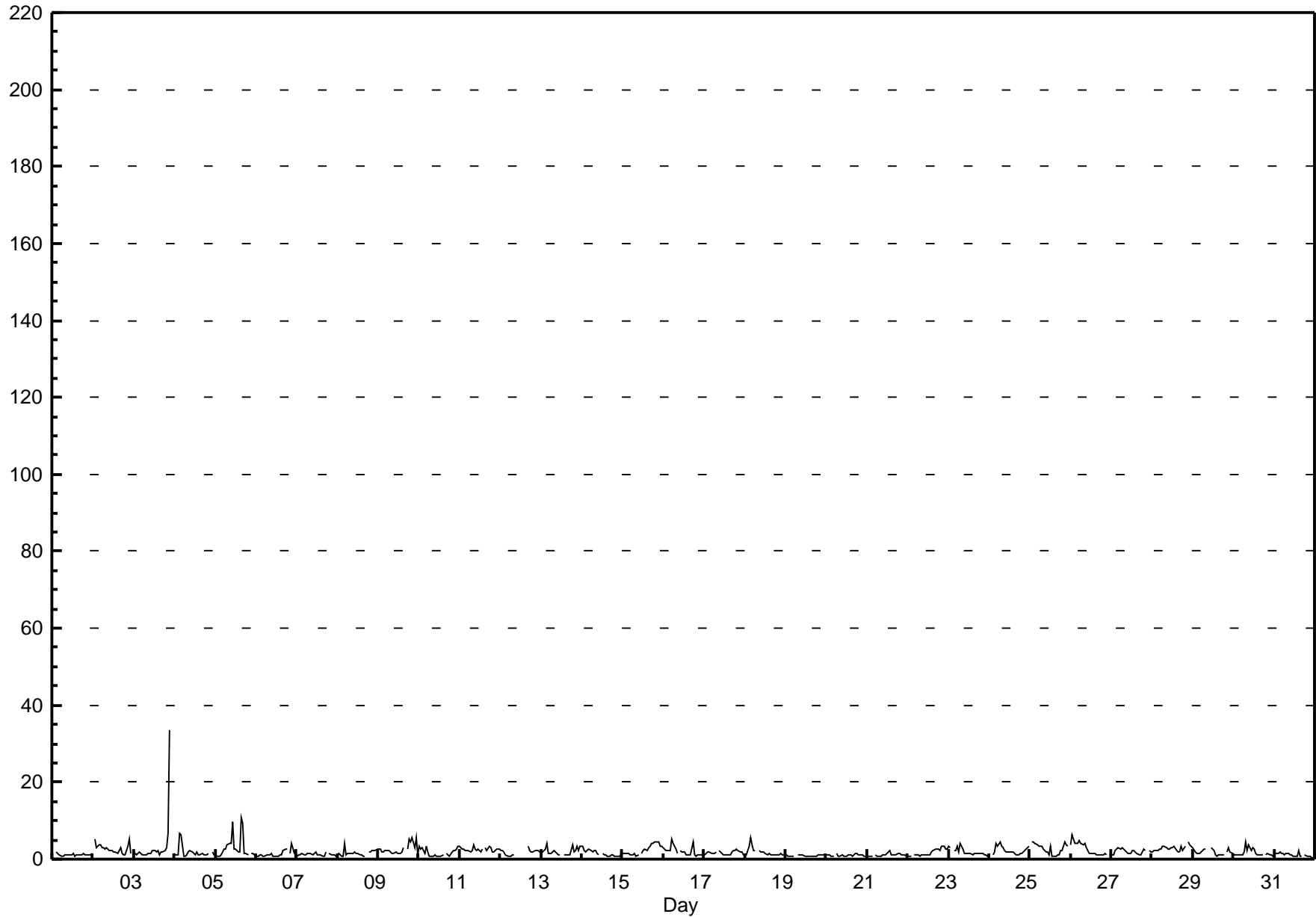
Nitrogen Dioxide (NO₂) - ppb

Sunset House - March 2012

| Maximum Value: 33.6 ppb on Mar 3 22:00 | | Maximum Daily Average: 3.3 ppb on Mar 3 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|-----|--------------------------------|-----|-----|-----|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|------|-----|---------------|-----------------|
| Minimum Value: 0 ppb on Apr 1 00:00 | | Minimum Daily Average: 1.0 ppb on Mar 19 | | Hours of Data: 702 | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 3.3 ppb at hour 22 | | Minimum Diurnal Average: 1.4 ppb at hour 15 | | Hours of Missing Data: 42 | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 1.92 ppb | | Percentiles: P ₁ = 0.6 P ₁₀ = 0.9 Q ₁ = 1.1 Median = 1.5 Q ₃ = 2.3 P ₉₀ = 3.4 P ₉₉ = 6.1 | | Hours of Calibration: 39 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 99.6 | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 2 | A | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1.2 | 1.7 |
| 2-Mar | A | 5 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 1 | 1 | 1 | 3 | 5 | 1 | A | 2 | 2.6 | 5.3 |
| 3-Mar | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 7 | 34 | A | 2 | 3.3 | 33.6 | |
| 4-Mar | 1 | 1 | 1 | 7 | 6 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 2 | 1 | 1.8 | 6.9 | |
| 5-Mar | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 4 | 4 | 4 | 10 | 3 | 3 | 2 | 2 | 11 | 9 | 1 | 2 | 1 | A | 2 | 1 | 3.0 | 10.9 | |
| 6-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | A | 1 | 4 | 2 | 1 | 1.4 | 3.9 | |
| 7-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | A | 1 | 1 | 1 | 1 | 1.2 | 1.8 | |
| 8-Mar | 1 | 1 | 1 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | A | 2 | 2 | 2 | 2 | 2 | 1.6 | 4.0 | |
| 9-Mar | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | A | 2 | 5 | 4 | 6 | 3 | 5 | 1 | 2.6 | 5.5 | |
| 10-Mar | 3 | 3 | 3 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 1.7 | 3.4 | |
| 11-Mar | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 2 | 2 | 2 | A | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 2.5 | 3.8 | |
| 12-Mar | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | C | C | C | C | C | C | C | 3 | 2 | 2 | 2 | 2 | 2 | 2 | -- | 3.2 | |
| 13-Mar | 2 | 2 | 3 | 4 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 4 | 2 | 2 | 3 | 2 | 3 | 1.9 | 4.2 | |
| 14-Mar | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1.6 | 3.5 | |
| 15-Mar | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2 | 3 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 3 | 2.4 | 4.6 | |
| 16-Mar | 3 | 2 | 2 | 2 | 2 | 5 | 4 | 3 | 2 | A | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 2.0 | 5.2 | |
| 17-Mar | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | A | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 1.6 | 2.5 | |
| 18-Mar | 1 | 1 | 3 | 6 | 4 | 2 | 2 | A | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.8 | 5.5 | |
| 19-Mar | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.2 | |
| 20-Mar | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.5 | |
| 21-Mar | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.1 | 2.1 | |
| 22-Mar | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 1.7 | 3.4 | |
| 23-Mar | 3 | 3 | A | 2 | 2 | 3 | 2 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.9 | 4.0 | |
| 24-Mar | 1 | A | 1 | 2 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 3 | 3 | 2.2 | 4.3 | |
| 25-Mar | A | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 2 | 2 | 5 | 4 | 3 | A | 2.7 | 4.5 | |
| 26-Mar | 4 | 6 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2.5 | 6.3 | |
| 27-Mar | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | A | 2 | 2 | 2.0 | 3.0 | |
| 28-Mar | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | A | 5 | 4 | 2.8 | 4.5 | |
| 29-Mar | 3 | 2 | 2 | 1 | 1 | 2 | 3 | 3 | D | D | D | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 2 | 3 | 2 | 1.8 | 3.2 | |
| 30-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 4 | 2 | 4 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2 | 1 | 1.7 | 4.4 | |
| 31-Mar | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0 | 1.1 | 2.1 | |
| | | 1.8 | 2.0 | 1.9 | 2.2 | 2.3 | 2.0 | 2.0 | 2.1 | 1.9 | 1.8 | 1.9 | 1.6 | 1.7 | 1.5 | 1.4 | 1.7 | 1.8 | 1.8 | 1.9 | 1.8 | 2.2 | 3.3 | 1.9 | 1.7 | Diurnal Average |
| | | 3.9 | 6.3 | 4.4 | 6.9 | 6.4 | 5.2 | 4.3 | 4.4 | 4.1 | 4.0 | 9.6 | 3.2 | 3.4 | 3.2 | 2.3 | 10.9 | 9.1 | 4.4 | 5.1 | 4.5 | 6.8 | 33.6 | 5.4 | 3.5 | Diurnal Maximum |
| C - Calibration | | D - DAS Failure | | | | | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | |

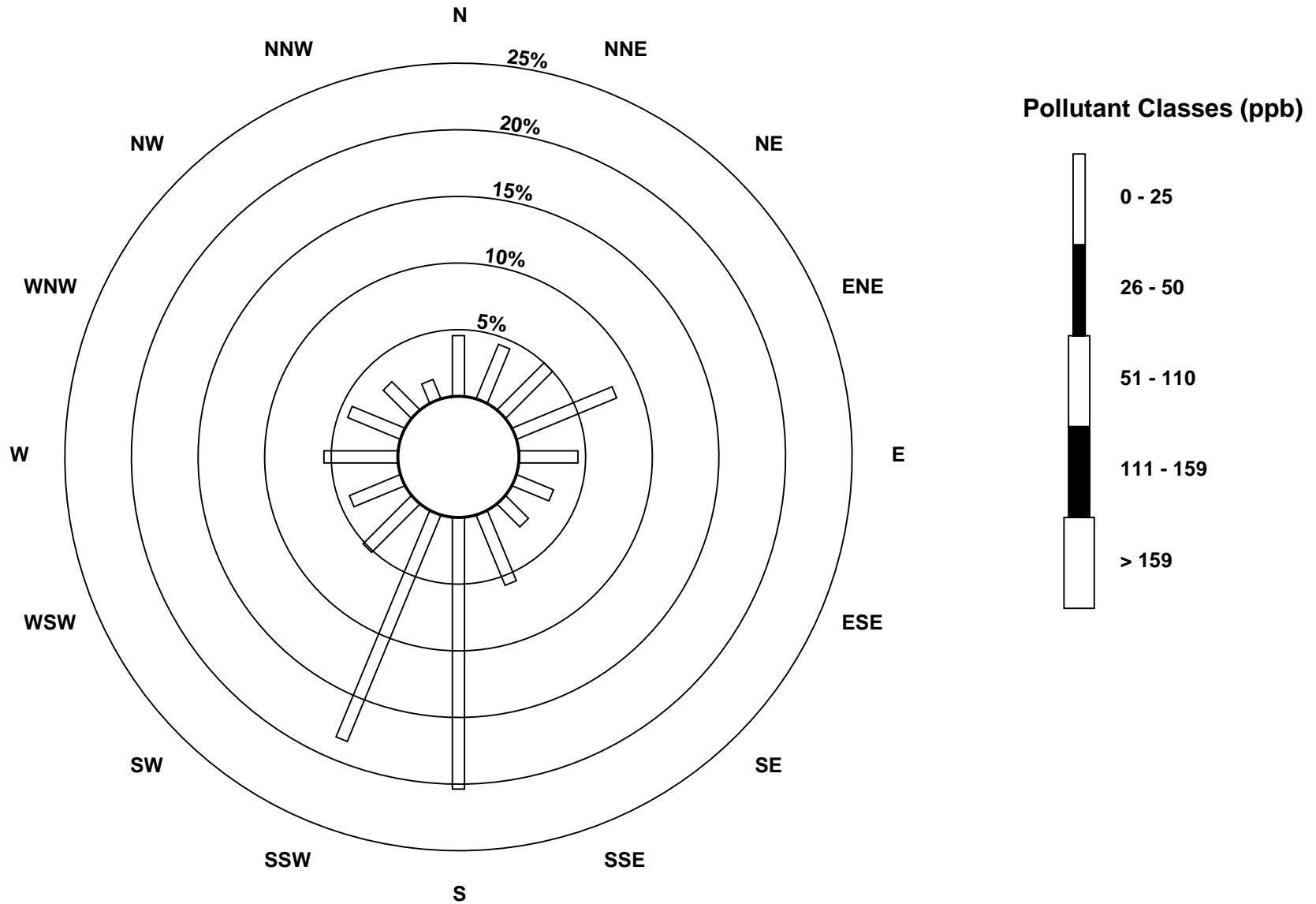
Hourly Maximums

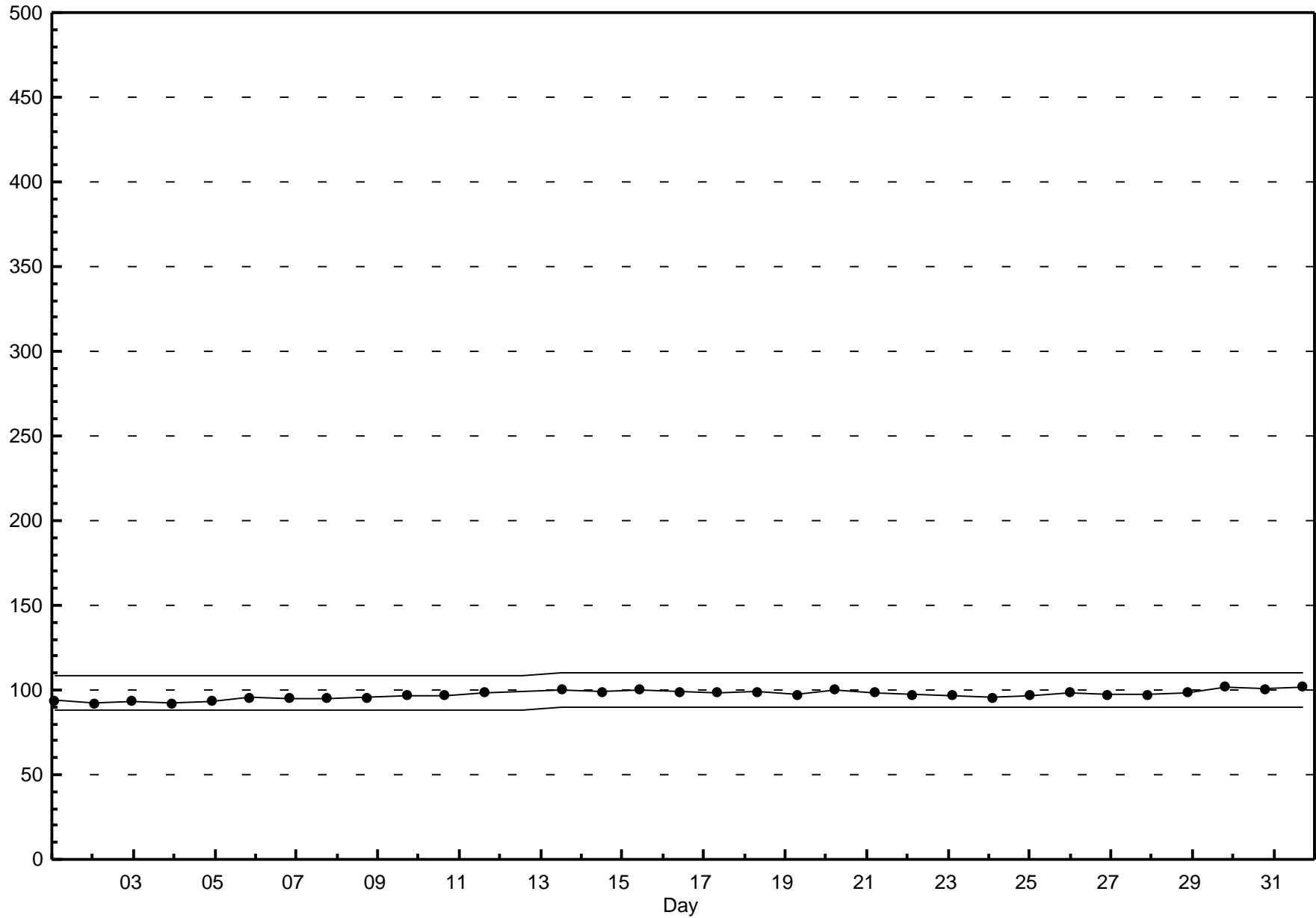
Nitrogen Dioxide (NO₂) - ppb
Sunset House - March 2012



Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Sunset House - March 2012





Hourly Averages

Nitrogen Oxide (NO) - ppb

Sunset House - March 2012

| | | | | |
|---|--|----------|---------------------------|------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 2.1 ppb on Mar 3 22:00 | Maximum Daily Average: 0.3 ppb on Mar 24 | | Hours of Data: | 702 |
| Minimum Value: 0 ppb on Mar 2 00:00 | Minimum Daily Average: 0.0 ppb on Mar 31 | | Hours of Missing Data: | 42 |
| Maximum Diurnal Average: 0.4 ppb at hour 13 | Minimum Diurnal Average: 0.0 ppb at hour 1 | | Hours of Calibration: | 39 |
| Monthly Average: 0.13 ppb | Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.2 P ₉₀ = 0.4 P ₉₉ = 1.0 | | Percent Operational Time: | 99.6 |

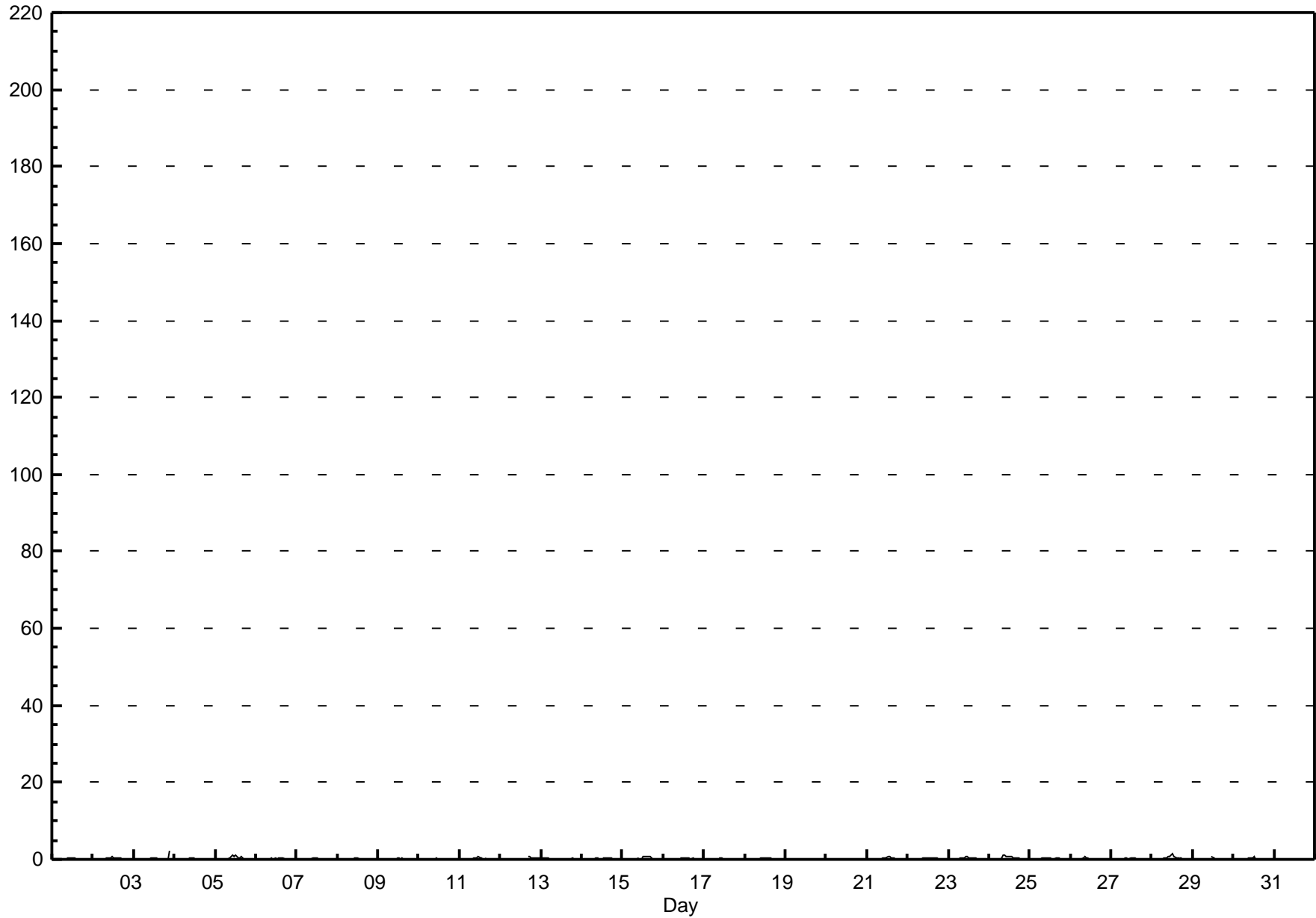
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
|--------|-------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---------------|---------------|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.4 | |
| 2-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.6 |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | A | 0 | 0.2 | 2.1 | |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.1 | 0.5 | |
| 5-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.3 | 1.0 | |
| 6-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.1 | 0.5 | |
| 7-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.4 | |
| 8-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 | |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.2 | |
| 10-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.2 | |
| 11-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.7 | |
| 12-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | C | C | C | C | C | C | C | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | -- | 0.6 | |
| 13-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 | |
| 14-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.5 | |
| 15-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.7 | |
| 16-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.5 | |
| 17-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.4 | |
| 18-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.4 | |
| 19-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 | |
| 20-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 | |
| 21-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.7 | |
| 22-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.5 | |
| 23-Mar | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.6 | |
| 24-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.1 | |
| 25-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.5 | |
| 26-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.1 | 0.7 | |
| 27-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.5 | |
| 28-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.3 | 1.4 | |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.1 | 0.6 | |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.1 | 0.6 | |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.2 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|-----------------|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | Diurnal Average |
| 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.5 | 1.1 | 1.1 | 1.0 | 1.0 | 1.4 | 0.8 | 0.6 | 0.7 | 0.6 | 0.6 | 0.4 | 0.3 | 0.3 | 2.1 | 0.3 | 0.3 | Diurnal Maximum | |

C - Calibration D - DAS Failure A - Automated Daily Zero Span

Hourly Averages

Nitrogen Oxide (NO) - ppb
Sunset House - March 2012



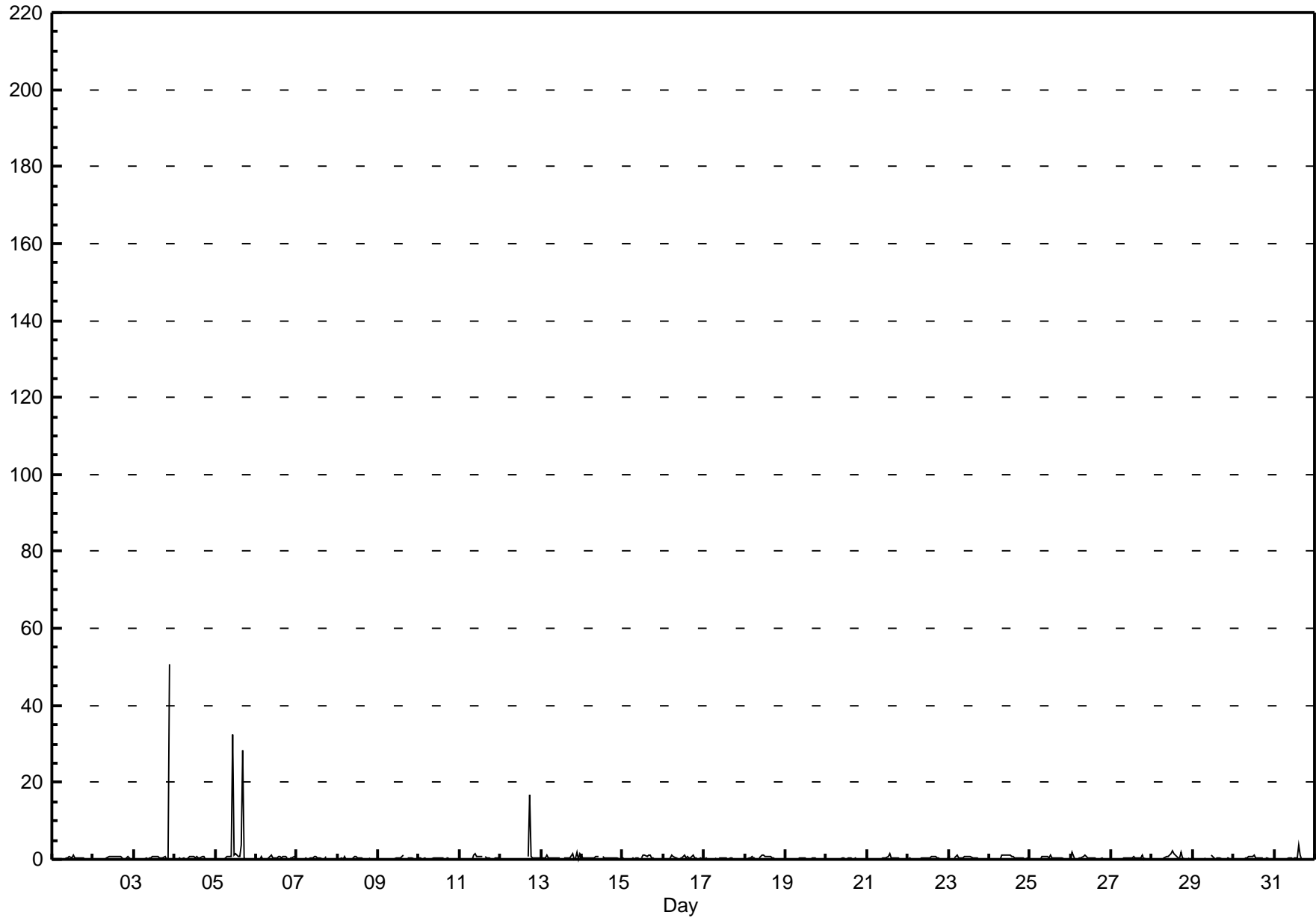
Hourly Maximums

Nitrogen Oxide (NO) - ppb
Sunset House - March 2012

| Maximum Value: 50.9 ppb on Mar 3 22:00 | | Maximum Daily Average: 3.2 ppb on Mar 5 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|-----|--------------------------------|-----|-----|-----|-------------------------------|-----|-----|-----|------|-----|-----|-----|-----|-----|------|------|-----|-----|-----|------|-----|-----------------|-----------------|
| Minimum Value: 0 ppb on Mar 12 02:00 | | Minimum Daily Average: 0.2 ppb on Mar 19 | | Hours of Data: 702 | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 2.0 ppb at hour 22 | | Minimum Diurnal Average: 0.2 ppb at hour 3 | | Hours of Missing Data: 42 | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 0.52 ppb | | Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.4 P ₉₀ = 0.8 P ₉₉ = 1.5 | | Hours of Calibration: 39 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 99.6 | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.0 |
| 2-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | A | 0.4 | 0.9 |
| 3-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 51 | A | 0 | 2.5 | 50.9 |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0.3 | 0.7 |
| 5-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 33 | 1 | 2 | 1 | 1 | 4 | 29 | 0 | 0 | 0 | A | 0 | 0 | 0 | 3.2 | 32.5 |
| 6-Mar | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | A | 0 | 0 | 0 | 1 | 0 | 0.4 | 1.1 |
| 7-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.8 |
| 8-Mar | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.8 |
| 9-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | A | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0.3 | 0.9 |
| 10-Mar | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.5 |
| 11-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.4 |
| 12-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | C | C | C | C | C | C | C | 1 | 17 | 1 | 0 | 0 | 0 | 0 | 0 | -- | 16.8 |
| 13-Mar | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 2 | 0.5 | 1.9 |
| 14-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.7 |
| 15-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.2 |
| 16-Mar | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | A | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.2 |
| 17-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.6 |
| 18-Mar | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.1 |
| 19-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 |
| 20-Mar | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.3 |
| 21-Mar | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.3 |
| 22-Mar | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.7 |
| 23-Mar | 1 | 1 | A | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.1 |
| 24-Mar | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.2 |
| 25-Mar | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0.4 | 1.0 |
| 26-Mar | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.4 | 1.9 |
| 27-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | A | 0 | 0 | 0.3 | 1.1 |
| 28-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.5 | 2.2 |
| 29-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | D | D | D | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.2 | 1.0 |
| 30-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | A | 1 | 0 | 0 | 0 | 0 | 0.3 | 1.0 |
| 31-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 3.6 |
| | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.6 | 1.7 | 0.6 | 0.7 | 0.5 | 0.6 | 0.6 | 1.3 | 1.0 | 0.3 | 0.2 | 0.2 | 2.0 | 0.2 | 0.2 | Diurnal Average | |
| | | 0.6 | 1.9 | 0.5 | 1.1 | 0.8 | 1.1 | 0.8 | 1.0 | 1.2 | 1.4 | 32.5 | 1.4 | 2.2 | 1.6 | 3.6 | 3.7 | 28.5 | 16.8 | 1.5 | 0.5 | 0.7 | 50.9 | 0.9 | 1.6 | Diurnal Maximum |
| C - Calibration | | D - DAS Failure | | | | | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | |

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Sunset House - March 2012



Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

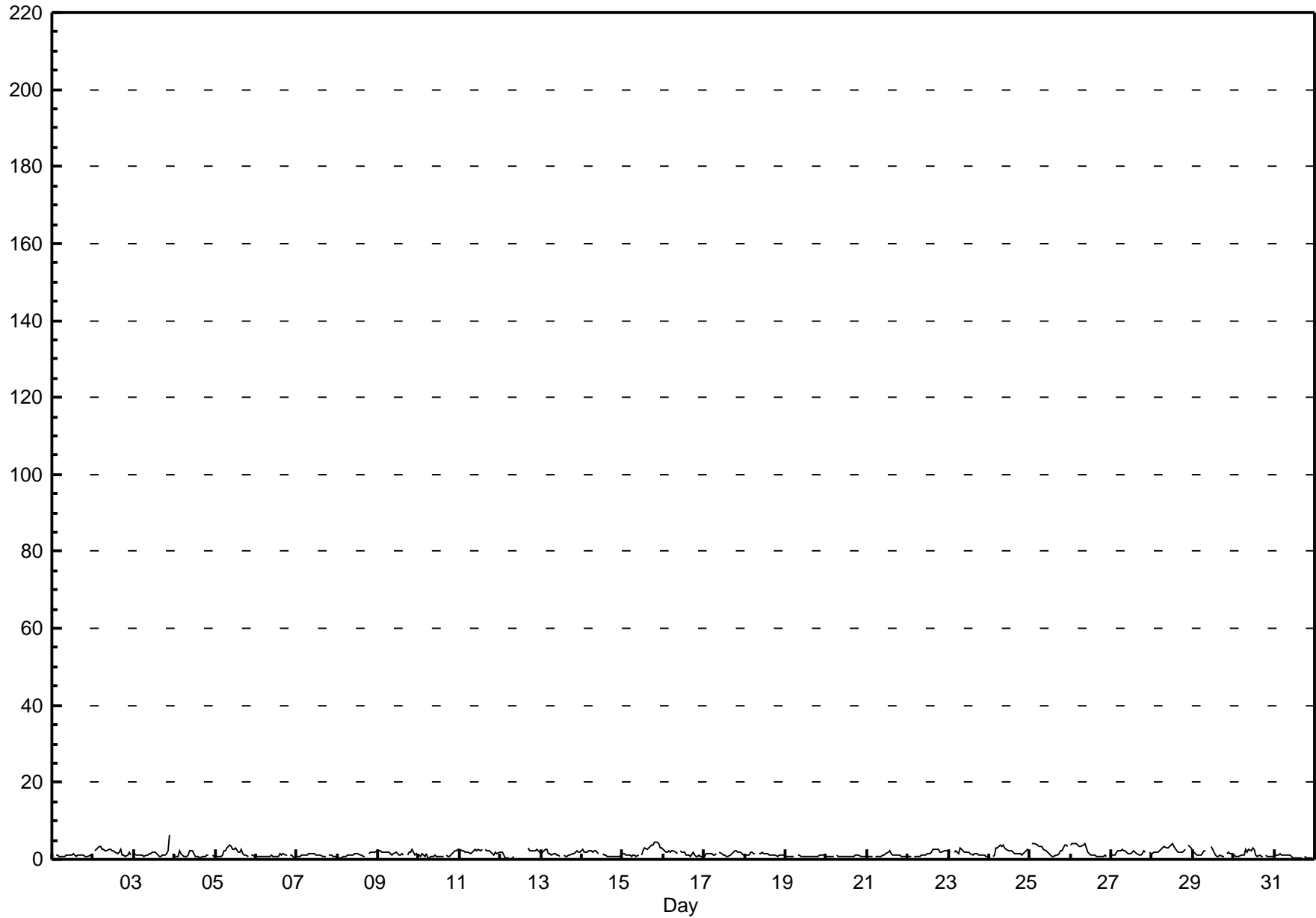
Sunset House - March 2012

| | | | | |
|---|--|----------|---------------------------|------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 6.4 ppb on Mar 3 22:00 | Maximum Daily Average: 2.6 ppb on Mar 28 | | Hours of Data: | 702 |
| Minimum Value: 0 ppb on Mar 12 07:00 | Minimum Daily Average: 0.7 ppb on Mar 31 | | Hours of Missing Data: | 42 |
| Maximum Diurnal Average: 1.8 ppb at hour 22 | Minimum Diurnal Average: 1.2 ppb at hour 15 | | Hours of Calibration: | 39 |
| Monthly Average: 1.51 ppb | Percentiles: P ₁ = 0.4 P ₁₀ = 0.7 Q ₁ = 0.9 Median = 1.3 Q ₃ = 2.0 P ₉₀ = 2.6 P ₉₉ = 4.1 | | Percent Operational Time: | 99.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
|--------|-------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---------------|---------------|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.4 | |
| 2-Mar | A | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 3 | 1 | 1 | 1 | 1 | 2 | 1 | A | 2.1 | 3.3 | |
| 3-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 6 | A | 1 | 1.5 | 6.4 | |
| 4-Mar | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1.1 | 2.3 | |
| 5-Mar | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1.8 | 3.6 | |
| 6-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0.9 | 1.4 | |
| 7-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.5 | |
| 8-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | A | A | 2 | 2 | 2 | 2 | 2 | 1.2 | 2.1 | |
| 9-Mar | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1.6 | 2.4 | |
| 10-Mar | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 1.1 | 2.6 | |
| 11-Mar | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | A | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2.0 | 2.7 | |
| 12-Mar | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | C | C | C | C | C | C | C | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | -- | 2.9 | |
| 13-Mar | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1.5 | 2.5 | |
| 14-Mar | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.4 | 2.5 | |
| 15-Mar | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 4 | 3 | 3 | 2.3 | 4.5 |
| 16-Mar | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | A | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1.5 | 2.5 | |
| 17-Mar | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | A | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1.5 | 2.3 | |
| 18-Mar | 1 | 1 | 1 | 2 | 2 | 2 | 2 | A | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.3 | 2.0 | |
| 19-Mar | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.1 | |
| 20-Mar | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.3 | |
| 21-Mar | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 2.2 | |
| 22-Mar | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1.5 | 2.7 | |
| 23-Mar | 2 | 2 | A | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.6 | 2.8 | |
| 24-Mar | 1 | A | 1 | 1 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 2.1 | 3.9 | |
| 25-Mar | A | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 4 | 4 | 3 | A | 2.5 | 4.2 | |
| 26-Mar | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2.2 | 4.1 | |
| 27-Mar | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | A | 2 | 2 | 1.8 | 2.7 | |
| 28-Mar | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | A | 4 | 3 | 2.6 | 4.2 | |
| 29-Mar | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | D | D | D | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2 | 2 | 1 | 1.4 | 3.2 | |
| 30-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1.3 | 2.9 | |
| 31-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 1 | 0 | 0 | 0 | 0.7 | 1.4 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|--|
| 1.4 | 1.5 | 1.5 | 1.6 | 1.6 | 1.5 | 1.6 | 1.7 | 1.7 | 1.7 | 1.7 | 1.6 | 1.6 | 1.4 | 1.2 | 1.3 | 1.3 | 1.4 | 1.4 | 1.5 | 1.5 | 1.8 | 1.5 | 1.3 | Diurnal Average | |
| 3.7 | 4.1 | 4.2 | 4.1 | 3.8 | 3.5 | 3.9 | 3.6 | 4.1 | 3.3 | 3.3 | 3.7 | 4.2 | 3.2 | 2.6 | 3.1 | 3.5 | 3.9 | 3.9 | 4.3 | 4.5 | 6.4 | 3.3 | 2.9 | Diurnal Maximum | |

C - Calibration D - DAS Failure A - Automated Daily Zero Span

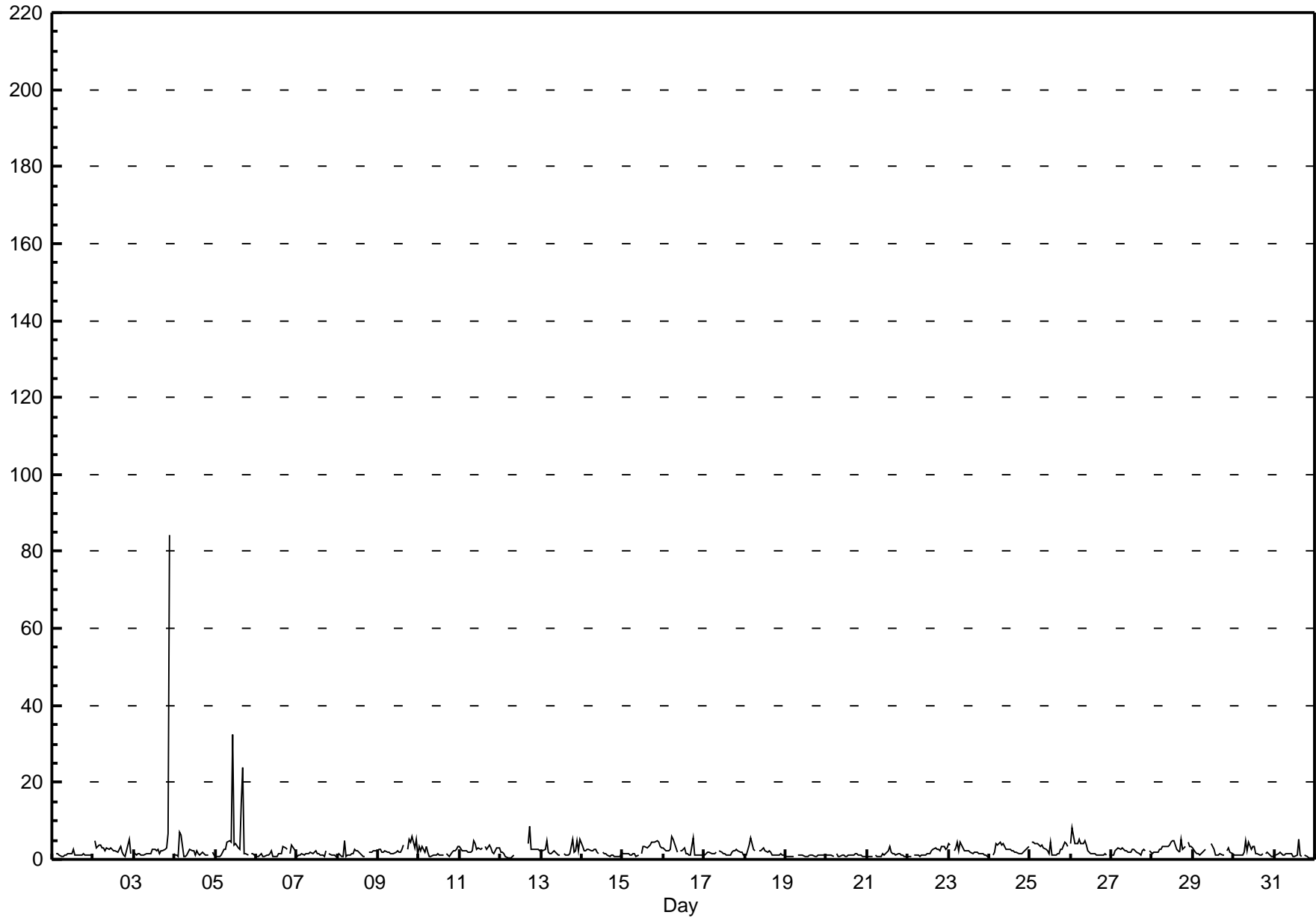


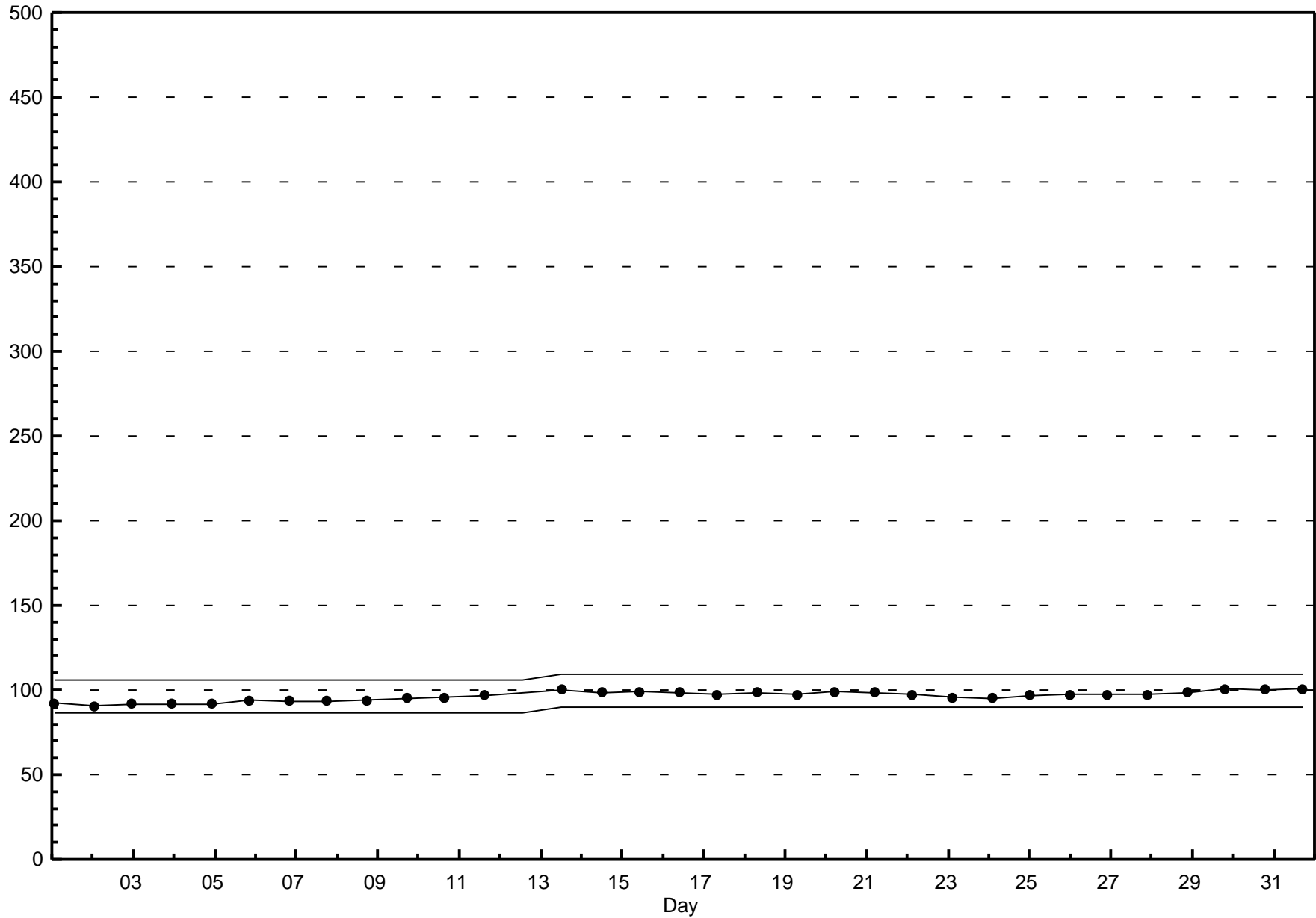
Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

Sunset House - March 2012

| Maximum Value: 84.2 ppb on Mar 3 22:00 | | Maximum Daily Average: 5.6 ppb on Mar 3 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|--|-----|--------------------------------|-----|-----|-----|-------------------------------|-----|-----|-----|------|-----|-----|-----|-----|------|------|-----|-----|-----|-----|------|-----|-----------------|-----------------|-----|
| Minimum Value: 0 ppb on Mar 12 06:00 | | Minimum Daily Average: 1.0 ppb on Mar 19 | | Hours of Data: 702 | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 5.1 ppb at hour 22 | | Minimum Diurnal Average: 1.8 ppb at hour 24 | | Hours of Missing Data: 42 | | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 2.24 ppb | | Percentiles: P ₁ = 0.6 P ₁₀ = 0.9 Q ₁ = 1.2 Median = 1.7 Q ₃ = 2.5 P ₉₀ = 3.9 P ₉₉ = 6.3 | | Hours of Calibration: 39 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 99.6 | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 2 | A | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1.3 | 2.5 | |
| 2-Mar | A | 5 | 3 | 4 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 1 | 1 | 4 | 5 | 1 | A | 2.8 | 5.4 | |
| 3-Mar | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 7 | 84 | A | 1 | 5.6 | 84.2 | |
| 4-Mar | 1 | 1 | 1 | 7 | 6 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | A | 2 | 1 | 1.9 | 7.0 | |
| 5-Mar | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 4 | 5 | 4 | 32 | 4 | 4 | 3 | 3 | 15 | 24 | 1 | 1 | 1 | A | 2 | 1 | 1 | 5.1 | 32.3 | |
| 6-Mar | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | A | 1 | 4 | 2 | 2 | 1.6 | 3.8 | |
| 7-Mar | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | A | 1 | 1 | 1 | 1 | 1 | 1.4 | 2.3 | |
| 8-Mar | 1 | 1 | 1 | 1 | 5 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | A | A | 2 | 2 | 2 | 2 | 2 | 1.7 | 4.8 | |
| 9-Mar | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | A | A | 3 | 5 | 4 | 6 | 3 | 5 | 2.7 | 6.0 | |
| 10-Mar | 3 | 2 | 3 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1.8 | 3.5 | |
| 11-Mar | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 4 | 3 | 3 | 3 | 3 | A | 4 | 2 | 4 | 3 | 2 | 1 | 2 | 3 | 3 | 2.7 | 4.8 | |
| 12-Mar | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 1 | 1 | C | C | C | C | C | C | C | C | 4 | 8 | 2 | 2 | 3 | 3 | 2 | 2 | -- | 8.5 |
| 13-Mar | 2 | 2 | 3 | 5 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 5 | 2 | 2 | 5 | 2 | 5 | 2.3 | 5.2 | |
| 14-Mar | 4 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 2 | A | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1.7 | 3.5 | |
| 15-Mar | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | A | 1 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 3 | 3 | 2.7 | 4.7 | |
| 16-Mar | 3 | 2 | 2 | 2 | 3 | 6 | 5 | 3 | 2 | A | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 2.3 | 6.1 | |
| 17-Mar | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | A | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1.7 | 2.5 | |
| 18-Mar | 1 | 1 | 4 | 6 | 4 | 3 | 2 | A | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2.1 | 5.7 | |
| 19-Mar | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.3 | |
| 20-Mar | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1.1 | 1.6 | |
| 21-Mar | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.3 | 3.3 | |
| 22-Mar | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 1.8 | 3.4 | |
| 23-Mar | 4 | 4 | A | 2 | 3 | 4 | 2 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2.2 | 4.3 | |
| 24-Mar | 1 | A | 1 | 2 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 2.6 | 4.4 | |
| 25-Mar | A | 5 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 5 | 4 | 3 | A | 3.0 | 4.6 | |
| 26-Mar | 4 | 8 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2.8 | 8.3 | |
| 27-Mar | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 3 | 2 | A | 2 | 2 | 2.1 | 3.0 | |
| 28-Mar | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 5 | 5 | 3 | 2 | 2 | 5 | 3 | 3 | A | 5 | 4 | 3 | 3.2 | 5.2 | |
| 29-Mar | 3 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | D | D | D | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 2 | 3 | 2 | 1.9 | 4.0 | |
| 30-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 5 | 2 | 4 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | A | 2 | 2 | 1 | 1 | 1.9 | 4.9 | |
| 31-Mar | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 5 | 1 | 1 | 1 | A | 1 | 1 | 0 | 0 | 0 | 1.2 | 5.2 | |
| | | 1.8 | 2.1 | 1.8 | 2.2 | 2.3 | 2.0 | 2.0 | 2.2 | 2.2 | 3.1 | 2.1 | 2.2 | 1.9 | 1.8 | 2.1 | 2.5 | 2.3 | 2.0 | 1.8 | 2.2 | 5.1 | 2.0 | 1.8 | Diurnal Average | | |
| | | 4.0 | 8.3 | 4.4 | 7.0 | 6.4 | 6.1 | 5.1 | 4.9 | 4.9 | 4.5 | 32.3 | 4.4 | 5.0 | 4.7 | 5.2 | 14.7 | 23.9 | 8.5 | 5.2 | 4.6 | 6.9 | 84.2 | 5.3 | 5.1 | Diurnal Maximum | |
| C - Calibration | | D - DAS Failure | | | | | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | | |





Hourly Averages

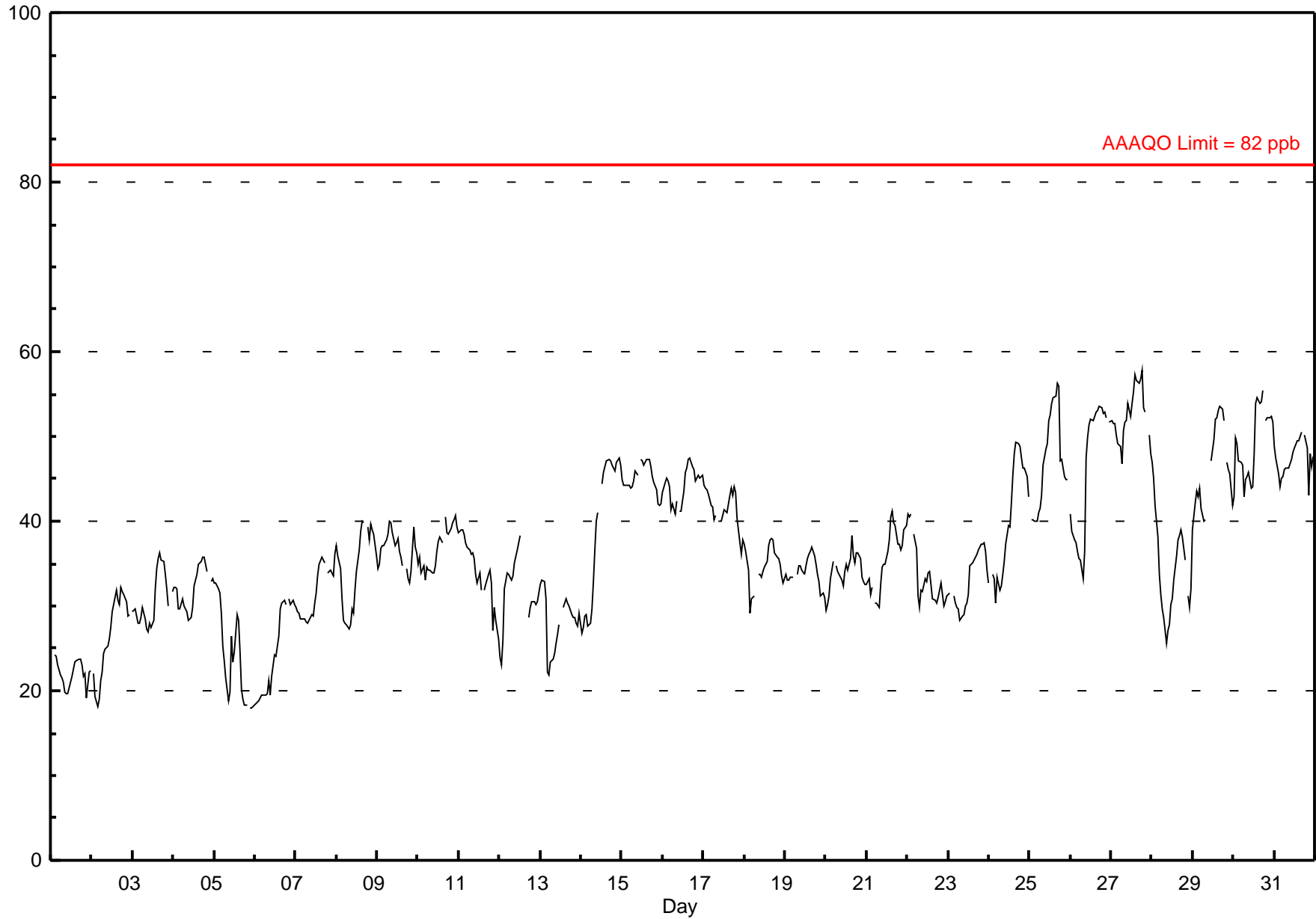
Ozone (O₃) - ppb

Sunset House - March 2012

| | | | | |
|--|---|----------|---------------------------|------|
| Number of Exceedences (AAAQO): | 1-hr: 0 | 24-hr: 0 | Hours in Service: | 744 |
| Maximum Value: 57.9 ppb on Mar 27 19:00 | Maximum Daily Average: 52.6 ppb on Mar 27 | | Hours of Data: | 705 |
| Minimum Value: 18 ppb on Mar 5 23:00 | Minimum Daily Average: 22.1 ppb on Mar 1 | | Hours of Missing Data: | 39 |
| Maximum Diurnal Average: 40.3 ppb at hour 17 | Minimum Diurnal Average: 33.2 ppb at hour 7 | | Hours of Calibration: | 36 |
| Monthly Average: 36.44 ppb | Percentiles: P ₁ = 18.5 P ₁₀ = 25.9 Q ₁ = 30.4 Median = 35.2 Q ₃ = 43.0 P ₉₀ = 48.7 P ₉₉ = 55.8 | | Percent Operational Time: | 99.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
|--------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 22 | A | 24 | 24 | 23 | 22 | 21 | 21 | 20 | 20 | 20 | 21 | 22 | 23 | 23 | 24 | 24 | 24 | 23 | 22 | 22 | 19 | 22 | 22 | 22.1 | 24.2 | |
| 2-Mar | A | 22 | 19 | 18 | 19 | 21 | 22 | 24 | 25 | 25 | 26 | 27 | 29 | 30 | 32 | 31 | 30 | 32 | 32 | 31 | 31 | 29 | 29 | A | 26.6 | 32.3 | |
| 3-Mar | 29 | 30 | 29 | 28 | 28 | 29 | 30 | 28 | 27 | 27 | 28 | 28 | 28 | 32 | 34 | 36 | 36 | 35 | 35 | 34 | 32 | 30 | A | 32 | 30.6 | 36.2 | |
| 4-Mar | 32 | 32 | 32 | 30 | 30 | 31 | 30 | 30 | 29 | 28 | 29 | 30 | 32 | 33 | 34 | 35 | 35 | 36 | 36 | 35 | 34 | A | 33 | 33 | 32.1 | 35.8 | |
| 5-Mar | 33 | 33 | 32 | 32 | 29 | 25 | 24 | 22 | 19 | 20 | 26 | 23 | 25 | 29 | 28 | 25 | 20 | 19 | 18 | 18 | A | 18 | 18 | 18 | 24.1 | 32.7 | |
| 6-Mar | 19 | 19 | 19 | 19 | 19 | 20 | 19 | 20 | 21 | 19 | 22 | 24 | 24 | 25 | 26 | 30 | 30 | 31 | 30 | A | 31 | 30 | 31 | 30 | 24.3 | 30.9 | |
| 7-Mar | 30 | 29 | 29 | 29 | 28 | 29 | 28 | 28 | 28 | 29 | 29 | 30 | 32 | 34 | 35 | 36 | 35 | 35 | A | 34 | 34 | 34 | 34 | 36 | 31.5 | 36.1 | |
| 8-Mar | 37 | 36 | 34 | 31 | 28 | 28 | 28 | 27 | 28 | 30 | 29 | 32 | 34 | 37 | 39 | 40 | 40 | A | 39 | 38 | 40 | 39 | 38 | 36 | 34.2 | 39.9 | |
| 9-Mar | 34 | 35 | 37 | 37 | 37 | 38 | 38 | 40 | 40 | 39 | 37 | 38 | 38 | 36 | 36 | 35 | A | 34 | 33 | 33 | 34 | 39 | 37 | 36 | 36.6 | 40.1 | |
| 10-Mar | 35 | 36 | 34 | 35 | 33 | 35 | 34 | 34 | 34 | 34 | 35 | 36 | 38 | 38 | 37 | A | 41 | 39 | 38 | 39 | 40 | 40 | 41 | 39 | 36.7 | 40.7 | |
| 11-Mar | 39 | 39 | 39 | 38 | 37 | 37 | 37 | 36 | 36 | 36 | 34 | 33 | 34 | 32 | A | 32 | 32 | 34 | 34 | 33 | 27 | 30 | 28 | 26 | 34.0 | 39.0 | |
| 12-Mar | 24 | 23 | 26 | 32 | 34 | 34 | 33 | 33 | 34 | 35 | 37 | 37 | 38 | A | C | C | C | 29 | 30 | 30 | 30 | 30 | 30 | 31 | 31.6 | 38.4 | |
| 13-Mar | 32 | 33 | 33 | 31 | 22 | 22 | 23 | 24 | 24 | 26 | 27 | 28 | A | 30 | 30 | 31 | 30 | 30 | 29 | 29 | 29 | 28 | 28 | 29 | 28.1 | 33.0 | |
| 14-Mar | 27 | 27 | 29 | 29 | 28 | 28 | 30 | 33 | 37 | 40 | 41 | A | 44 | 46 | 47 | 47 | 47 | 47 | 47 | 46 | 46 | 47 | 47 | 47 | 39.4 | 47.4 | |
| 15-Mar | 45 | 44 | 44 | 44 | 44 | 44 | 44 | 45 | 46 | 45 | A | 47 | 47 | 47 | 47 | 47 | 47 | 46 | 45 | 45 | 44 | 42 | 42 | 42 | 45.0 | 47.4 | |
| 16-Mar | 43 | 45 | 45 | 45 | 44 | 41 | 42 | 41 | 42 | A | 41 | 41 | 44 | 46 | 46 | 47 | 48 | 46 | 46 | 45 | 45 | 45 | 45 | 45 | 44.3 | 47.5 | |
| 17-Mar | 44 | 44 | 44 | 43 | 42 | 42 | 40 | 41 | A | 40 | 40 | 41 | 41 | 41 | 41 | 43 | 44 | 43 | 44 | 43 | 40 | 37 | 36 | 38 | 41.4 | 44.3 | |
| 18-Mar | 37 | 36 | 34 | 29 | 31 | 31 | 31 | A | 34 | 34 | 33 | 34 | 35 | 35 | 37 | 38 | 38 | 38 | 36 | 36 | 36 | 35 | 34 | 33 | 34.5 | 38.0 | |
| 19-Mar | 34 | 33 | 33 | 33 | 33 | 33 | A | 34 | 35 | 35 | 34 | 34 | 35 | 36 | 36 | 36 | 37 | 36 | 35 | 34 | 33 | 31 | 32 | 31 | 34.0 | 36.9 | |
| 20-Mar | 29 | 30 | 31 | 33 | 35 | A | 35 | 34 | 34 | 34 | 33 | 32 | 34 | 35 | 34 | 36 | 38 | 36 | 35 | 36 | 36 | 36 | 33 | 33 | 33 | 34.0 | 38.3 |
| 21-Mar | 33 | 33 | 31 | 32 | A | 30 | 30 | 30 | 33 | 35 | 35 | 35 | 36 | 38 | 40 | 41 | 40 | 39 | 37 | 37 | 37 | 37 | 39 | 40 | 35.6 | 41.2 | |
| 22-Mar | 41 | 41 | 41 | A | 38 | 37 | 31 | 30 | 32 | 32 | 33 | 33 | 34 | 34 | 32 | 31 | 31 | 30 | 31 | 32 | 33 | 30 | 31 | 31 | 33.4 | 40.9 | |
| 23-Mar | 31 | 32 | A | 31 | 30 | 30 | 30 | 28 | 29 | 29 | 30 | 30 | 31 | 35 | 35 | 35 | 36 | 36 | 37 | 37 | 37 | 37 | 36 | 34 | 33.0 | 37.4 | |
| 24-Mar | 33 | A | 34 | 33 | 30 | 33 | 32 | 32 | 34 | 35 | 37 | 39 | 39 | 42 | 45 | 48 | 49 | 49 | 49 | 47 | 46 | 46 | 45 | 43 | 40.2 | 49.3 | |
| 25-Mar | A | 40 | 40 | 40 | 40 | 41 | 41 | 43 | 47 | 48 | 49 | 52 | 53 | 54 | 55 | 55 | 56 | 56 | 47 | 47 | 45 | 45 | 45 | A | 47.3 | 56.3 | |
| 26-Mar | 41 | 39 | 38 | 37 | 36 | 36 | 35 | 33 | 36 | 47 | 50 | 51 | 52 | 52 | 52 | 53 | 53 | 54 | 53 | 53 | 53 | 52 | A | 52 | 46.1 | 53.6 | |
| 27-Mar | 52 | 52 | 52 | 50 | 49 | 49 | 47 | 51 | 52 | 52 | 54 | 52 | 54 | 55 | 57 | 57 | 56 | 57 | 58 | 53 | 53 | A | 50 | 48 | 52.6 | 57.9 | |
| 28-Mar | 47 | 45 | 42 | 38 | 34 | 31 | 30 | 29 | 26 | 27 | 28 | 30 | 31 | 33 | 36 | 38 | 38 | 39 | 38 | 35 | A | 31 | 30 | 32 | 34.2 | 46.9 | |
| 29-Mar | 39 | 42 | 44 | 43 | 44 | 42 | 40 | 40 | D | D | D | 47 | 50 | 52 | 52 | 53 | 54 | 53 | 52 | A | 47 | 46 | 46 | 42 | 46.3 | 53.6 | |
| 30-Mar | 43 | 50 | 49 | 47 | 47 | 47 | 43 | 45 | 45 | 46 | 44 | 44 | 48 | 54 | 54 | 54 | 54 | 55 | A | 52 | 52 | 52 | 52 | 52 | 49.1 | 55.3 | |
| 31-Mar | 49 | 48 | 46 | 44 | 45 | 45 | 46 | 46 | 46 | 47 | 47 | 48 | 49 | 49 | 50 | 50 | 50 | A | 50 | 49 | 43 | 48 | 47 | 48 | 47.4 | 50.5 | |
| | 35.7 | 36.1 | 35.4 | 34.6 | 34.0 | 33.6 | 33.2 | 33.4 | 33.5 | 34.2 | 34.7 | 36.0 | 37.7 | 38.7 | 39.8 | 40.1 | 40.3 | 39.3 | 38.6 | 38.0 | 38.2 | 36.7 | 36.5 | 36.5 | Diurnal Average | | |
| | 51.8 | 51.6 | 51.6 | 50.2 | 49.1 | 48.8 | 46.9 | 50.8 | 51.7 | 51.9 | 53.9 | 52.3 | 53.9 | 55.3 | 57.4 | 56.6 | 56.3 | 56.8 | 57.9 | 53.4 | 52.8 | 52.2 | 52.3 | 51.7 | Diurnal Maximum | | |

C - Calibration D - DAS Failure A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na



Hourly Maximums

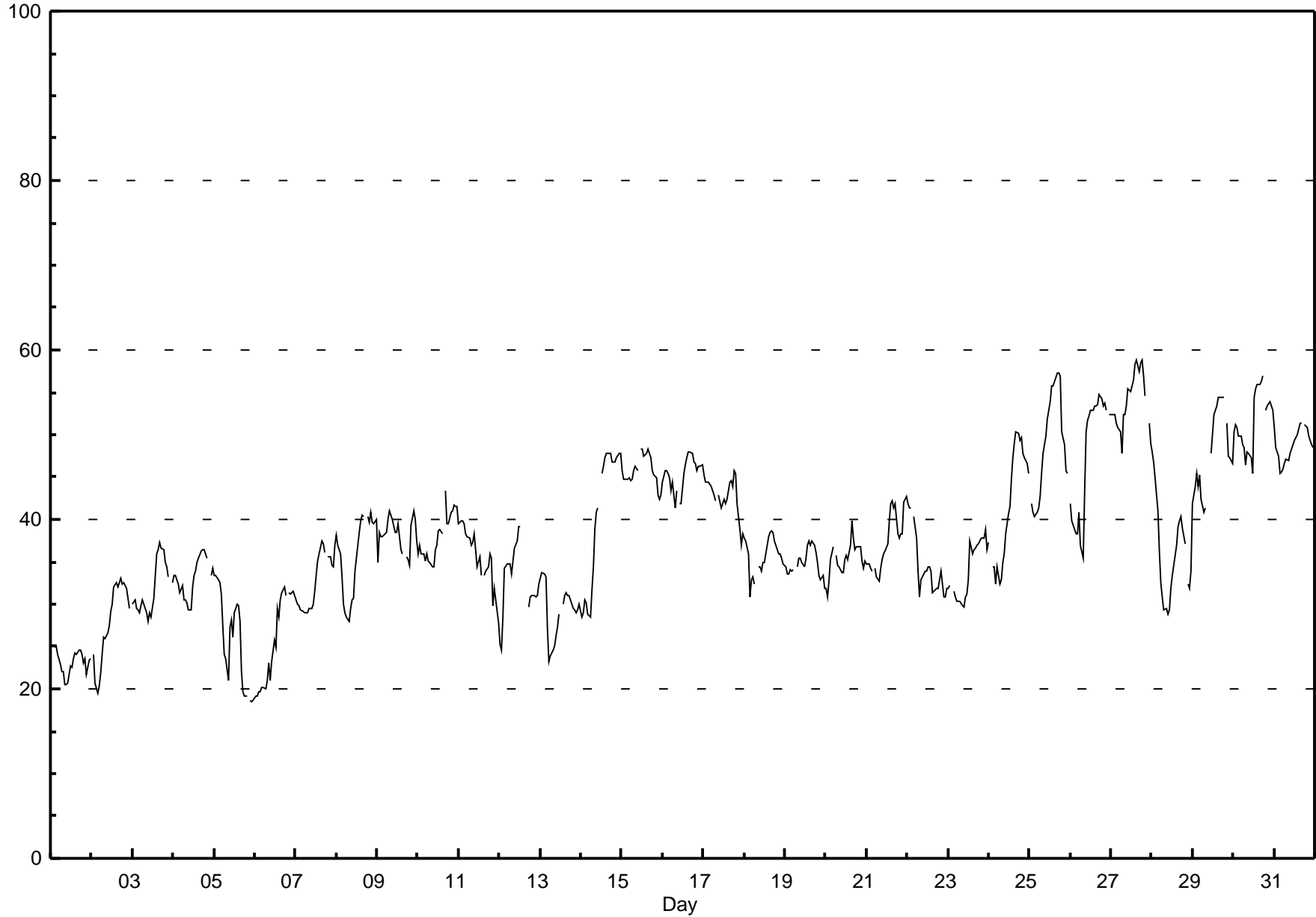
Ozone (O₃) - ppb

Sunset House - March 2012

| Maximum Value: 58.9 ppb on Mar 27 16:00 | | Maximum Daily Average: 54.0 ppb on Mar 27 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|---|------|--------------------------------|------|------|------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|-----------------|
| Minimum Value: 18 ppb on Mar 5 23:00 | | Minimum Daily Average: 23.1 ppb on Mar 1 | | Hours of Data: 705 | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Diurnal Average: 41.4 ppb at hour 17 | | Minimum Diurnal Average: 34.5 ppb at hour 7 | | Hours of Missing Data: 39 | | | | | | | | | | | | | | | | | | | | | | |
| Monthly Average: 37.77 ppb | | Percentiles: P ₁ = 19.3 P ₁₀ = 27.9 Q ₁ = 31.8 Median = 36.4 Q ₃ = 44.8 P ₉₀ = 50.4 P ₉₉ = 57.2 | | Hours of Calibration: 36 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Percent Operational Time: 99.6 | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | 23 | A | 25 | 25 | 24 | 23 | 22 | 22 | 21 | 21 | 21 | 23 | 23 | 24 | 24 | 24 | 25 | 25 | 24 | 23 | 23 | 22 | 23 | 24 | 23.1 | 25.0 |
| 2-Mar | A | 24 | 21 | 19 | 20 | 22 | 24 | 26 | 26 | 27 | 27 | 29 | 30 | 32 | 33 | 32 | 33 | 33 | 32 | 33 | 32 | 31 | 30 | A | 28.0 | 33.1 |
| 3-Mar | 30 | 31 | 30 | 29 | 29 | 30 | 31 | 30 | 29 | 28 | 29 | 28 | 31 | 33 | 36 | 36 | 37 | 37 | 36 | 35 | 34 | 33 | A | 33 | 32.0 | 37.2 |
| 4-Mar | 33 | 33 | 33 | 32 | 31 | 32 | 30 | 30 | 30 | 29 | 29 | 32 | 33 | 34 | 35 | 35 | 36 | 36 | 36 | 36 | 35 | A | 33 | 34 | 33.2 | 36.4 |
| 5-Mar | 33 | 33 | 33 | 33 | 31 | 27 | 24 | 24 | 21 | 27 | 28 | 26 | 29 | 30 | 30 | 28 | 22 | 20 | 19 | 19 | A | 19 | 18 | 19 | 25.8 | 33.4 |
| 6-Mar | 19 | 19 | 20 | 20 | 20 | 20 | 20 | 21 | 23 | 21 | 23 | 26 | 25 | 29 | 28 | 30 | 31 | 32 | 31 | A | 31 | 31 | 31 | 31 | 25.4 | 32.0 |
| 7-Mar | 30 | 30 | 30 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 30 | 31 | 33 | 35 | 36 | 38 | 37 | 36 | A | 36 | 36 | 35 | 34 | 37 | 32.5 | 37.5 |
| 8-Mar | 38 | 37 | 36 | 33 | 30 | 29 | 28 | 28 | 29 | 30 | 31 | 34 | 35 | 38 | 40 | 41 | 40 | A | 40 | 40 | 41 | 40 | 39 | 40 | 35.6 | 40.8 |
| 9-Mar | 35 | 38 | 38 | 38 | 38 | 38 | 40 | 41 | 40 | 40 | 38 | 38 | 40 | 38 | 37 | 36 | A | 36 | 35 | 35 | 39 | 41 | 40 | 37 | 38.1 | 41.0 |
| 10-Mar | 36 | 37 | 36 | 36 | 35 | 36 | 35 | 35 | 34 | 34 | 36 | 37 | 39 | 39 | 38 | A | 43 | 39 | 39 | 41 | 41 | 42 | 41 | 41 | 38.0 | 43.5 |
| 11-Mar | 39 | 40 | 40 | 39 | 38 | 38 | 38 | 37 | 37 | 38 | 36 | 34 | 36 | 33 | A | 33 | 34 | 34 | 36 | 35 | 30 | 32 | 30 | 28 | 35.6 | 39.9 |
| 12-Mar | 25 | 25 | 28 | 34 | 35 | 35 | 35 | 34 | 35 | 37 | 37 | 39 | 39 | A | C | C | C | 30 | 31 | 31 | 31 | 31 | 31 | 32 | 32.7 | 39.2 |
| 13-Mar | 33 | 34 | 34 | 33 | 27 | 23 | 24 | 25 | 25 | 26 | 27 | 29 | A | 30 | 31 | 31 | 31 | 31 | 30 | 29 | 29 | 29 | 29 | 30 | 29.2 | 33.8 |
| 14-Mar | 28 | 29 | 30 | 30 | 29 | 28 | 32 | 34 | 39 | 41 | 41 | A | 45 | 46 | 47 | 48 | 48 | 48 | 47 | 47 | 47 | 47 | 48 | 48 | 40.4 | 47.8 |
| 15-Mar | 46 | 45 | 45 | 45 | 45 | 45 | 45 | 46 | 46 | 46 | A | 48 | 48 | 47 | 48 | 48 | 48 | 47 | 46 | 45 | 45 | 43 | 42 | 43 | 45.7 | 48.3 |
| 16-Mar | 44 | 46 | 46 | 45 | 45 | 43 | 44 | 41 | 43 | A | 42 | 42 | 45 | 47 | 47 | 48 | 48 | 48 | 47 | 47 | 46 | 46 | 46 | 46 | 45.4 | 48.0 |
| 17-Mar | 45 | 44 | 44 | 44 | 44 | 43 | 43 | 42 | A | 43 | 41 | 42 | 42 | 42 | 44 | 45 | 44 | 44 | 46 | 45 | 42 | 39 | 37 | 38 | 42.7 | 45.8 |
| 18-Mar | 38 | 37 | 36 | 31 | 33 | 33 | 32 | A | 34 | 34 | 34 | 35 | 35 | 37 | 38 | 38 | 39 | 38 | 37 | 36 | 36 | 36 | 35 | 35 | 35.6 | 38.7 |
| 19-Mar | 34 | 33 | 33 | 34 | 34 | 34 | A | 34 | 35 | 35 | 35 | 34 | 35 | 37 | 37 | 37 | 37 | 37 | 36 | 35 | 33 | 33 | 33 | 32 | 34.8 | 37.4 |
| 20-Mar | 32 | 31 | 33 | 35 | 37 | A | 36 | 35 | 34 | 34 | 34 | 35 | 36 | 35 | 37 | 40 | 38 | 36 | 37 | 37 | 37 | 35 | 34 | 35 | 35.3 | 39.8 |
| 21-Mar | 35 | 35 | 34 | 34 | A | 34 | 33 | 33 | 34 | 35 | 36 | 36 | 37 | 40 | 42 | 42 | 41 | 42 | 38 | 38 | 38 | 38 | 42 | 43 | 37.5 | 42.8 |
| 22-Mar | 42 | 41 | 41 | A | 40 | 38 | 34 | 31 | 33 | 33 | 34 | 34 | 34 | 34 | 34 | 31 | 32 | 32 | 32 | 33 | 34 | 31 | 31 | 32 | 34.4 | 41.8 |
| 23-Mar | 32 | 32 | A | 32 | 31 | 30 | 30 | 30 | 30 | 30 | 31 | 31 | 33 | 37 | 36 | 36 | 37 | 37 | 37 | 38 | 38 | 38 | 39 | 36 | 34.0 | 38.9 |
| 24-Mar | 37 | A | 34 | 34 | 32 | 34 | 32 | 33 | 35 | 36 | 38 | 41 | 41 | 45 | 47 | 49 | 50 | 50 | 49 | 50 | 48 | 47 | 47 | 45 | 41.6 | 50.3 |
| 25-Mar | A | 42 | 41 | 40 | 41 | 41 | 43 | 45 | 48 | 50 | 52 | 53 | 54 | 56 | 56 | 57 | 57 | 57 | 57 | 50 | 49 | 46 | 45 | A | 49.1 | 57.3 |
| 26-Mar | 42 | 40 | 39 | 38 | 38 | 41 | 37 | 35 | 43 | 50 | 52 | 52 | 53 | 53 | 53 | 53 | 54 | 55 | 54 | 53 | 54 | 53 | A | 52 | 47.6 | 54.8 |
| 27-Mar | 52 | 52 | 52 | 51 | 51 | 50 | 48 | 52 | 52 | 53 | 55 | 55 | 56 | 56 | 58 | 59 | 57 | 58 | 59 | 57 | 55 | A | 51 | 49 | 54.0 | 58.9 |
| 28-Mar | 48 | 47 | 45 | 41 | 36 | 33 | 31 | 29 | 29 | 29 | 29 | 32 | 33 | 35 | 37 | 39 | 40 | 40 | 39 | 37 | A | 32 | 32 | 34 | 36.0 | 47.9 |
| 29-Mar | 42 | 44 | 45 | 44 | 45 | 42 | 41 | 41 | D | D | D | 48 | 52 | 53 | 53 | 54 | 54 | 54 | 54 | A | 51 | 47 | 47 | 47 | 48.1 | 54.3 |
| 30-Mar | 50 | 51 | 51 | 50 | 50 | 49 | 48 | 46 | 48 | 48 | 47 | 45 | 54 | 55 | 56 | 56 | 56 | 57 | A | 53 | 53 | 54 | 53 | 53 | 51.5 | 56.9 |
| 31-Mar | 51 | 48 | 47 | 45 | 46 | 46 | 47 | 47 | 47 | 48 | 48 | 49 | 49 | 50 | 51 | 51 | 51 | A | 51 | 51 | 50 | 49 | 49 | 48 | 48.7 | 51.3 |
| | | 37.1 | 37.2 | 36.7 | 35.9 | 35.5 | 35.0 | 34.5 | 34.6 | 35.0 | 35.6 | 36.0 | 37.3 | 39.3 | 40.0 | 41.0 | 41.3 | 41.4 | 40.3 | 39.9 | 39.4 | 40.0 | 37.9 | 37.8 | 38.0 | Diurnal Average |
| | | 52.3 | 52.3 | 52.3 | 51.3 | 50.8 | 50.4 | 48.4 | 52.4 | 52.4 | 53.4 | 55.4 | 55.1 | 55.7 | 56.4 | 58.4 | 58.9 | 57.4 | 58.4 | 58.8 | 56.9 | 54.6 | 53.8 | 53.4 | 52.9 | Diurnal Maximum |
| C - Calibration | | D - DAS Failure | | | | | | A - Automated Daily Zero Span | | | | | | | | | | | | | | | | | | |

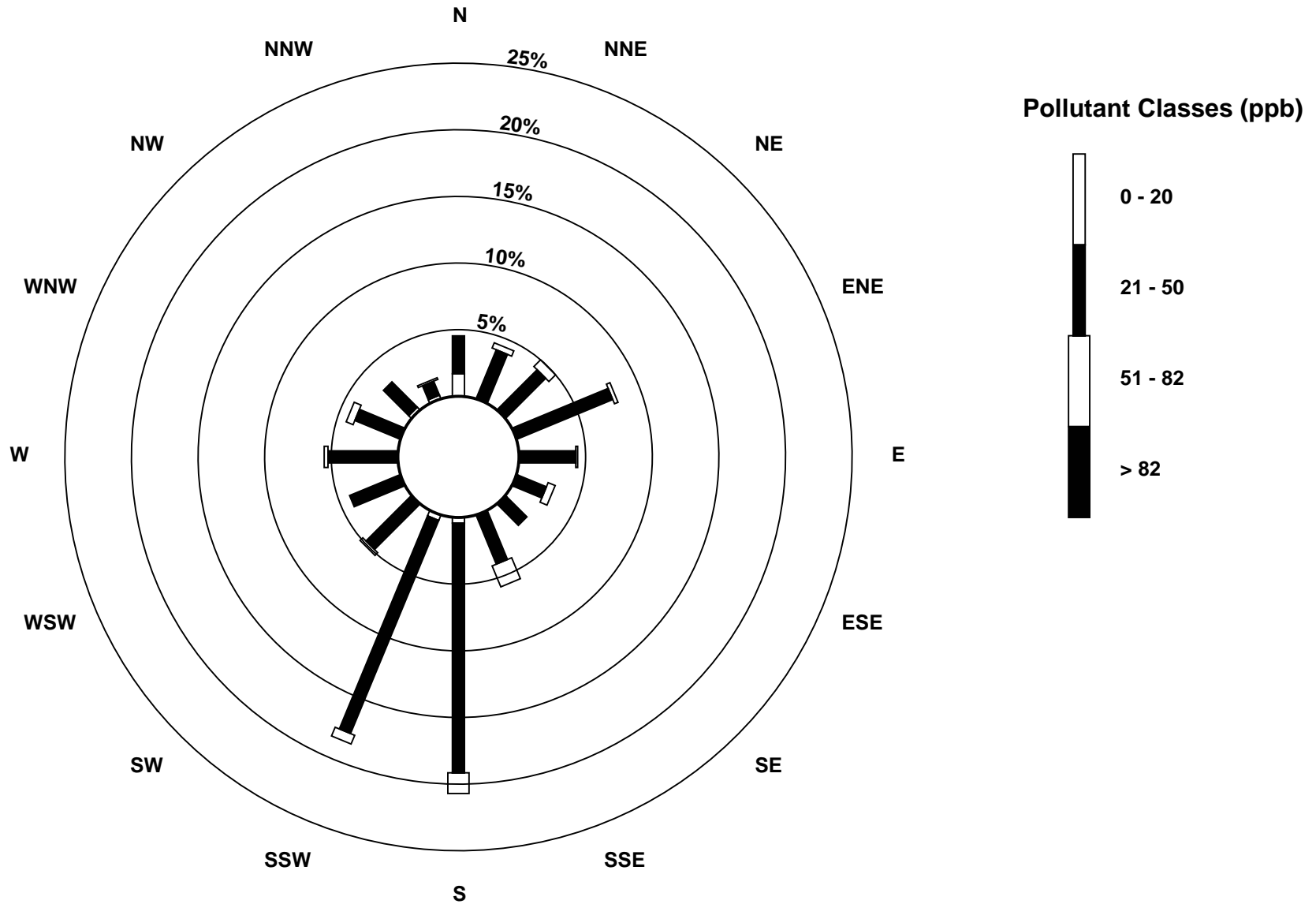
Hourly Maximums

Ozone (O₃) - ppb
Sunset House - March 2012



Pollutant Rose

Ozone (O₃) - ppb
Sunset House - March 2012



Eight Hour Running Averages

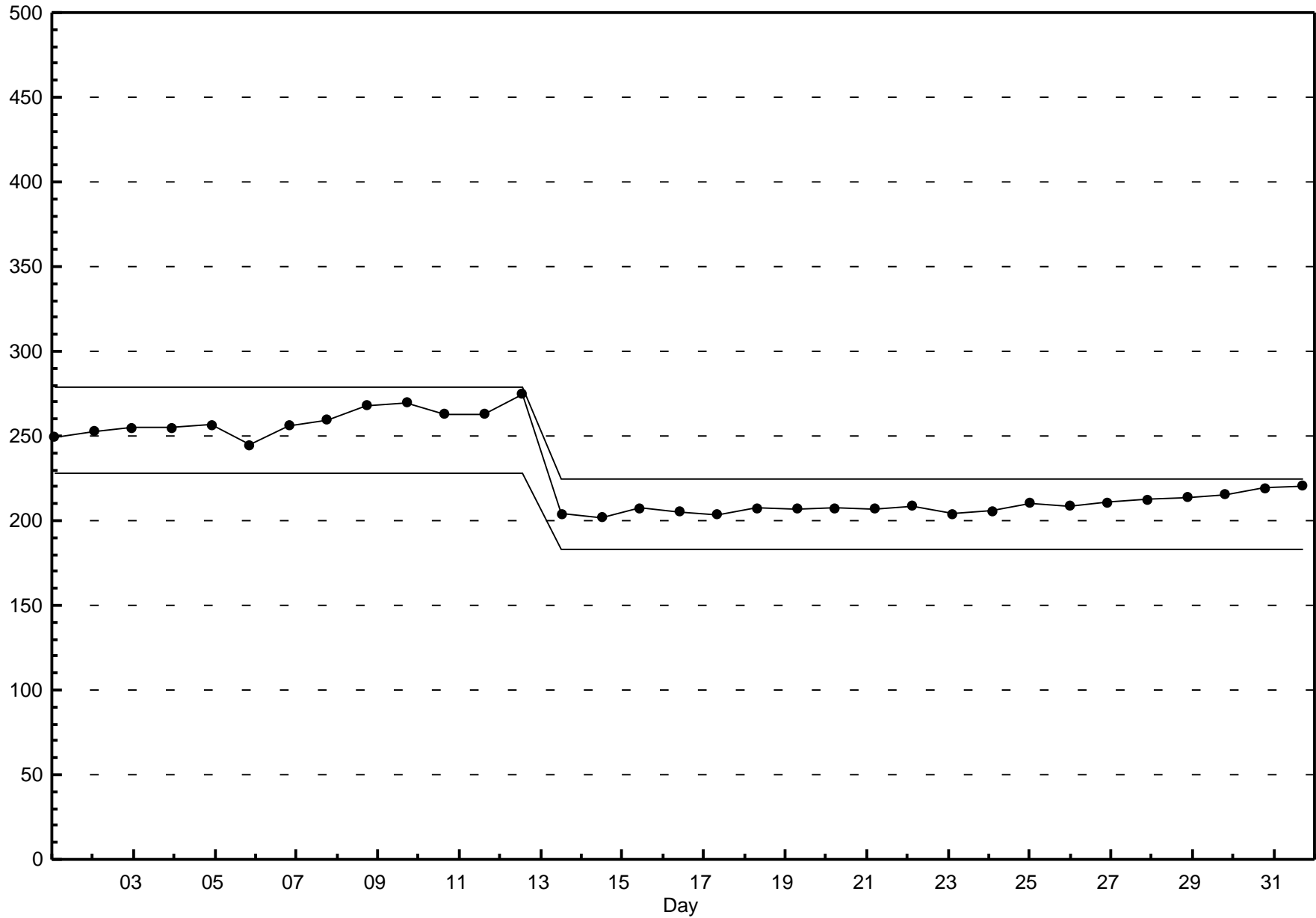
Ozone (O₃) - ppb

Sunset House - March 2012

| Maximum Value: 55.9 ppb on Mar 27 20:00 | | | | | | | | | | | | | | | | | | | | | | Hours in Service: | 744 | | |
|---|-------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---------------------------|------|----|---------------|
| Minimum Value: 18.3 ppb on Mar 6 02:00 | | | | | | | | | | | | | | | | | | | | | | Hours of Data: | 731 | | |
| Percentiles: P ₁ = 18.9 P ₁₀ = 25.7 Q ₁ = 30.5 Median = 34.9 Q ₃ = 42.9 P ₉₀ = 48.4 P ₉₉ = 54.5 | | | | | | | | | | | | | | | | | | | | | | Hours of Missing Data: | 13 | | |
| | | | | | | | | | | | | | | | | | | | | | | Hours of Calibration: | 7 | | |
| | | | | | | | | | | | | | | | | | | | | | | Percent Operational Time: | 99.2 | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum |
| 1-Mar | 20 | 20 | 21 | 21 | 22 | 22 | 22 | 23 | 22 | 22 | 21 | 21 | 21 | 21 | 21 | 21 | 22 | 22 | 23 | 23 | 23 | 23 | 22 | 22 | 23.0 |
| 2-Mar | 22 | 22 | 21 | 21 | 20 | 21 | 21 | 21 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 30 | 31 | 31 | 31 | 31 | 31 | 31.1 |
| 3-Mar | 30 | 30 | 30 | 29 | 29 | 29 | 29 | 29 | 29 | 28 | 28 | 28 | 28 | 29 | 29 | 30 | 31 | 32 | 33 | 34 | 34 | 34 | 34 | 33 | 34.3 |
| 4-Mar | 33 | 32 | 32 | 31 | 31 | 31 | 31 | 31 | 30 | 30 | 29 | 30 | 30 | 30 | 31 | 31 | 32 | 33 | 34 | 34 | 35 | 35 | 35 | 35 | 34.9 |
| 5-Mar | 34 | 34 | 33 | 33 | 32 | 31 | 30 | 29 | 27 | 25 | 25 | 23 | 23 | 23 | 24 | 24 | 25 | 24 | 23 | 23 | 23 | 21 | 19 | 19 | 34.2 |
| 6-Mar | 18 | 18 | 18 | 18 | 19 | 19 | 19 | 19 | 19 | 20 | 20 | 21 | 21 | 22 | 23 | 24 | 25 | 27 | 28 | 28 | 29 | 30 | 30 | 30 | 30.5 |
| 7-Mar | 30 | 30 | 30 | 30 | 30 | 29 | 29 | 29 | 29 | 29 | 28 | 29 | 29 | 30 | 31 | 32 | 32 | 33 | 34 | 34 | 35 | 35 | 35 | 35 | 34.8 |
| 8-Mar | 35 | 35 | 35 | 34 | 34 | 33 | 32 | 31 | 30 | 29 | 29 | 29 | 31 | 32 | 33 | 35 | 36 | 37 | 38 | 39 | 39 | 39 | 39 | 39 | 39.2 |
| 9-Mar | 38 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 37 | 37 | 36 | 36 | 35 | 34 | 35 | 35 | 35 | 38.4 |
| 10-Mar | 35 | 35 | 35 | 36 | 36 | 35 | 35 | 34 | 34 | 34 | 34 | 34 | 35 | 35 | 36 | 36 | 37 | 38 | 38 | 39 | 39 | 39 | 40 | 40 | 39.6 |
| 11-Mar | 39 | 39 | 39 | 39 | 39 | 39 | 38 | 38 | 37 | 37 | 36 | 36 | 35 | 35 | 34 | 34 | 33 | 33 | 33 | 33 | 32 | 32 | 31 | 31 | 39.5 |
| 12-Mar | 29 | 28 | 27 | 27 | 28 | 28 | 29 | 30 | 31 | 33 | 34 | 35 | 35 | 35 | 36 | N | N | N | N | N | N | N | 30 | 30 | 35.7 |
| 13-Mar | 30 | 31 | 31 | 31 | 30 | 29 | 29 | 28 | 27 | 26 | 25 | 24 | 25 | 26 | 27 | 28 | 29 | 29 | 30 | 30 | 30 | 29 | 29 | 29 | 31.5 |
| 14-Mar | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 29 | 30 | 32 | 33 | 34 | 36 | 39 | 41 | 43 | 45 | 46 | 46 | 46 | 47 | 47 | 47 | 47 | 46.8 |
| 15-Mar | 46 | 46 | 46 | 46 | 45 | 45 | 45 | 44 | 44 | 45 | 45 | 45 | 46 | 46 | 46 | 47 | 47 | 47 | 47 | 46 | 46 | 45 | 45 | 44 | 47.1 |
| 16-Mar | 44 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 42 | 42 | 42 | 42 | 43 | 44 | 45 | 45 | 46 | 46 | 46 | 46 | 46 | 46 | 46.2 |
| 17-Mar | 45 | 45 | 45 | 45 | 44 | 44 | 43 | 42 | 42 | 42 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 42 | 42 | 43 | 43 | 42 | 41 | 41 | 45.3 |
| 18-Mar | 40 | 39 | 38 | 36 | 35 | 34 | 33 | 33 | 32 | 32 | 32 | 33 | 33 | 34 | 35 | 35 | 35 | 36 | 36 | 37 | 37 | 37 | 36 | 36 | 39.9 |
| 19-Mar | 35 | 34 | 34 | 34 | 33 | 33 | 33 | 33 | 34 | 34 | 34 | 34 | 34 | 35 | 35 | 35 | 35 | 35 | 36 | 36 | 35 | 35 | 34 | 34 | 35.6 |
| 20-Mar | 33 | 32 | 31 | 31 | 32 | 32 | 32 | 33 | 33 | 34 | 34 | 34 | 34 | 34 | 34 | 35 | 35 | 35 | 36 | 36 | 36 | 36 | 35 | 35 | 35.9 |
| 21-Mar | 34 | 34 | 34 | 33 | 33 | 32 | 32 | 31 | 31 | 32 | 32 | 32 | 33 | 34 | 35 | 37 | 38 | 38 | 38 | 39 | 39 | 39 | 38 | 38 | 38.7 |
| 22-Mar | 38 | 39 | 39 | 39 | 39 | 39 | 38 | 37 | 36 | 34 | 33 | 33 | 33 | 32 | 32 | 33 | 32 | 32 | 32 | 32 | 32 | 31 | 31 | 31 | 39.5 |
| 23-Mar | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 31 | 32 | 33 | 34 | 34 | 35 | 36 | 36 | 37 | 36 | 36.5 |
| 24-Mar | 36 | 36 | 36 | 35 | 34 | 33 | 33 | 33 | 33 | 33 | 33 | 34 | 35 | 36 | 38 | 40 | 42 | 44 | 45 | 46 | 47 | 48 | 48 | 47 | 47.6 |
| 25-Mar | 47 | 45 | 44 | 43 | 42 | 41 | 41 | 41 | 42 | 43 | 44 | 45 | 47 | 48 | 50 | 52 | 53 | 54 | 53 | 53 | 52 | 51 | 50 | 49 | 53.6 |
| 26-Mar | 47 | 44 | 43 | 41 | 40 | 39 | 37 | 37 | 36 | 37 | 39 | 41 | 43 | 45 | 47 | 49 | 51 | 52 | 53 | 53 | 53 | 53 | 53 | 53 | 53.0 |
| 27-Mar | 53 | 52 | 52 | 52 | 51 | 51 | 50 | 50 | 50 | 50 | 50 | 51 | 51 | 52 | 53 | 54 | 55 | 55 | 56 | 56 | 56 | 56 | 55 | 54 | 55.9 |
| 28-Mar | 52 | 51 | 48 | 46 | 43 | 42 | 39 | 37 | 34 | 32 | 30 | 29 | 29 | 29 | 30 | 31 | 33 | 34 | 35 | 36 | 37 | 37 | 36 | 35 | 52.3 |
| 29-Mar | 35 | 35 | 36 | 37 | 38 | 39 | 41 | 42 | 42 | 42 | N | N | N | N | N | N | 51 | 52 | 52 | 52 | 52 | 51 | 50 | 48 | 52.2 |
| 30-Mar | 47 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 47 | 46 | 45 | 45 | 45 | 46 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 53 | 53 | 53 | 53.6 |
| 31-Mar | 52 | 51 | 50 | 49 | 48 | 48 | 47 | 46 | 46 | 46 | 46 | 46 | 47 | 47 | 48 | 48 | 49 | 49 | 49 | 50 | 49 | 49 | 48 | 48 | 52.0 |
| 52.6 52.3 52.1 51.7 51.2 50.7 50.2 50.1 50.1 50.1 50.1 50.4 50.7 51.3 52.1 53.4 54.1 54.7 55.3 55.8 55.9 55.8 55.9 54.9 53.6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diurnal Maximums | | | | | | | | | | | | | | | | | | | | | | | | | |
| N - Not Valid | | | | | | | | | | | | | | | | | | | | | | | | | |

Span Responses

Ozone (O₃)
Sunset House - March 2012



Hourly Averages

PM2.5 (PM_{2.5}) - µg/m³

Sunset House - March 2012

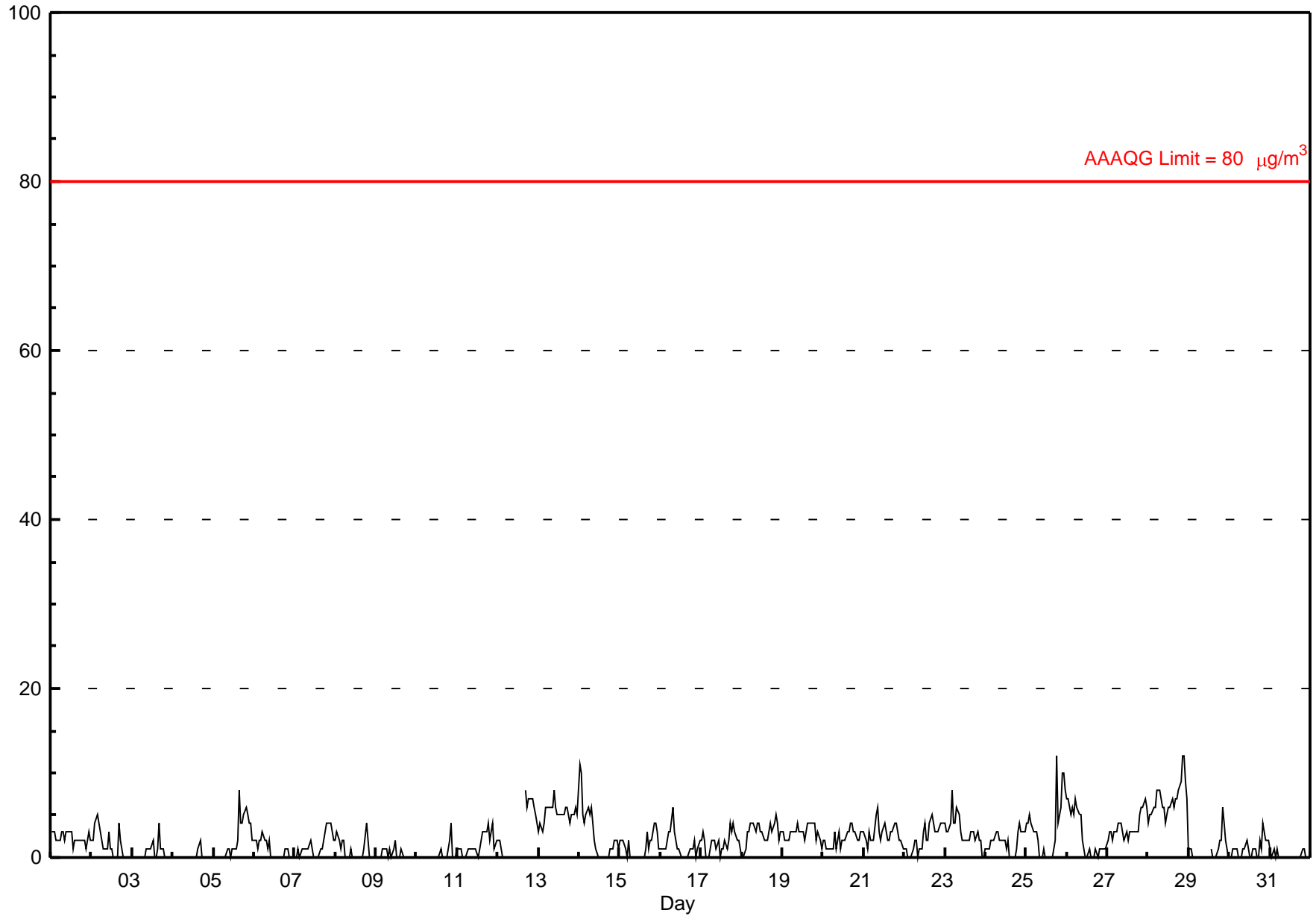
| | |
|---|--|
| Number of Exceedences: 1-hr: 0 24-hr: 0 | Hours in Service: 744 |
| Maximum Value: 12.0 µg/m ³ on Mar 25 19:00 | Maximum Daily Average: 7.0 µg/m ³ on Mar 28 |
| Minimum Value: 0 µg/m ³ on Mar 2 14:00 | Hours of Data: 734 |
| Maximum Diurnal Average: 3.2 µg/m ³ at hour 21 | Hours of Missing Data: 10 |
| Monthly Average: 2.06 µg/m ³ | Hours of Calibration: 0 |
| Minimum Daily Average: 0.1 µg/m ³ on Mar 4 | Percent Operational Time: 98.7 |
| Minimum Diurnal Average: 1.2 µg/m ³ at hour 14 | |
| Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 2.0 Q ₃ = 3.0 P ₉₀ = 5.0 P ₉₉ = 10.0 | |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | | | | | | | | | | | | | | | | | | | | | | |
|--------|-------------------------------|----|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------|---------------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|------|------|------|-----|-----------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-Mar | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 2.3 | 3.0 | | | | | | | | | | | | | | | | | | | | | | |
| 2-Mar | 2 | 2 | 4 | 5 | 4 | 3 | 2 | 1 | 1 | 1 | 3 | 1 | 1 | 0 | 0 | 0 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1.5 | 5.0 | | | | | | | | | | | | | | | | | | | | | | |
| 3-Mar | 0 | 0 | 0 | N | N | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 0 | 0 | 1 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.6 | 4.0 | | | | | | | | | | | | | | | | | | | | | | |
| 4-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 2.0 | | | | | | | | | | | | | | | | | | | | | | |
| 5-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 8 | 4 | 4 | 5 | 6 | 5 | 4 | 4 | 2 | 2.0 | 8.0 | | | | | | | | | | | | | | | | | | | | | | |
| 6-Mar | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0.9 | 3.0 | | | | | | | | | | | | | | | | | | | | | | |
| 7-Mar | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 4 | 4 | 3 | 2 | 1.4 | 4.0 | | | | | | | | | | | | | | | | | | | | | | |
| 8-Mar | 2 | 3 | 2 | 1 | 2 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 2 | 0 | 0 | 0 | 0 | 0.8 | 4.0 | | | | | | | | | | | | | | | | | | | | | | |
| 9-Mar | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 2.0 | | | | | | | | | | | | | | | | | | | | | | |
| 10-Mar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0.3 | 4.0 | | | | | | | | | | | | | | | | | | | | | | |
| 11-Mar | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 2 | 3 | 3 | 3 | 4 | 2 | 3 | 4 | 1 | 2 | 1.5 | 4.0 | | | | | | | | | | | | | | | | | | | | | | |
| 12-Mar | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | M | M | M | 8 | 6 | 7 | 7 | 7 | 6 | 5 | 4 | 2.6 | 8.0 | | | | | | | | | | | | | | | | | | | | | | |
| 13-Mar | 3 | 4 | 3 | 4 | 6 | 6 | 6 | 6 | 6 | 8 | 6 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 4 | 5 | 5 | 5 | 6 | 5 | 5.2 | 8.0 | | | | | | | | | | | | | | | | | | | | | | |
| 14-Mar | 11 | 10 | 5 | 4 | 5 | 6 | 5 | 6 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 1 | 2.8 | 11.0 | | | | | | | | | | | | | | | | | | | | | | |
| 15-Mar | 2 | 2 | 2 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 2 | 2 | 4 | 4 | 3 | 1 | 1.3 | 4.0 | | | | | | | | | | | | | | | | | | | | | | |
| 16-Mar | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 6 | 3 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 0 | 1 | 2 | 1.4 | 6.0 | | | | | | | | | | | | | | | | | | | | | | |
| 17-Mar | 2 | 3 | 2 | 0 | 0 | 1 | 2 | 2 | 2 | 1 | 2 | 0 | 1 | 1 | 2 | 1 | 2 | 4 | 3 | 4 | 3 | 2 | 2 | 1 | 1.8 | 4.0 | | | | | | | | | | | | | | | | | | | | | | |
| 18-Mar | 0 | 0 | 1 | 3 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 3 | 4 | 3 | 4 | 5 | 4 | 2 | 3 | 2.9 | 5.0 | | | | | | | | | | | | | | | | | | | | | | |
| 19-Mar | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 1 | 2.9 | 4.0 | | | | | | | | | | | | | | | | | | | | | | |
| 20-Mar | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 3 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 3 | 3 | 2.2 | 4.0 | | | | | | | | | | | | | | | | | | | | | | |
| 21-Mar | 3 | 2 | 1 | 3 | 2 | 2 | 2 | 5 | 6 | 3 | 2 | 3 | 4 | 3 | 2 | 2 | 3 | 3 | 4 | 4 | 3 | 2 | 2 | 1 | 2.8 | 6.0 | | | | | | | | | | | | | | | | | | | | | | |
| 22-Mar | 1 | 1 | 0 | 0 | 0 | 1 | 2 | 2 | 0 | 1 | 1 | 3 | 4 | 2 | 2 | 4 | 5 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 2.3 | 5.0 | | | | | | | | | | | | | | | | | | | | | | |
| 23-Mar | 4 | 3 | 3 | 4 | 8 | 4 | 4 | 6 | 5 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 0 | 0 | 3.0 | 8.0 | | | | | | | | | | | | | | | | | | | | | | |
| 24-Mar | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 3 | 3 | 3 | 1.8 | 4.0 | | | | | | | | | | | | | | | | | | | | | | |
| 25-Mar | 4 | 4 | 5 | 4 | 3 | 3 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 12 | 4 | 6 | 10 | 10 | 8 | 3.4 | 12.0 | | | | | | | | | | | | | | | | | | | | | | |
| 26-Mar | 7 | 7 | 5 | 6 | 5 | 7 | 6 | 5 | 5 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2.6 | 7.0 | | | | | | | | | | | | | | | | | | | | | | |
| 27-Mar | 2 | 3 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 5 | 6 | 6 | 7 | 6 | 6 | 3.6 | 7.0 | | | | | | | | | | | | | | | | | | | | | | |
| 28-Mar | 4 | 5 | 5 | 6 | 6 | 8 | 8 | 8 | 8 | 6 | 6 | 4 | 5 | 6 | 6 | 7 | 6 | 7 | 8 | 9 | 12 | 12 | 9 | 7 | 7.0 | 12.0 | | | | | | | | | | | | | | | | | | | | | | |
| 29-Mar | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | D | D | D | D | D | 1 | 0 | 0 | 0 | 1 | 2 | 2 | 6 | 4 | 2 | 0 | 1.1 | 6.0 | | | | | | | | | | | | | | | | | | | | | |
| 30-Mar | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 1 | 4 | 2 | 2 | 2 | 1.0 | 4.0 | | | | | | | | | | | | | | | | | | | | | |
| 31-Mar | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0.2 | 1.0 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | 2.1 | 2.1 | 1.8 | 1.8 | 2.1 | 2.2 | 2.1 | 2.4 | 2.0 | 1.9 | 1.5 | 1.4 | 1.3 | 1.2 | 1.3 | 1.7 | 2.3 | 2.2 | 2.8 | 2.8 | 3.2 | 2.8 | 2.5 | 2.0 | Diurnal Average |
| | | | | | | | | | | | | | | | | | | | | | | | | 11.0 | 10.0 | 5.0 | 6.0 | 8.0 | 8.0 | 8.0 | 8.0 | 6.0 | 8.0 | 6.0 | 5.0 | 6.0 | 6.0 | 7.0 | 8.0 | 8.0 | 7.0 | 12.0 | 9.0 | 12.0 | 12.0 | 10.0 | 8.0 | Diurnal Maximum |

D - DAS Failure M - Maintenance N - Not Valid
 Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³

Hourly Averages

PM2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Sunset House - March 2012



Hourly Maximums

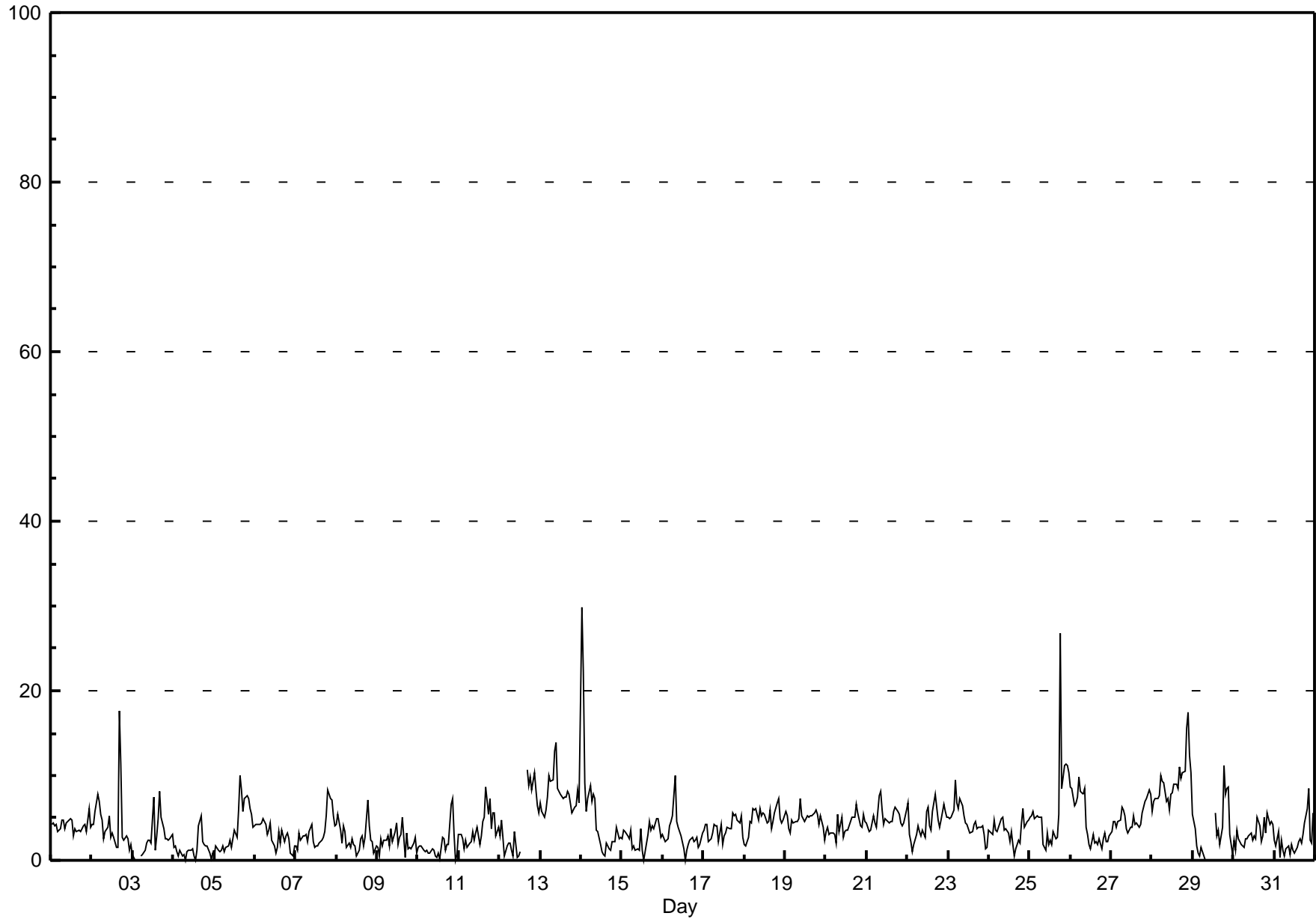
PM2.5 (PM_{2.5}) - µg/m³

Sunset House - March 2012

| Maximum Value: 29.8 µg/m ³ on Mar 14 01:00 Minimum Value: 0 µg/m ³ on Mar 3 02:00 Maximum Diurnal Average: 5.6 µg/m ³ at hour 19 Monthly Average: 4.09 µg/m ³ | | Maximum Daily Average: 9.3 µg/m ³ on Mar 28 Minimum Daily Average: 1.3 µg/m ³ on Mar 4 Minimum Diurnal Average: 2.9 µg/m ³ at hour 14 Percentiles: P ₁ = 0.0 P ₁₀ = 1.2 Q ₁ = 2.2 Median = 3.6 Q ₃ = 5.3 P ₉₀ = 7.5 P ₉₉ = 12.4 | | Hours in Service: 744 Hours of Data: 734 Hours of Missing Data: 10 Hours of Calibration: 0 Percent Operational Time: 98.7 | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|---|------|---|---------------|-----|------|-----|------|------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|---------------|-----------------|--|--|
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | | |
| 1-Mar | 4 | 4 | 4 | 4 | 3 | 4 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 3 | 6 | 4 | 4.1 | 6.0 | | |
| 2-Mar | 4 | 4 | 6 | 8 | 7 | 5 | 5 | 3 | 3 | 4 | 5 | 3 | 3 | 3 | 1 | 1 | 18 | 11 | 3 | 2 | 3 | 2 | 1 | 2 | 4.5 | 17.7 | | |
| 3-Mar | 1 | 0 | 0 | N | N | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 7 | 1 | 3 | 5 | 8 | 5 | 4 | 2 | 3 | 2 | 3 | 3 | 2.7 | 8.2 | | |
| 4-Mar | 2 | 2 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 4 | 5 | 2 | 2 | 2 | 2 | 1 | 0 | 1 | 1.3 | 5.3 | | |
| 5-Mar | 0 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 4 | 3 | 6 | 10 | 8 | 6 | 7 | 8 | 7 | 6 | 5 | 4 | 3.8 | 10.0 | | |
| 6-Mar | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 3 | 3 | 4 | 2 | 2 | 1 | 1 | 3 | 2 | 4 | 2 | 3 | 3 | 3 | 1 | 1 | 2 | 2.9 | 5.0 | | |
| 7-Mar | 2 | 1 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 4 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 5 | 8 | 7 | 7 | 5 | 4 | 3.4 | 8.3 | | |
| 8-Mar | 4 | 5 | 4 | 2 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 1 | 3 | 3 | 2 | 3 | 7 | 4 | 2 | 2 | 1 | 2 | 2.7 | 7.1 | | |
| 9-Mar | 2 | 0 | 2 | 2 | 2 | 2 | 3 | 2 | 4 | 2 | 3 | 4 | 2 | 3 | 3 | 5 | 0 | 3 | 1 | 2 | 1 | 2 | 3 | 1 | 2.3 | 5.1 | | |
| 10-Mar | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 3 | 3 | 1 | 2 | 2 | 7 | 7 | 3 | 0 | 1 | 1.8 | 7.3 | | |
| 11-Mar | 3 | 3 | 3 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 4 | 2 | 3 | 5 | 5 | 9 | 5 | 7 | 4 | 6 | 6 | 3 | 4 | 3.7 | 8.7 | | |
| 12-Mar | 3 | 5 | 3 | 1 | 2 | 2 | 2 | 1 | 1 | 3 | 0 | 0 | 1 | M | M | M | 11 | 9 | 10 | 8 | 10 | 8 | 6 | 6 | 4.4 | 10.7 | | |
| 13-Mar | 7 | 6 | 5 | 6 | 7 | 10 | 9 | 10 | 13 | 14 | 9 | 8 | 8 | 7 | 7 | 7 | 8 | 8 | 6 | 6 | 6 | 7 | 8 | 7 | 7.9 | 13.9 | | |
| 14-Mar | 30 | 22 | 9 | 6 | 7 | 9 | 7 | 8 | 7 | 4 | 3 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 4 | 3 | 3 | 5.7 | 29.8 | | |
| 15-Mar | 3 | 4 | 3 | 3 | 3 | 4 | 1 | 2 | 1 | 1 | 1 | 4 | 1 | 0 | 2 | 3 | 5 | 4 | 4 | 4 | 5 | 5 | 4 | 3 | 2.8 | 5.0 | | |
| 16-Mar | 3 | 2 | 2 | 3 | 4 | 5 | 5 | 10 | 5 | 4 | 3 | 3 | 1 | 0 | 1 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 3.0 | 10.0 | | |
| 17-Mar | 4 | 4 | 4 | 2 | 3 | 3 | 4 | 4 | 4 | 2 | 4 | 2 | 3 | 3 | 4 | 4 | 4 | 6 | 5 | 5 | 5 | 4 | 5 | 3 | 3.8 | 5.7 | | |
| 18-Mar | 2 | 2 | 3 | 5 | 4 | 6 | 6 | 6 | 5 | 6 | 5 | 6 | 5 | 4 | 5 | 6 | 4 | 5 | 6 | 7 | 7 | 5 | 4 | 5 | 4.9 | 7.3 | | |
| 19-Mar | 6 | 5 | 4 | 3 | 5 | 4 | 5 | 5 | 5 | 7 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 5 | 4 | 5 | 4 | 2 | 4.9 | 7.2 | | |
| 20-Mar | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 5 | 3 | 5 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 7 | 6 | 4 | 4 | 5 | 5 | 4.1 | 6.6 | | |
| 21-Mar | 4 | 3 | 4 | 4 | 5 | 4 | 4 | 8 | 8 | 6 | 4 | 5 | 5 | 4 | 5 | 5 | 6 | 6 | 6 | 5 | 4 | 4 | 4 | 6 | 5.0 | 8.1 | | |
| 22-Mar | 7 | 3 | 2 | 1 | 2 | 3 | 4 | 3 | 3 | 4 | 3 | 6 | 6 | 4 | 4 | 6 | 8 | 6 | 5 | 4 | 5 | 7 | 6 | 5 | 4.4 | 7.7 | | |
| 23-Mar | 5 | 5 | 5 | 6 | 10 | 7 | 6 | 7 | 6 | 5 | 4 | 4 | 4 | 3 | 3 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 1 | 1 | 4.7 | 9.5 | | |
| 24-Mar | 4 | 3 | 3 | 5 | 4 | 3 | 4 | 5 | 5 | 4 | 4 | 3 | 2 | 3 | 2 | 0 | 1 | 2 | 2 | 4 | 6 | 4 | 5 | 5 | 3.5 | 6.2 | | |
| 25-Mar | 5 | 5 | 6 | 5 | 5 | 5 | 5 | 5 | 2 | 1 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 5 | 27 | 8 | 11 | 11 | 11 | 10 | 6.1 | 26.8 | | |
| 26-Mar | 9 | 9 | 7 | 7 | 8 | 10 | 8 | 8 | 8 | 4 | 3 | 2 | 1 | 3 | 2 | 2 | 2 | 2 | 1 | 3 | 3 | 2 | 2 | 3 | 4.5 | 9.8 | | |
| 27-Mar | 3 | 5 | 5 | 4 | 5 | 5 | 6 | 6 | 5 | 4 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 6 | 6 | 7 | 7 | 8 | 8 | 8 | 5.1 | 8.3 | | |
| 28-Mar | 6 | 7 | 7 | 7 | 8 | 10 | 9 | 9 | 7 | 7 | 6 | 8 | 8 | 9 | 9 | 9 | 11 | 10 | 10 | 11 | 16 | 17 | 12 | 10 | 9.3 | 17.4 | | |
| 29-Mar | 5 | 4 | 2 | 1 | 0 | 2 | 1 | 0 | D | D | D | D | D | 6 | 3 | 4 | 2 | 4 | 11 | 8 | 9 | 9 | 3 | 1 | 3.8 | 11.1 | | |
| 30-Mar | 2 | 1 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 5 | 4 | 2 | 3 | 5 | 3 | 6 | 4 | 5 | 4 | 3.1 | 5.6 | | |
| 31-Mar | 2 | 2 | 3 | 0 | 2 | 1 | 0 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 2 | 3 | 4 | 6 | 8 | 2 | 2 | 6 | 2.5 | 8.5 | | |
| | | 4.5 | 4.1 | 3.6 | 3.3 | 3.9 | 4.1 | 3.8 | 4.1 | 4.1 | 3.9 | 3.3 | 3.2 | 3.1 | 2.9 | 3.5 | 4.0 | 4.9 | 4.6 | 5.6 | 5.0 | 5.5 | 4.9 | 4.2 | 3.9 | Diurnal Average | | |
| | | 29.8 | 22.2 | 9.1 | 7.8 | 9.5 | 10.1 | 9.3 | 10.0 | 12.9 | 13.9 | 8.6 | 8.2 | 8.0 | 9.0 | 9.0 | 10.0 | 17.7 | 11.3 | 26.8 | 10.5 | 15.6 | 17.4 | 12.4 | 10.4 | Diurnal Maximum | | |
| D - DAS Failure | | M - Maintenance | | | N - Not Valid | | | | | | | | | | | | | | | | | | | | | | | |

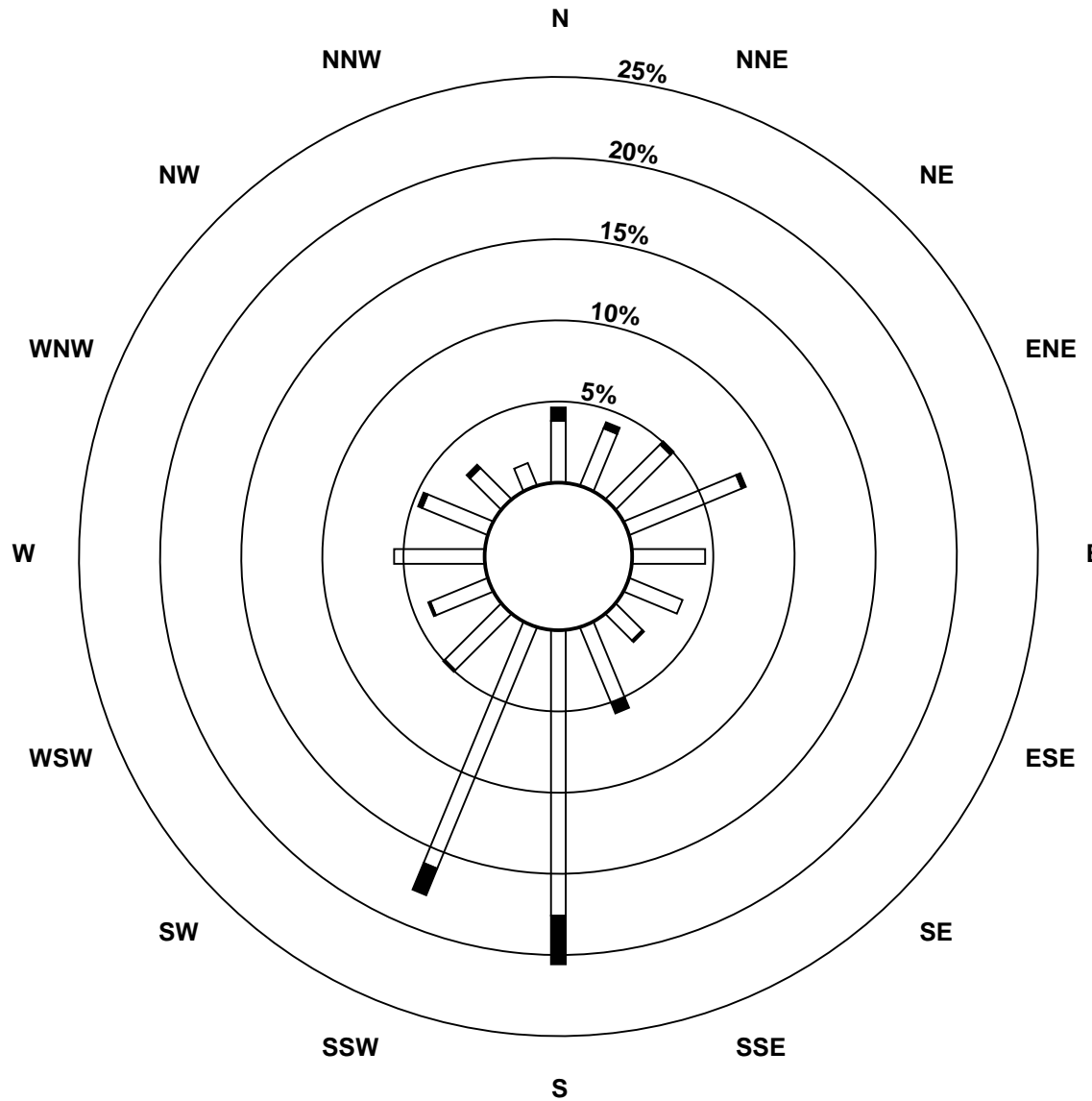
Hourly Maximums

PM2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Sunset House - March 2012

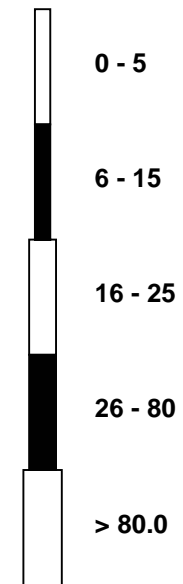


Pollutant Rose

PM_{2.5} (PM_{2.5}) - μg/m³
Sunset House - March 2012



Pollutant Classes (μg/m³)

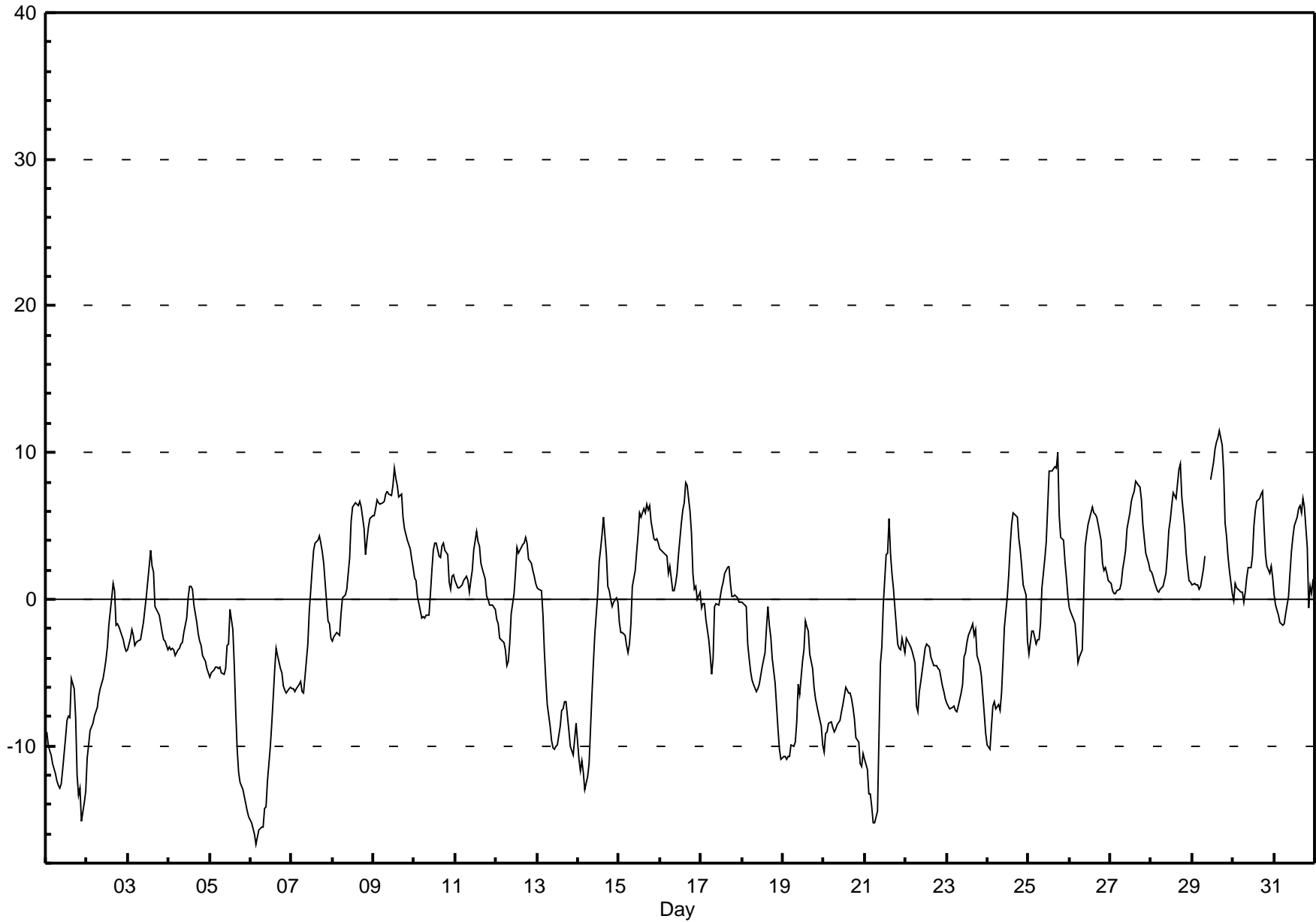


Hourly Averages

External Temperature (ET) - °C

Sunset House - March 2012

| Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 11.5 °C on Mar 29 17:00 Maximum Daily Average: 6.1 °C on Mar 9 | | Hours in Service: 744 Hours of Data: 741 Hours of Missing Data: 3 Hours of Calibration: 0 Percent Operational Time: 99.6 | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----------------|---------------|---------------|
| Minimum Value: -17 °C on Mar 6 04:00 Maximum Diurnal Average: 2.4 °C at hour 16 Monthly Average: -1.55 °C | | Minimum Daily Average: -10.8 °C on Mar 1 Minimum Diurnal Average: -4.6 °C at hour 7 Percentiles: P ₁ = -15.3 P ₁₀ = -9.9 Q ₁ = -5.4 Median = -1.0 Q ₃ = 2.7 P ₉₀ = 5.9 P ₉₉ = 8.7 | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Mar | -9 | -10 | -10 | -11 | -11 | -12 | -12 | -13 | -13 | -13 | -12 | -9 | -8 | -8 | -8 | -5 | -6 | -8 | -12 | -13 | -13 | -15 | -14 | -13 | -10.8 | -5.4 |
| 2-Mar | -11 | -10 | -9 | -8 | -8 | -8 | -7 | -7 | -6 | -5 | -5 | -4 | -3 | -2 | 0 | 1 | 1 | -2 | -2 | -2 | -2 | -3 | -3 | -4 | -4.6 | 1.1 |
| 3-Mar | -3 | -3 | -2 | -2 | -3 | -3 | -3 | -3 | -2 | -2 | -1 | 0 | 2 | 3 | 2 | 2 | 0 | -1 | -1 | -2 | -2 | -3 | -3 | -3 | -1.3 | 3.4 |
| 4-Mar | -3 | -3 | -3 | -3 | -4 | -3 | -3 | -3 | -3 | -2 | -1 | 0 | 1 | 1 | 1 | 0 | -2 | -2 | -3 | -3 | -4 | -4 | -5 | -5 | -2.5 | 0.8 |
| 5-Mar | -5 | -5 | -5 | -5 | -5 | -5 | -5 | -5 | -5 | -5 | -3 | -3 | -1 | -2 | -5 | -8 | -10 | -12 | -13 | -13 | -14 | -14 | -14 | -15 | -7.3 | -0.7 |
| 6-Mar | -15 | -16 | -16 | -17 | -16 | -16 | -16 | -15 | -14 | -14 | -12 | -10 | -9 | -7 | -5 | -3 | -4 | -5 | -5 | -6 | -6 | -6 | -6 | -6 | -10.2 | -3.3 |
| 7-Mar | -6 | -6 | -6 | -6 | -6 | -6 | -6 | -6 | -5 | -3 | -1 | 1 | 2 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 0 | -2 | -2 | -3 | -1.5 | 4.3 |
| 8-Mar | -3 | -3 | -2 | -2 | -2 | -1 | 0 | 0 | 1 | 2 | 3 | 5 | 6 | 7 | 6 | 6 | 7 | 6 | 5 | 3 | 4 | 5 | 6 | 6 | 2.7 | 6.6 |
| 9-Mar | 6 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 9 | 8 | 8 | 7 | 7 | 6 | 5 | 4 | 4 | 3 | 3 | 2 | 6.1 | 8.9 |
| 10-Mar | 1 | 1 | 0 | -1 | -1 | -1 | -1 | -1 | -1 | 0 | 2 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 1 | 1 | 2 | 2 | 1.4 | 3.8 |
| 11-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 5 | 4 | 4 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | -1 | 1.3 | 4.6 |
| 12-Mar | -1 | -2 | -3 | -3 | -3 | -3 | -4 | -4 | -3 | -1 | 0 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 1 | 0.4 | 4.3 |
| 13-Mar | 1 | 1 | 1 | -1 | -4 | -5 | -7 | -9 | -10 | -10 | -10 | -10 | -10 | -9 | -8 | -8 | -7 | -7 | -9 | -10 | -10 | -11 | -10 | -9 | -7.1 | 0.8 |
| 14-Mar | -11 | -12 | -11 | -12 | -13 | -12 | -11 | -9 | -6 | -4 | -2 | 0 | 3 | 3 | 4 | 6 | 3 | 1 | 1 | 0 | -1 | 0 | 0 | 0 | -3.5 | 5.6 |
| 15-Mar | -2 | -2 | -2 | -2 | -3 | -4 | -3 | -2 | 1 | 2 | 3 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 4 | 4 | 4 | 4 | 2.3 | 6.5 |
| 16-Mar | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 8 | 6 | 5 | 2 | 1 | 1 | 0 | 1 | 3.1 | 7.9 |
| 17-Mar | -1 | 0 | 0 | -1 | -3 | -4 | -5 | -4 | -1 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | -0.4 | 2.2 |
| 18-Mar | 0 | 0 | 0 | -3 | -4 | -5 | -6 | -6 | -6 | -6 | -6 | -5 | -5 | -4 | -2 | -1 | -2 | -3 | -4 | -6 | -7 | -9 | -10 | -11 | -4.6 | -0.2 |
| 19-Mar | -11 | -11 | -11 | -11 | -11 | -10 | -10 | -10 | -8 | -6 | -4 | -3 | -1 | -2 | -2 | -2 | -4 | -5 | -6 | -7 | -7 | -8 | -9 | -10 | -7.2 | -1.5 |
| 20-Mar | -10 | -9 | -9 | -8 | -8 | -9 | -9 | -9 | -9 | -8 | -8 | -7 | -7 | -6 | -6 | -6 | -7 | -7 | -8 | -9 | -10 | -11 | -11 | -11 | -8.5 | -6.0 |
| 21-Mar | -11 | -12 | -13 | -13 | -14 | -15 | -15 | -14 | -9 | -4 | -3 | 0 | 3 | 3 | 5 | 3 | 2 | 1 | -2 | -3 | -3 | -3 | -3 | -4 | -5.3 | 5.5 |
| 22-Mar | -3 | -3 | -3 | -3 | -4 | -4 | -7 | -8 | -6 | -6 | -4 | -3 | -3 | -3 | -3 | -4 | -5 | -4 | -5 | -5 | -5 | -6 | -6 | -7 | -4.6 | -2.6 |
| 23-Mar | -7 | -7 | -7 | -7 | -7 | -8 | -8 | -7 | -6 | -6 | -4 | -4 | -3 | -2 | -2 | -2 | -3 | -2 | -4 | -5 | -5 | -6 | -8 | -9 | -5.4 | -1.7 |
| 24-Mar | -10 | -10 | -9 | -7 | -7 | -7 | -7 | -8 | -6 | -4 | -2 | 0 | 2 | 4 | 5 | 6 | 6 | 6 | 4 | 3 | 2 | 1 | 0 | -3 | -1.7 | 5.9 |
| 25-Mar | -4 | -3 | -2 | -2 | -3 | -3 | -3 | -2 | 1 | 3 | 4 | 6 | 9 | 9 | 9 | 9 | 9 | 10 | 6 | 4 | 4 | 3 | 1 | 0 | 2.7 | 10.0 |
| 26-Mar | -1 | -1 | -1 | -2 | -3 | -4 | -4 | -3 | 0 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 5 | 4 | 2 | 2 | 2 | 2 | 1 | 1.8 | 6.3 |
| 27-Mar | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 2 | 3 | 3 | 5 | 6 | 7 | 7 | 7 | 8 | 8 | 8 | 7 | 5 | 4 | 3 | 2 | 2 | 3.8 | 8.0 |
| 28-Mar | 2 | 2 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 3 | 5 | 5 | 6 | 7 | 7 | 8 | 9 | 9 | 7 | 5 | 3 | 2 | 1 | 1 | 3.7 | 9.2 |
| 29-Mar | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | D | D | D | 8 | 9 | 10 | 11 | 11 | 11 | 10 | 9 | 5 | 4 | 3 | 2 | 0 | 5.0 | 11.5 |
| 30-Mar | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 5 | 6 | 7 | 7 | 7 | 7 | 5 | 3 | 2 | 2 | 2 | 1 | 2.8 | 7.4 |
| 31-Mar | 0 | 0 | -1 | -2 | -2 | -2 | -2 | -1 | 0 | 2 | 3 | 4 | 5 | 6 | 6 | 6 | 6 | 7 | 6 | 4 | -1 | 1 | 0 | 1 | 2.0 | 6.9 |
| | | | | | | | | | | | | | | | | | | | | | | | | Diurnal Average | | |
| | | | | | | | | | | | | | | | | | | | | | | | | Diurnal Maximum | | |
| D - DAS Failure | | | | | | | | | | | | | | | | | | | | | | | | | | |



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Sunset House - March 2012

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1 Spd | 15 | 11 | 10 | 9 | 9 | 9 | 9 | 9 | 8 | 7 | 6 | 6 | 6 | 7 | 6 | 3 | 2 | 3 | 4 | 5 | 4 | 4 | 6 | 9 | 4.3 | 15.0 |
| Dir | 58 | 48 | 38 | 28 | 25 | 21 | 12 | 7 | 6 | 355 | 313 | 307 | 316 | 315 | 338 | 31 | 57 | 314 | 45 | 67 | 63 | 125 | 173 | 191 | 19.4 | 58.0 |
| 2 Spd | 13 | 17 | 19 | 17 | 16 | 18 | 17 | 14 | 17 | 15 | 14 | 14 | 17 | 13 | 10 | 10 | 17 | 15 | 14 | 12 | 6 | 5 | 10 | 10 | 10.6 | 19.4 |
| Dir | 187 | 187 | 183 | 183 | 183 | 178 | 178 | 188 | 181 | 187 | 192 | 195 | 193 | 202 | 204 | 255 | 294 | 285 | 291 | 289 | 275 | 238 | 195 | 187 | 204.4 | 182.5 |
| 3 Spd | 13 | 14 | 13 | 8 | 7 | 11 | 14 | 12 | 9 | 10 | 10 | 9 | 9 | 11 | 19 | 26 | 19 | 6 | 7 | 7 | 6 | 5 | 8 | 7 | 7.6 | 26.4 |
| Dir | 185 | 179 | 185 | 207 | 198 | 194 | 194 | 199 | 205 | 202 | 209 | 223 | 242 | 272 | 307 | 305 | 306 | 272 | 238 | 212 | 249 | 233 | 210 | 208 | 230.4 | 305.4 |
| 4 Spd | 8 | 8 | 8 | 6 | 6 | 8 | 8 | 9 | 10 | 9 | 9 | 8 | 11 | 10 | 12 | 12 | 11 | 11 | 9 | 9 | 9 | 9 | 10 | 10 | 8.0 | 12.1 |
| Dir | 207 | 213 | 213 | 245 | 202 | 207 | 206 | 210 | 202 | 205 | 213 | 251 | 281 | 280 | 276 | 274 | 227 | 210 | 203 | 202 | 192 | 198 | 195 | 198 | 221.7 | 276.4 |
| 5 Spd | 11 | 12 | 13 | 14 | 14 | 15 | 15 | 11 | 11 | 6 | 3 | 5 | 3 | 5 | 14 | 19 | 18 | 18 | 18 | 15 | 15 | 14 | 15 | 13 | 2.5 | 18.9 |
| Dir | 189 | 188 | 181 | 181 | 178 | 181 | 183 | 197 | 191 | 210 | 237 | 274 | 278 | 314 | 353 | 353 | 353 | 358 | 350 | 349 | 358 | 357 | 350 | 353 | 311.2 | 353.4 |
| 6 Spd | 12 | 11 | 5 | 5 | 4 | 6 | 3 | 3 | 3 | 8 | 13 | 16 | 18 | 19 | 15 | 8 | 7 | 12 | 15 | 17 | 14 | 9 | 10 | 10 | 5.8 | 18.8 |
| Dir | 354 | 357 | 325 | 294 | 340 | 6 | 331 | 115 | 151 | 205 | 189 | 197 | 195 | 194 | 203 | 252 | 276 | 287 | 275 | 285 | 279 | 249 | 232 | 235 | 247.3 | 193.8 |
| 7 Spd | 9 | 10 | 11 | 10 | 9 | 9 | 9 | 10 | 8 | 8 | 8 | 13 | 15 | 21 | 22 | 23 | 22 | 22 | 20 | 13 | 14 | 13 | 12 | 16 | 7.2 | 22.9 |
| Dir | 230 | 223 | 204 | 205 | 219 | 222 | 208 | 209 | 209 | 221 | 238 | 269 | 283 | 292 | 295 | 295 | 294 | 293 | 290 | 318 | 29 | 61 | 57 | 66 | 275.6 | 295.4 |
| 8 Spd | 14 | 7 | 5 | 3 | 7 | 15 | 14 | 12 | 13 | 14 | 13 | 9 | 8 | 9 | 11 | 12 | 7 | 13 | 12 | 10 | 11 | 15 | 18 | 21 | 9.6 | 20.6 |
| Dir | 86 | 104 | 135 | 132 | 216 | 181 | 191 | 198 | 193 | 197 | 204 | 225 | 228 | 241 | 217 | 204 | 191 | 186 | 227 | 182 | 153 | 166 | 170 | 176 | 186.9 | 176.2 |
| 9 Spd | 18 | 18 | 19 | 20 | 20 | 20 | 21 | 22 | 21 | 18 | 16 | 11 | 16 | 16 | 13 | 17 | 15 | 18 | 14 | 9 | 10 | 16 | 16 | 13 | 12.4 | 21.7 |
| Dir | 187 | 192 | 190 | 190 | 191 | 191 | 191 | 193 | 201 | 202 | 209 | 244 | 282 | 273 | 254 | 291 | 280 | 295 | 279 | 255 | 251 | 274 | 275 | 276 | 230.2 | 193.4 |
| 10 Spd | 12 | 11 | 4 | 5 | 5 | 5 | 7 | 6 | 9 | 12 | 12 | 11 | 11 | 9 | 10 | 9 | 9 | 12 | 10 | 17 | 20 | 24 | 24 | 20 | 9.2 | 24.2 |
| Dir | 241 | 270 | 263 | 255 | 225 | 210 | 203 | 204 | 189 | 190 | 190 | 202 | 212 | 219 | 196 | 178 | 153 | 149 | 129 | 167 | 176 | 152 | 139 | 151 | 181.3 | 138.6 |
| 11 Spd | 16 | 20 | 20 | 18 | 14 | 13 | 12 | 14 | 9 | 4 | 9 | 6 | 12 | 15 | 12 | 9 | 4 | 7 | 5 | 4 | 2 | 6 | 7 | 7 | 3.9 | 20.1 |
| Dir | 178 | 178 | 173 | 166 | 177 | 170 | 173 | 171 | 212 | 219 | 11 | 345 | 26 | 29 | 5 | 323 | 351 | 268 | 89 | 80 | 203 | 215 | 201 | 211 | 175.7 | 172.6 |
| 12 Spd | 6 | 7 | 6 | 9 | 10 | 8 | 6 | 8 | 9 | 9 | 11 | 11 | 10 | 13 | 17 | 18 | 20 | 27 | 23 | 20 | 18 | 15 | 12 | 10 | 11.6 | 26.9 |
| Dir | 209 | 216 | 205 | 210 | 205 | 206 | 196 | 202 | 198 | 189 | 193 | 175 | 179 | 146 | 146 | 154 | 143 | 149 | 168 | 173 | 186 | 187 | 187 | 181 | 175.7 | 149.0 |
| 13 Spd | 11 | 13 | 9 | 2 | 13 | 17 | 15 | 16 | 15 | 14 | 13 | 16 | 15 | 11 | 12 | 9 | 9 | 4 | 3 | 6 | 6 | 4 | 7 | 5 | 4.5 | 16.7 |
| Dir | 177 | 175 | 180 | 339 | 37 | 28 | 13 | 8 | 357 | 353 | 319 | 311 | 307 | 316 | 312 | 318 | 312 | 295 | 253 | 219 | 213 | 207 | 192 | 223 | 325.1 | 28.4 |
| 14 Spd | 7 | 6 | 3 | 4 | 5 | 8 | 11 | 15 | 17 | 16 | 12 | 10 | 8 | 9 | 6 | 3 | 9 | 12 | 15 | 17 | 13 | 8 | 8 | 12 | 4.7 | 17.0 |
| Dir | 23 | 62 | 181 | 196 | 187 | 208 | 190 | 189 | 186 | 194 | 204 | 228 | 248 | 288 | 296 | 344 | 60 | 76 | 90 | 98 | 125 | 169 | 180 | 190 | 169.4 | 186.1 |
| 15 Spd | 13 | 13 | 13 | 11 | 11 | 9 | 9 | 15 | 18 | 21 | 25 | 26 | 30 | 28 | 29 | 30 | 25 | 26 | 24 | 19 | 20 | 18 | 19 | 20 | 18.7 | 30.1 |
| Dir | 190 | 180 | 174 | 177 | 171 | 168 | 138 | 136 | 133 | 151 | 135 | 127 | 153 | 154 | 160 | 163 | 173 | 172 | 174 | 182 | 176 | 180 | 183 | 185 | 162.7 | 163.3 |
| 16 Spd | 20 | 18 | 19 | 18 | 10 | 7 | 6 | 6 | 13 | 17 | 14 | 11 | 11 | 10 | 9 | 6 | 5 | 8 | 3 | 6 | 7 | 6 | 6 | 12 | 8.5 | 20.0 |
| Dir | 185 | 183 | 182 | 186 | 210 | 238 | 265 | 212 | 185 | 190 | 203 | 212 | 237 | 259 | 274 | 323 | 290 | 266 | 247 | 191 | 175 | 168 | 183 | 178 | 205.0 | 184.7 |
| 17 Spd | 10 | 14 | 14 | 9 | 6 | 3 | 6 | 9 | 6 | 13 | 18 | 21 | 22 | 24 | 26 | 25 | 18 | 16 | 14 | 16 | 15 | 13 | 13 | 15 | 11.5 | 25.6 |
| Dir | 183 | 178 | 178 | 176 | 167 | 110 | 58 | 63 | 44 | 45 | 55 | 69 | 70 | 64 | 75 | 74 | 78 | 74 | 85 | 92 | 92 | 97 | 92 | 92 | 85.5 | 74.9 |
| 18 Spd | 13 | 9 | 1 | 9 | 12 | 13 | 13 | 12 | 15 | 13 | 12 | 11 | 11 | 12 | 11 | 6 | 9 | 10 | 10 | 13 | 13 | 9 | 5 | 6 | 4.8 | 14.6 |
| Dir | 91 | 76 | 75 | 272 | 276 | 281 | 276 | 266 | 273 | 273 | 275 | 275 | 279 | 291 | 294 | 300 | 6 | 9 | 28 | 42 | 46 | 56 | 45 | 64 | 314.3 | 272.7 |
| 19 Spd | 8 | 12 | 12 | 14 | 13 | 19 | 22 | 14 | 21 | 6 | 9 | 13 | 14 | 11 | 14 | 15 | 16 | 14 | 12 | 10 | 12 | 8 | 6 | 4 | 10.5 | 21.7 |
| Dir | 60 | 64 | 65 | 72 | 76 | 86 | 80 | 84 | 81 | 96 | 57 | 44 | 28 | 25 | 10 | 19 | 352 | 6 | 2 | 14 | 60 | 49 | 354 | 40 | 48.8 | 79.7 |
| 20 Spd | 4 | 5 | 7 | 5 | 6 | 6 | 12 | 11 | 14 | 15 | 17 | 17 | 19 | 18 | 19 | 14 | 12 | 10 | 10 | 4 | 3 | 3 | 5 | 4 | 7.9 | 18.9 |
| Dir | 63 | 72 | 67 | 117 | 130 | 107 | 79 | 78 | 68 | 70 | 58 | 57 | 52 | 42 | 40 | 32 | 348 | 336 | 347 | 13 | 65 | 109 | 163 | 156 | 55.1 | 40.0 |
| 21 Spd | 3 | 5 | 4 | 4 | 4 | 5 | 3 | 4 | 8 | 7 | 8 | 5 | 4 | 5 | 6 | 6 | 7 | 11 | 12 | 12 | 13 | 10 | 11 | 11 | 4.7 | 12.7 |
| Dir | 169 | 133 | 88 | 115 | 102 | 76 | 87 | 76 | 55 | 61 | 13 | 351 | 289 | 330 | 319 | 317 | 6 | 25 | 56 | 58 | 61 | 57 | 116 | 82 | 54.2 | 61.1 |
| 22 Spd | 19 | 22 | 18 | 18 | 18 | 13 | 16 | 14 | 18 | 22 | 24 | 19 | 16 | 18 | 19 | 19 | 16 | 14 | 7 | 7 | 4 | 11 | 8 | 7 | 11.9 | 24.3 |
| Dir | 116 | 120 | 107 | 105 | 102 | 86 | 39 | 43 | 71 | 83 | 81 | 71 | 64 | 53 | 49 | 44 | 38 | 41 | 31 | 26 | 79 | 191 | 205 | 209 | 77.1 | 81.0 |

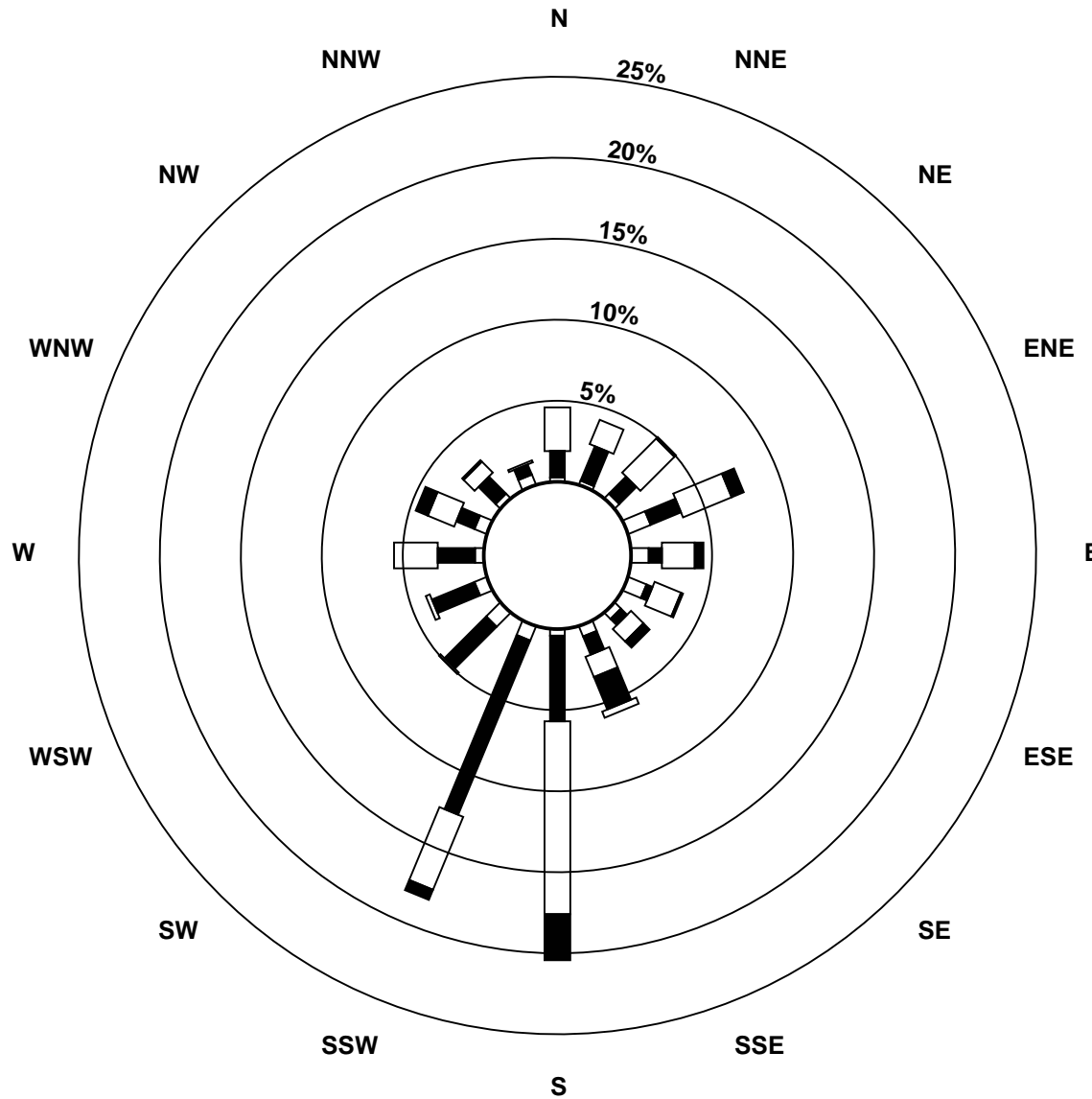
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Sunset House - March 2012

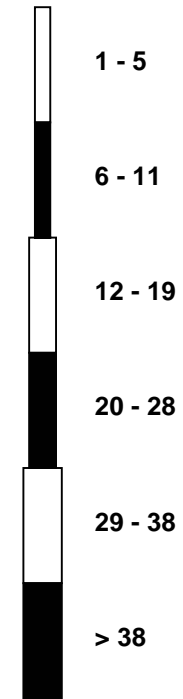
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum |
|--|-------------------------------|--|----------|----------|----------|-------|-------|-------|-------|-------|-------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 23 Spd | 6 | 6 | 4 | 2 | 2 | 4 | 2 | 5 | 7 | 10 | 10 | 11 | 11 | 13 | 9 | 8 | 12 | 12 | 11 | 12 | 11 | 8 | 3 | 2 | 4.9 | 12.9 |
| Dir | 205 | 216 | 193 | 233 | 219 | 236 | 283 | 62 | 49 | 32 | 52 | 27 | 10 | 18 | 15 | 6 | 5 | 36 | 34 | 56 | 66 | 75 | 75 | 78 | 34.6 | 18.4 |
| 24 Spd | 2 | 5 | 7 | 10 | 12 | 13 | 16 | 16 | 19 | 17 | 16 | 14 | 15 | 13 | 10 | 9 | 7 | 5 | 8 | 13 | 15 | 16 | 8 | 4 | 9.7 | 18.7 |
| Dir | 106 | 154 | 169 | 174 | 171 | 177 | 183 | 191 | 188 | 191 | 192 | 197 | 199 | 196 | 191 | 198 | 214 | 162 | 93 | 112 | 122 | 143 | 131 | 97 | 172.9 | 188.3 |
| 25 Spd | 5 | 6 | 11 | 13 | 10 | 9 | 13 | 16 | 13 | 13 | 14 | 11 | 9 | 18 | 18 | 16 | 12 | 4 | 10 | 2 | 15 | 17 | 18 | 15 | 10.9 | 18.4 |
| Dir | 111 | 152 | 179 | 176 | 171 | 174 | 178 | 184 | 187 | 188 | 194 | 196 | 191 | 176 | 184 | 182 | 177 | 212 | 351 | 123 | 177 | 177 | 180 | 190 | 180.9 | 183.9 |
| 26 Spd | 15 | 10 | 7 | 7 | 6 | 5 | 7 | 3 | 8 | 10 | 12 | 10 | 15 | 12 | 17 | 19 | 20 | 19 | 19 | 17 | 20 | 19 | 15 | 14 | 8.2 | 20.2 |
| Dir | 186 | 194 | 172 | 178 | 163 | 200 | 186 | 82 | 55 | 51 | 60 | 49 | 22 | 37 | 25 | 32 | 40 | 44 | 53 | 58 | 73 | 93 | 105 | 111 | 69.3 | 39.7 |
| 27 Spd | 14 | 13 | 15 | 15 | 14 | 16 | 18 | 21 | 24 | 24 | 26 | 26 | 23 | 24 | 21 | 17 | 17 | 19 | 20 | 20 | 24 | 25 | 25 | 25 | 19.1 | 26.2 |
| Dir | 113 | 113 | 120 | 111 | 110 | 132 | 140 | 151 | 169 | 170 | 164 | 163 | 158 | 157 | 165 | 173 | 162 | 151 | 153 | 155 | 161 | 164 | 171 | 178 | 154.4 | 163.7 |
| 28 Spd | 26 | 25 | 16 | 18 | 14 | 17 | 10 | 15 | 22 | 16 | 12 | 13 | 10 | 10 | 10 | 11 | 7 | 3 | 13 | 13 | 20 | 20 | 12 | 13 | 13.9 | 26.3 |
| Dir | 172 | 176 | 174 | 180 | 176 | 184 | 171 | 180 | 178 | 172 | 165 | 195 | 209 | 210 | 213 | 200 | 176 | 247 | 188 | 167 | 192 | 199 | 210 | 205 | 185.3 | 172.2 |
| 29 Spd | 9 | 10 | 10 | 14 | 16 | 17 | 18 | 18 | D | D | D | 15 | 15 | 13 | 14 | 13 | 16 | 15 | 9 | 6 | 7 | 7 | 7 | 7 | 10.1 | 17.6 |
| Dir | 227 | 208 | 208 | 202 | 196 | 180 | 171 | 174 | D | D | D | 194 | 180 | 195 | 181 | 184 | 162 | 179 | 329 | 89 | 299 | 217 | 206 | 154 | 189.1 | 174.0 |
| 30 Spd | 8 | 9 | 9 | 9 | 8 | 6 | 1 | 4 | 2 | 6 | 9 | 9 | 8 | 14 | 15 | 11 | 12 | 10 | 10 | 4 | 8 | 7 | 9 | 11 | 6.3 | 14.6 |
| Dir | 183 | 197 | 188 | 181 | 191 | 197 | 221 | 278 | 221 | 218 | 219 | 228 | 255 | 279 | 292 | 291 | 291 | 279 | 293 | 291 | 226 | 206 | 226 | 203 | 239.4 | 292.1 |
| 31 Spd | 10 | 10 | 13 | 11 | 11 | 13 | 11 | 10 | 11 | 11 | 11 | 12 | 11 | 11 | 10 | 9 | 7 | 6 | 1 | 2 | 7 | 8 | 8 | 12 | 5.7 | 13.0 |
| Dir | 204 | 201 | 194 | 200 | 196 | 189 | 199 | 209 | 211 | 237 | 275 | 274 | 243 | 236 | 254 | 246 | 259 | 290 | 181 | 94 | 84 | 75 | 83 | 99 | 214.8 | 194.2 |
| Spd | 6.7 | 7.3 | 7.7 | 7.1 | 6.3 | 6.4 | 5.8 | 6.2 | 6.2 | 6.0 | 4.6 | 3.7 | 3.0 | 2.4 | 2.0 | 2.2 | 1.7 | 0.8 | 0.5 | 2.5 | 4.3 | 5.8 | 6.2 | 6.6 | Diurnal Average | |
| Dir | 168.3 | 170.6 | 171.2 | 177.4 | 174.9 | 174.1 | 171.3 | 173.7 | 170.0 | 177.3 | 175.6 | 197.8 | 218.4 | 237.5 | 260.9 | 286.6 | 313.0 | 289.6 | 357.6 | 124.2 | 142.8 | 159.8 | 170.8 | 169.4 | Diurnal Maximum | |
| Spd | 26.3 | 24.6 | 20.1 | 19.8 | 20.5 | 19.5 | 21.7 | 21.7 | 24.2 | 24.1 | 26.2 | 26.2 | 29.9 | 28.2 | 29.2 | 30.1 | 24.5 | 26.9 | 23.6 | 20.1 | 23.8 | 24.6 | 24.7 | 25.3 | Diurnal Maximum | |
| Dir | 172.2 | 176.1 | 172.6 | 190.1 | 191.4 | 191.2 | 79.7 | 193.4 | 168.9 | 170.2 | 163.7 | 163.3 | 152.7 | 153.9 | 159.7 | 163.3 | 172.9 | 149.0 | 174.2 | 172.7 | 160.9 | 163.9 | 171.4 | 177.6 | Diurnal Maximum | |
| Maximum Speed Value: 30 km/h on Mar 15 16:00 | | Minimum Speed Value: 1 km/h on Mar 31 19:00 | | | | | | | | | | Hours in Service: 744 | | | | | | | | | | | | | | |
| Maximum Daily Speed Average: 19.1 km/h on Mar 27 | | Minimum Daily Speed Average: 2.5 km/h on Mar 1 | | | | | | | | | | Hours of Data: 741 | | | | | | | | | | | | | | |
| Maximum Diurnal Speed Average: 7.7 km/h at hour 3 | | Minimum Diurnal Speed Average: 0.5 km/h at hour 19 | | | | | | | | | | Hours of Missing Data: 3 | | | | | | | | | | | | | | |
| Monthly Average Velocity: 4.06 km/h 176.26 deg | | Speed Percentiles: P ₁ = 2.2 P ₁₀ = 5.0 Q ₁ = 7.9 Median = 11.2 Q ₃ = 15.1 P ₉₀ = 19.0 P ₉₉ = 26.2 | | | | | | | | | | Percent Operational Time: 99.6 | | | | | | | | | | | | | | |
| All monthly, daily, and diurnal averages have been calculated using vector methods | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D - DAS Failure | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frequency Distribution | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Speed Range (km/h) | | | | | | | | | | | | | | | | | | | | | | | | |
| Direction | 0 to 5 | 5 to 11 | 11 to 19 | 19 to 28 | 28 to 38 | > 38 | Total | | | | | | | | | | | | | | | | | | | |
| North | 6 | 21 | 25 | 0 | 0 | 0 | 52 | | | | | | | | | | | | | | | | | | | |
| NorthEast | 7 | 35 | 42 | 5 | 0 | 0 | 89 | | | | | | | | | | | | | | | | | | | |
| East | 19 | 12 | 32 | 10 | 0 | 0 | 73 | | | | | | | | | | | | | | | | | | | |
| SouthEast | 8 | 12 | 15 | 14 | 2 | 0 | 51 | | | | | | | | | | | | | | | | | | | |
| South | 8 | 69 | 128 | 36 | 2 | 0 | 243 | | | | | | | | | | | | | | | | | | | |
| SouthWest | 13 | 90 | 16 | 0 | 0 | 0 | 119 | | | | | | | | | | | | | | | | | | | |
| West | 8 | 31 | 34 | 2 | 0 | 0 | 75 | | | | | | | | | | | | | | | | | | | |
| NorthWest | 6 | 19 | 8 | 6 | 0 | 0 | 39 | | | | | | | | | | | | | | | | | | | |
| Total | 75 | 289 | 300 | 73 | 4 | 0 | 741 | | | | | | | | | | | | | | | | | | | |

Wind Rose

Wind Speed (WS) (km/h)
Sunset House - March 2012



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Sunset House - March 2012

| | | |
|---|--|--------------------------------|
| Maximum Speed: 30 km/h on Mar 15 13:00 | Maximum Daily Speed Average: 20.5 km/h on Mar 27 | Hours in Service: 744 |
| Minimum Speed: 2 km/h on Mar 24 00:00 | Minimum Daily Speed Average: 7.1 km/h on Mar 1 | Hours of Data: 741 |
| Maximum Diurnal Speed Average: 14.5 km/h at hour 15 | Minimum Diurnal Speed Average: 10.3 km/h at hour 5 | Hours of Missing Data: 3 |
| Monthly Average Speed: 12.19 km/h | Percentiles: P ₁ = 3.3 P ₁₀ = 5.7 Q ₁ = 8.2 Median = 11.5 Q ₃ = 15.4 P ₉₀ = 19.5 P ₉₉ = 26.5 | Percent Operational Time: 99.6 |

| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Average | Daily Maximum | |
|--------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 15 | 11 | 10 | 9 | 9 | 9 | 9 | 9 | 9 | 8 | 6 | 6 | 6 | 7 | 6 | 4 | 2 | 4 | 4 | 5 | 4 | 4 | 6 | 9 | 7.1 | 15.0 | |
| 2-Mar | 13 | 17 | 20 | 17 | 16 | 18 | 17 | 15 | 17 | 15 | 15 | 14 | 17 | 13 | 10 | 11 | 18 | 15 | 14 | 12 | 6 | 6 | 10 | 10 | 14.0 | 19.5 | |
| 3-Mar | 13 | 14 | 13 | 9 | 7 | 11 | 14 | 12 | 9 | 10 | 10 | 9 | 9 | 12 | 20 | 27 | 19 | 7 | 10 | 7 | 7 | 5 | 8 | 7 | 11.2 | 26.5 | |
| 4-Mar | 9 | 8 | 8 | 6 | 7 | 8 | 9 | 9 | 10 | 9 | 9 | 9 | 11 | 10 | 12 | 13 | 11 | 12 | 9 | 9 | 9 | 9 | 10 | 10 | 9.5 | 13.0 | |
| 5-Mar | 11 | 12 | 13 | 14 | 14 | 15 | 15 | 12 | 11 | 6 | 4 | 6 | 4 | 5 | 15 | 19 | 18 | 18 | 18 | 15 | 15 | 14 | 15 | 13 | 12.6 | 19.1 | |
| 6-Mar | 12 | 11 | 5 | 5 | 5 | 6 | 4 | 4 | 5 | 9 | 13 | 17 | 18 | 19 | 15 | 10 | 7 | 12 | 15 | 17 | 14 | 9 | 11 | 10 | 10.5 | 19.1 | |
| 7-Mar | 10 | 10 | 11 | 10 | 9 | 9 | 9 | 10 | 8 | 8 | 9 | 14 | 15 | 22 | 22 | 23 | 22 | 22 | 21 | 16 | 15 | 13 | 12 | 17 | 14.0 | 23.0 | |
| 8-Mar | 14 | 9 | 6 | 4 | 7 | 16 | 14 | 12 | 13 | 14 | 13 | 10 | 8 | 10 | 11 | 12 | 8 | 14 | 12 | 10 | 11 | 15 | 18 | 21 | 11.8 | 20.7 | |
| 9-Mar | 18 | 18 | 19 | 20 | 21 | 20 | 21 | 22 | 21 | 18 | 16 | 11 | 16 | 17 | 13 | 18 | 16 | 18 | 14 | 9 | 10 | 16 | 16 | 13 | 16.7 | 21.8 | |
| 10-Mar | 12 | 11 | 4 | 6 | 6 | 5 | 7 | 6 | 9 | 12 | 12 | 11 | 11 | 9 | 10 | 9 | 9 | 13 | 10 | 18 | 20 | 24 | 24 | 21 | 11.7 | 24.3 | |
| 11-Mar | 16 | 20 | 20 | 18 | 14 | 13 | 12 | 14 | 9 | 8 | 9 | 7 | 12 | 15 | 13 | 10 | 9 | 7 | 8 | 5 | 4 | 6 | 7 | 7 | 11.1 | 20.1 | |
| 12-Mar | 6 | 7 | 6 | 9 | 10 | 8 | 6 | 8 | 9 | 10 | 11 | 11 | 10 | 14 | 17 | 18 | 20 | 27 | 24 | 20 | 18 | 15 | 12 | 10 | 12.8 | 27.1 | |
| 13-Mar | 11 | 13 | 9 | 6 | 13 | 17 | 16 | 17 | 15 | 15 | 14 | 16 | 15 | 11 | 12 | 10 | 9 | 5 | 3 | 6 | 6 | 4 | 8 | 6 | 10.6 | 17.1 | |
| 14-Mar | 8 | 6 | 3 | 4 | 6 | 8 | 12 | 15 | 17 | 16 | 12 | 11 | 9 | 9 | 7 | 5 | 10 | 12 | 15 | 17 | 15 | 8 | 8 | 12 | 10.2 | 17.1 | |
| 15-Mar | 13 | 13 | 13 | 11 | 11 | 9 | 10 | 15 | 18 | 21 | 25 | 26 | 30 | 28 | 29 | 30 | 25 | 26 | 24 | 20 | 20 | 18 | 19 | 20 | 19.8 | 30.5 | |
| 16-Mar | 20 | 18 | 20 | 18 | 11 | 7 | 8 | 8 | 13 | 17 | 14 | 11 | 11 | 11 | 9 | 7 | 6 | 8 | 4 | 6 | 8 | 6 | 6 | 12 | 10.8 | 20.1 | |
| 17-Mar | 10 | 14 | 14 | 9 | 6 | 4 | 6 | 9 | 7 | 13 | 18 | 21 | 22 | 25 | 26 | 25 | 18 | 16 | 14 | 16 | 15 | 14 | 13 | 15 | 14.6 | 25.9 | |
| 18-Mar | 13 | 9 | 6 | 9 | 12 | 14 | 13 | 13 | 15 | 13 | 12 | 11 | 11 | 12 | 11 | 7 | 9 | 10 | 10 | 13 | 13 | 9 | 6 | 6 | 10.7 | 14.8 | |
| 19-Mar | 8 | 12 | 13 | 14 | 13 | 19 | 22 | 15 | 21 | 8 | 10 | 13 | 14 | 11 | 14 | 15 | 16 | 14 | 12 | 11 | 12 | 9 | 7 | 4 | 12.8 | 21.7 | |
| 20-Mar | 4 | 5 | 7 | 6 | 6 | 7 | 13 | 11 | 15 | 15 | 17 | 18 | 19 | 19 | 19 | 14 | 12 | 10 | 10 | 4 | 4 | 4 | 5 | 5 | 10.4 | 19.1 | |
| 21-Mar | 4 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 8 | 7 | 8 | 5 | 5 | 5 | 6 | 6 | 7 | 11 | 12 | 12 | 13 | 10 | 13 | 13 | 7.4 | 13.1 | |
| 22-Mar | 19 | 22 | 18 | 18 | 18 | 14 | 16 | 14 | 18 | 22 | 24 | 20 | 16 | 18 | 19 | 19 | 16 | 14 | 7 | 7 | 7 | 11 | 8 | 7 | 15.5 | 24.4 | |
| 23-Mar | 6 | 6 | 5 | 4 | 4 | 4 | 3 | 6 | 7 | 11 | 10 | 11 | 11 | 13 | 10 | 9 | 13 | 12 | 11 | 12 | 11 | 8 | 3 | 2 | 8.0 | 13.1 | |
| 24-Mar | 3 | 6 | 7 | 10 | 12 | 13 | 16 | 16 | 19 | 17 | 16 | 15 | 15 | 13 | 11 | 10 | 8 | 6 | 8 | 13 | 15 | 17 | 8 | 5 | 11.6 | 18.8 | |
| 25-Mar | 5 | 6 | 11 | 13 | 10 | 9 | 13 | 16 | 13 | 13 | 14 | 12 | 10 | 19 | 19 | 16 | 12 | 5 | 11 | 7 | 16 | 17 | 18 | 15 | 12.5 | 18.8 | |
| 26-Mar | 15 | 10 | 7 | 7 | 7 | 6 | 7 | 4 | 9 | 10 | 12 | 11 | 15 | 13 | 17 | 19 | 20 | 19 | 19 | 17 | 20 | 19 | 15 | 14 | 13.1 | 20.3 | |
| 27-Mar | 14 | 13 | 15 | 15 | 14 | 16 | 18 | 21 | 24 | 24 | 27 | 27 | 24 | 24 | 22 | 18 | 18 | 20 | 20 | 20 | 24 | 25 | 25 | 25 | 20.5 | 26.6 | |
| 28-Mar | 26 | 25 | 16 | 18 | 14 | 18 | 11 | 15 | 22 | 16 | 13 | 13 | 11 | 10 | 11 | 12 | 8 | 7 | 13 | 13 | 20 | 20 | 12 | 13 | 14.9 | 26.5 | |
| 29-Mar | 10 | 10 | 10 | 14 | 16 | 17 | 18 | 18 | D | D | D | 15 | 15 | 13 | 15 | 13 | 17 | 20 | 14 | 7 | 10 | 7 | 8 | 7 | 13.0 | 20.2 | |
| 30-Mar | 8 | 9 | 9 | 9 | 8 | 6 | 3 | 4 | 4 | 6 | 9 | 9 | 9 | 9 | 14 | 15 | 11 | 12 | 10 | 11 | 5 | 8 | 8 | 10 | 11 | 8.8 | 14.9 |
| 31-Mar | 10 | 10 | 13 | 11 | 11 | 13 | 11 | 10 | 11 | 11 | 11 | 13 | 12 | 12 | 11 | 9 | 9 | 7 | 4 | 3 | 7 | 8 | 9 | 12 | 9.9 | 13.0 | |
| | 11.4 | 11.7 | 10.8 | 10.6 | 10.3 | 11.1 | 11.5 | 11.7 | 12.9 | 12.9 | 13.2 | 13.0 | 13.3 | 13.9 | 14.5 | 13.8 | 13.1 | 12.8 | 12.3 | 11.4 | 12.2 | 11.6 | 11.2 | 11.4 | Diurnal Average | | |
| | 26.5 | 24.7 | 20.1 | 19.9 | 20.5 | 19.6 | 21.7 | 21.8 | 24.4 | 24.3 | 26.5 | 26.6 | 30.5 | 28.5 | 29.5 | 30.3 | 25.0 | 27.1 | 23.9 | 20.3 | 24.0 | 24.8 | 24.9 | 25.5 | Diurnal Maximum | | |

D - DAS Failure
 All monthly, daily, and diurnal averages have been calculated using scalar methods

Hourly Standard Deviations

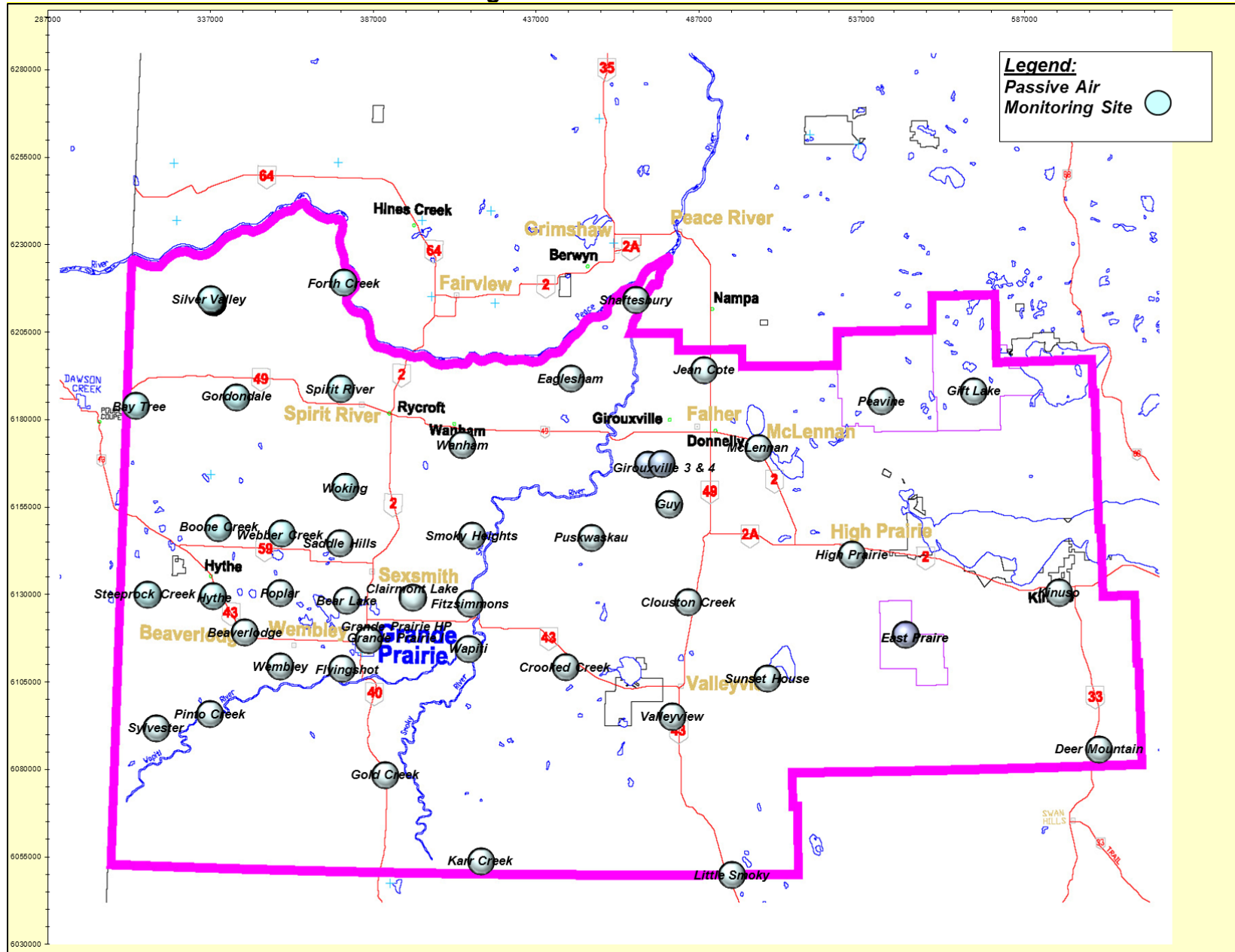
Wind Direction (WD) - deg
Sunset House - March 2012

| Maximum Value: 89.2 deg on Mar 11 21:00 | | Hours in Service: 744 | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|--|--|
| Minimum Value: 2.9 deg on Mar 2 01:00 | | Hours of Data: 741 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Percentiles: P ₁ = 3.9 P ₁₀ = 5.6 Q ₁ = 7.8 Median = 10.8 Q ₃ = 17.3 P ₉₀ = 30.2 P ₉₉ = 71.0 | | Hours of Missing Data: 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Hours of Calibration: 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Percent Operational Time: 99.6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Day | Hourly Period Ending At (MST) | | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | |
| 1-Mar | 6 | 6 | 6 | 11 | 9 | 8 | 6 | 8 | 5 | 15 | 10 | 18 | 15 | 12 | 25 | 17 | 35 | 48 | 26 | 23 | 28 | 8 | 18 | 4 | 48.5 | | |
| 2-Mar | 3 | 5 | 5 | 6 | 5 | 6 | 8 | 11 | 8 | 17 | 12 | 9 | 8 | 9 | 13 | 30 | 18 | 13 | 8 | 9 | 25 | 45 | 7 | 6 | 45.4 | | |
| 3-Mar | 6 | 6 | 10 | 14 | 9 | 5 | 5 | 13 | 11 | 8 | 8 | 18 | 19 | 10 | 16 | 6 | 11 | 20 | 40 | 13 | 23 | 22 | 14 | 9 | 40.0 | | |
| 4-Mar | 10 | 10 | 10 | 18 | 16 | 10 | 10 | 9 | 10 | 10 | 11 | 29 | 9 | 9 | 11 | 22 | 12 | 12 | 10 | 8 | 4 | 5 | 4 | 4 | 28.6 | | |
| 5-Mar | 4 | 4 | 4 | 5 | 4 | 6 | 6 | 23 | 15 | 25 | 31 | 23 | 40 | 23 | 21 | 9 | 9 | 6 | 9 | 9 | 9 | 9 | 8 | 8 | 40.3 | | |
| 6-Mar | 8 | 7 | 23 | 14 | 25 | 13 | 53 | 38 | 59 | 21 | 8 | 10 | 11 | 10 | 12 | 30 | 13 | 10 | 12 | 6 | 8 | 17 | 9 | 9 | 58.7 | | |
| 7-Mar | 10 | 11 | 6 | 8 | 10 | 9 | 8 | 8 | 10 | 9 | 18 | 11 | 9 | 7 | 7 | 6 | 6 | 8 | 10 | 31 | 23 | 11 | 12 | 11 | 31.4 | | |
| 8-Mar | 9 | 48 | 23 | 43 | 19 | 10 | 9 | 8 | 8 | 6 | 12 | 13 | 15 | 17 | 9 | 11 | 23 | 13 | 9 | 16 | 15 | 5 | 6 | 6 | 47.6 | | |
| 9-Mar | 6 | 10 | 6 | 6 | 5 | 5 | 5 | 6 | 6 | 6 | 8 | 19 | 11 | 11 | 19 | 12 | 9 | 8 | 14 | 14 | 14 | 10 | 9 | 10 | 18.8 | | |
| 10-Mar | 14 | 20 | 53 | 25 | 20 | 14 | 12 | 9 | 7 | 8 | 10 | 17 | 15 | 14 | 17 | 12 | 21 | 16 | 11 | 20 | 9 | 11 | 6 | 12 | 52.8 | | |
| 11-Mar | 8 | 6 | 5 | 6 | 14 | 6 | 17 | 19 | 17 | 73 | 15 | 29 | 12 | 7 | 22 | 25 | 62 | 18 | 71 | 52 | 89 | 12 | 13 | 11 | 89.2 | | |
| 12-Mar | 10 | 11 | 12 | 11 | 10 | 9 | 14 | 9 | 9 | 11 | 13 | 14 | 20 | 18 | 14 | 13 | 7 | 8 | 11 | 7 | 6 | 5 | 8 | 5 | 19.7 | | |
| 13-Mar | 7 | 6 | 9 | 83 | 13 | 13 | 17 | 16 | 9 | 15 | 11 | 9 | 8 | 10 | 7 | 10 | 11 | 35 | 39 | 9 | 9 | 18 | 11 | 33 | 83.2 | | |
| 14-Mar | 33 | 13 | 38 | 9 | 22 | 6 | 9 | 6 | 5 | 7 | 10 | 14 | 23 | 13 | 39 | 74 | 26 | 5 | 9 | 6 | 28 | 11 | 5 | 6 | 73.9 | | |
| 15-Mar | 4 | 8 | 7 | 6 | 5 | 7 | 15 | 4 | 15 | 6 | 11 | 9 | 11 | 8 | 8 | 6 | 11 | 10 | 9 | 8 | 6 | 6 | 5 | 6 | 15.4 | | |
| 16-Mar | 6 | 5 | 6 | 9 | 25 | 23 | 39 | 44 | 10 | 6 | 11 | 10 | 13 | 19 | 11 | 35 | 70 | 15 | 36 | 7 | 12 | 20 | 18 | 8 | 70.4 | | |
| 17-Mar | 9 | 4 | 4 | 8 | 34 | 36 | 15 | 14 | 25 | 11 | 8 | 7 | 8 | 6 | 9 | 7 | 9 | 8 | 12 | 8 | 7 | 7 | 8 | 8 | 35.6 | | |
| 18-Mar | 6 | 9 | 82 | 9 | 14 | 8 | 11 | 17 | 11 | 10 | 11 | 11 | 15 | 12 | 12 | 34 | 14 | 6 | 14 | 9 | 12 | 8 | 14 | 13 | 82.4 | | |
| 19-Mar | 9 | 6 | 8 | 5 | 4 | 5 | 5 | 28 | 7 | 57 | 29 | 14 | 12 | 15 | 15 | 13 | 10 | 12 | 8 | 17 | 12 | 16 | 24 | 26 | 56.9 | | |
| 20-Mar | 21 | 17 | 12 | 32 | 21 | 26 | 15 | 15 | 15 | 14 | 8 | 9 | 9 | 12 | 10 | 13 | 12 | 10 | 9 | 36 | 44 | 35 | 25 | 30 | 44.1 | | |
| 21-Mar | 26 | 7 | 18 | 25 | 28 | 20 | 30 | 27 | 7 | 17 | 10 | 37 | 21 | 21 | 23 | 42 | 15 | 7 | 10 | 8 | 9 | 13 | 34 | 35 | 42.0 | | |
| 22-Mar | 6 | 3 | 6 | 4 | 4 | 17 | 6 | 9 | 4 | 7 | 6 | 10 | 10 | 11 | 9 | 8 | 8 | 8 | 15 | 10 | 48 | 7 | 11 | 12 | 48.4 | | |
| 23-Mar | 15 | 14 | 22 | 58 | 68 | 19 | 57 | 31 | 13 | 14 | 18 | 15 | 12 | 10 | 18 | 25 | 16 | 11 | 9 | 9 | 8 | 8 | 40 | 26 | 68.0 | | |
| 24-Mar | 35 | 17 | 13 | 4 | 3 | 5 | 9 | 5 | 5 | 6 | 9 | 14 | 13 | 14 | 20 | 21 | 28 | 40 | 11 | 4 | 8 | 12 | 25 | 23 | 40.3 | | |
| 25-Mar | 16 | 22 | 5 | 4 | 8 | 14 | 8 | 7 | 11 | 7 | 10 | 18 | 33 | 16 | 12 | 12 | 12 | 31 | 35 | 77 | 7 | 5 | 6 | 4 | 77.1 | | |
| 26-Mar | 6 | 28 | 17 | 7 | 39 | 43 | 26 | 44 | 7 | 11 | 16 | 23 | 9 | 23 | 8 | 6 | 6 | 7 | 5 | 4 | 7 | 8 | 5 | 7 | 44.0 | | |
| 27-Mar | 4 | 7 | 5 | 4 | 6 | 9 | 5 | 9 | 7 | 7 | 9 | 11 | 13 | 11 | 12 | 18 | 15 | 10 | 8 | 6 | 6 | 7 | 7 | 7 | 18.2 | | |
| 28-Mar | 6 | 6 | 18 | 8 | 10 | 10 | 15 | 9 | 9 | 14 | 17 | 16 | 23 | 17 | 24 | 21 | 33 | 85 | 14 | 10 | 8 | 16 | 11 | 9 | 85.1 | | |
| 29-Mar | 16 | 9 | 6 | 6 | 6 | 6 | 5 | 5 | D | D | D | 14 | 14 | 17 | 15 | 17 | 15 | 43 | 61 | 31 | 58 | 18 | 12 | 13 | 60.8 | | |
| 30-Mar | 12 | 6 | 4 | 5 | 11 | 13 | 74 | 43 | 55 | 21 | 13 | 13 | 26 | 9 | 11 | 12 | 11 | 14 | 16 | 30 | 20 | 25 | 16 | 9 | 73.9 | | |
| 31-Mar | 9 | 5 | 6 | 7 | 8 | 5 | 7 | 8 | 9 | 16 | 17 | 19 | 21 | 22 | 24 | 23 | 42 | 39 | 87 | 60 | 28 | 13 | 11 | 9 | 86.7 | | |
| | | 34.8 | 47.6 | 82.4 | 83.2 | 68.0 | 43.0 | 73.9 | 44.0 | 58.7 | 73.2 | 30.6 | 37.0 | 40.3 | 23.1 | 39.3 | 73.9 | 70.4 | 85.1 | 86.7 | 77.1 | 89.2 | 45.4 | 40.1 | 35.0 | | |
| D - DAS Failure | | | | | | | | | | | | | | | | | | | | | | | | | | | |

PAZA

Monthly Passive Data Summary

Location of PAZA Passive Monitoring Stations



PAZA Passive Results for March 2012

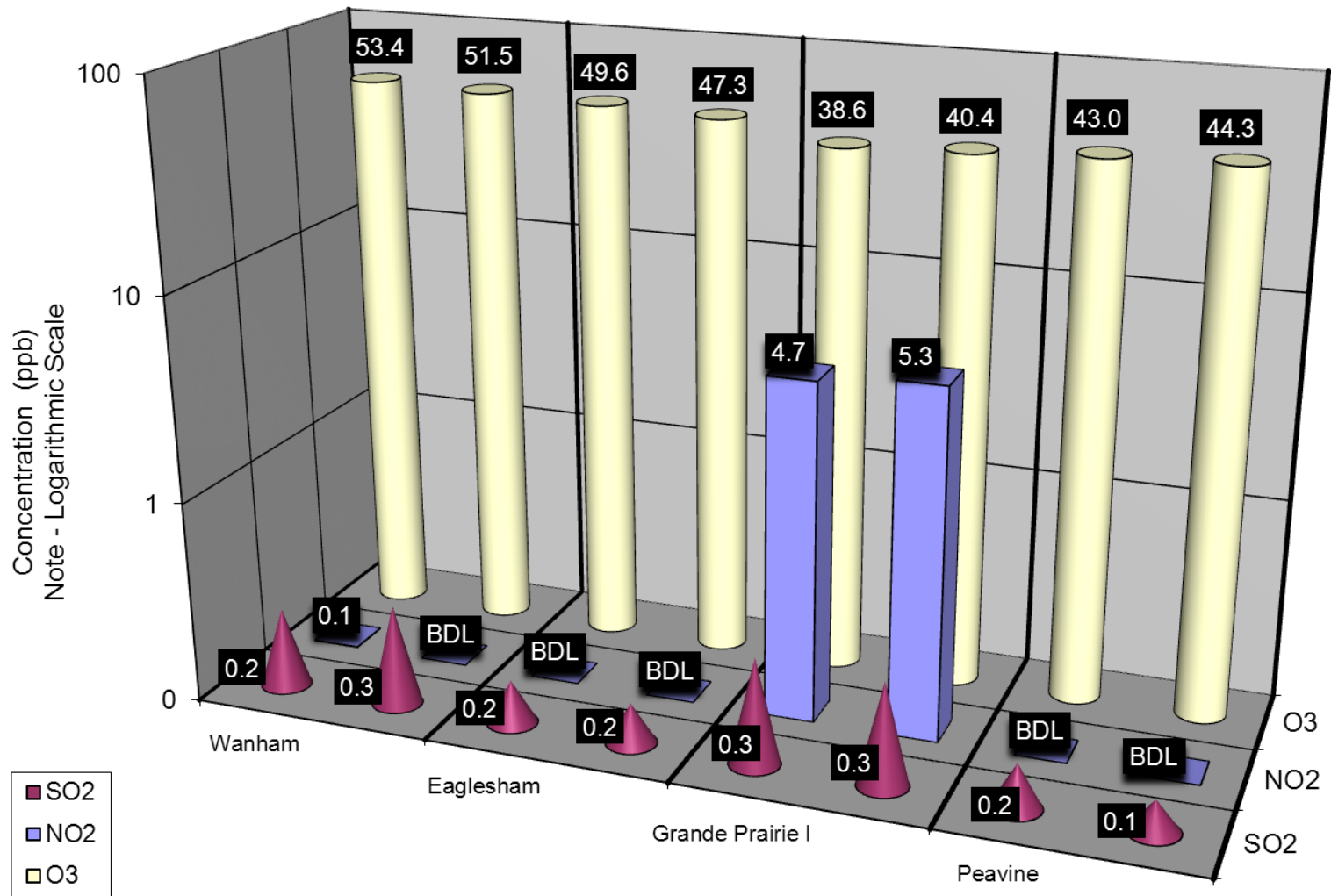
| Station Number | Station Name | SO2 ppb | O3 ppb | NO2 ppb | H2S ppb | Site Legal |
|-------------------|------------------|------------|-----------|------------|------------|------------------|
| Duplicates | | | | | | |
| 19a | Wanham | 0.2 | 53.4 | 0.1 | | |
| 19b | Wanham | 0.3 | 51.5 | BDL | | |
| 21a | Eaglesham | 0.2 | 49.6 | BDL | | |
| 21b | Eaglesham | 0.2 | 47.3 | BDL | | |
| 27a | Grande Prairie I | 0.3 | 38.6 | 4.7 | | |
| 27b | Grande Prairie I | 0.3 | 40.4 | 5.3 | | |
| 44a | Peavine | 0.2 | 43.0 | BDL | | |
| 44b | Peavine | 0.1 | 44.3 | BDL | | |
| 63a | Girouxville 3 | | | | 0.3 | |
| 63b | Girouxville 3 | | | | 0.3 | |
| 1 | Silver Valley | 0.3 | 45.7 | BDL | | 08-27-081-11 W6M |
| 2 | Bay Tree | 0.2 | 39.3 | 0.8 | | 13-16-078-13 W6M |
| 3 | Fourth Creek | 0.2 | 46.3 | BDL | | 04-13-082-07 W6M |
| 4 | Gordondale | 0.4 | 49.9 | 0.4 | | 04-34-078-10 W6M |
| 5 | Boone Creek | 0.3 | 50.5 | 0.3 | | 16-36-074-11 W6M |
| 7 | Steeprock Creek | 0.3 | 46.1 | BDL | | 09-35-072-13 W6M |
| 9 | Spirit River | 0.1 | 45.6 | 0.2 | | 08-12-079-07 W6M |
| 10 | Woking | 0.3 | 48.5 | BDL | | 01-13-076-07 W6M |
| 11 | Webber Creek | 1.5 | 53.3 | 0.2 | | 09-36-074-09 W6M |
| 12 | Hythe | 0.2 | 40.0 | 0.7 | | 14-36-072-11 W6M |
| 14 | Sylvester | 0.1 | 40.2 | BDL | | 08-06-069-12 W6M |
| 16 | Beaverlodge | 0.3 | 39.7 | 1.2 | | 15-36-071-10 W6M |
| 17 | Poplar | 0.6 | 43.9 | 0.6 | | 13-06-073-08 W6M |
| 18 | Saddle Hills | 0.4 | 52.5 | BDL | | 04-25-074-07 W6M |
| 19 | Wanham | 0.3 | 52.5 | 0.1 | | 16-22-077-03 W6M |
| 20 | Shaftesbury | 0.2 | 55.3 | 0.2 | | 04-03-082-23 W5M |
| 21 | Eaglesham | 0.2 | 48.5 | BDL | | 16-21-079-25 W5M |
| 23 | Bear Lake | 0.3 | 51.7 | 0.3 | | 15-31-072-06 W6M |

PAZA Passive Results for March 2012 (Continued)

| | | | | | | |
|----|-------------------|-----|------|-----|-----|------------------|
| 24 | Wembley | 0.2 | 36.5 | 0.6 | | 12-31-070-08 W6M |
| 25 | Pinto Creek | 0.1 | 47.1 | 0.6 | | 04-24-069-11 W6M |
| 26 | Flyingshot | 0.2 | 40.0 | 1.0 | | 15-36-070-07 W6M |
| 27 | Grande Prairie I | 0.3 | 39.5 | 5.0 | | 08-15-071-06 W6M |
| 28 | Clairmont Lake | 0.5 | 57.9 | BDL | | 09-06-073-04 W6M |
| 29 | Smoky Heights | 0.5 | 51.9 | 0.5 | | 04-06-075-02 W6M |
| 30 | Fitzsimmons | 0.2 | 57.2 | BDL | | 15-36-072-03 W6M |
| 32 | Gold Creek | 0.1 | 34.4 | 0.7 | | 06-33-067-05 W6M |
| 33 | Wapiti | 0.2 | 50.1 | BDL | | 02-25-071-03 W6M |
| 34 | Puskwaskau | 0.1 | 48.1 | BDL | | 15-35-074-25 W5M |
| 35 | Jean Cote | 0.2 | 56.5 | BDL | | 12-35-079-21 W5M |
| 36 | Guy | 0.2 | 49.4 | BDL | | 03-04-076-22 W5M |
| 37 | Crooked Creek | 0.2 | 51.4 | BDL | | 16-01-071-26 W5M |
| 38 | Karr Creek | BDL | 39.9 | BDL | | 10-16-065-02 W6M |
| 39 | Clouston Creek | 0.1 | 41.6 | 0.2 | | 12-01-073-22 W5M |
| 40 | McLennan | 0.3 | 51.7 | 0.1 | | 03-29-077-19 W5M |
| 41 | Valleyview | 0.2 | 51.1 | BDL | | 09-30-069-22 W5M |
| 42 | Sunset House | 0.2 | 51.1 | BDL | | 05-32-070-19 W5M |
| 43 | High Prairie | 0.1 | 45.5 | 0.2 | | 16-13-074-17 W5M |
| 44 | Peavine | 0.2 | 43.6 | BDL | | 03-05-079-15 W5M |
| 45 | Gift Lake | 0.2 | 44.0 | BDL | 0.1 | 10-07-079-12 W5M |
| 46 | Little Smoky | 0.2 | 46.5 | 0.7 | | 12-01-065-21 W5M |
| 47 | Kinuso | 0.1 | 41.7 | 0.2 | | 12-10-073-10 W5M |
| 48 | Deer Mountain | 0.2 | 45.4 | BDL | | 15-22-068-09 W5M |
| 49 | Grande Prairie HP | 0.3 | 36.0 | 4.8 | | 17-26-071-06 W6M |
| 62 | East Prairie | 0.1 | 43.1 | 0.3 | | 13-02-072-15 W5M |
| 63 | Girouxville 3 | | | | 0.3 | 14-02-077-23 W5M |
| 64 | Girouxville 4 | | | | 0.1 | 4-08-077-22 W5M |

*BDL = Below Detection Level

*NS - No sample



Duplicate Summary Chart

Passive Summary for March 2012

| Stats | Sulphur Dioxide SO ₂ | Ozone O ₃ | Nitrogen Dioxide NO ₂ | Hydrogen Sulphide H ₂ S |
|-------|------------------------------------|-------------------------|-------------------------------------|---------------------------------------|
| | ppb | ppb | ppb | ppb |

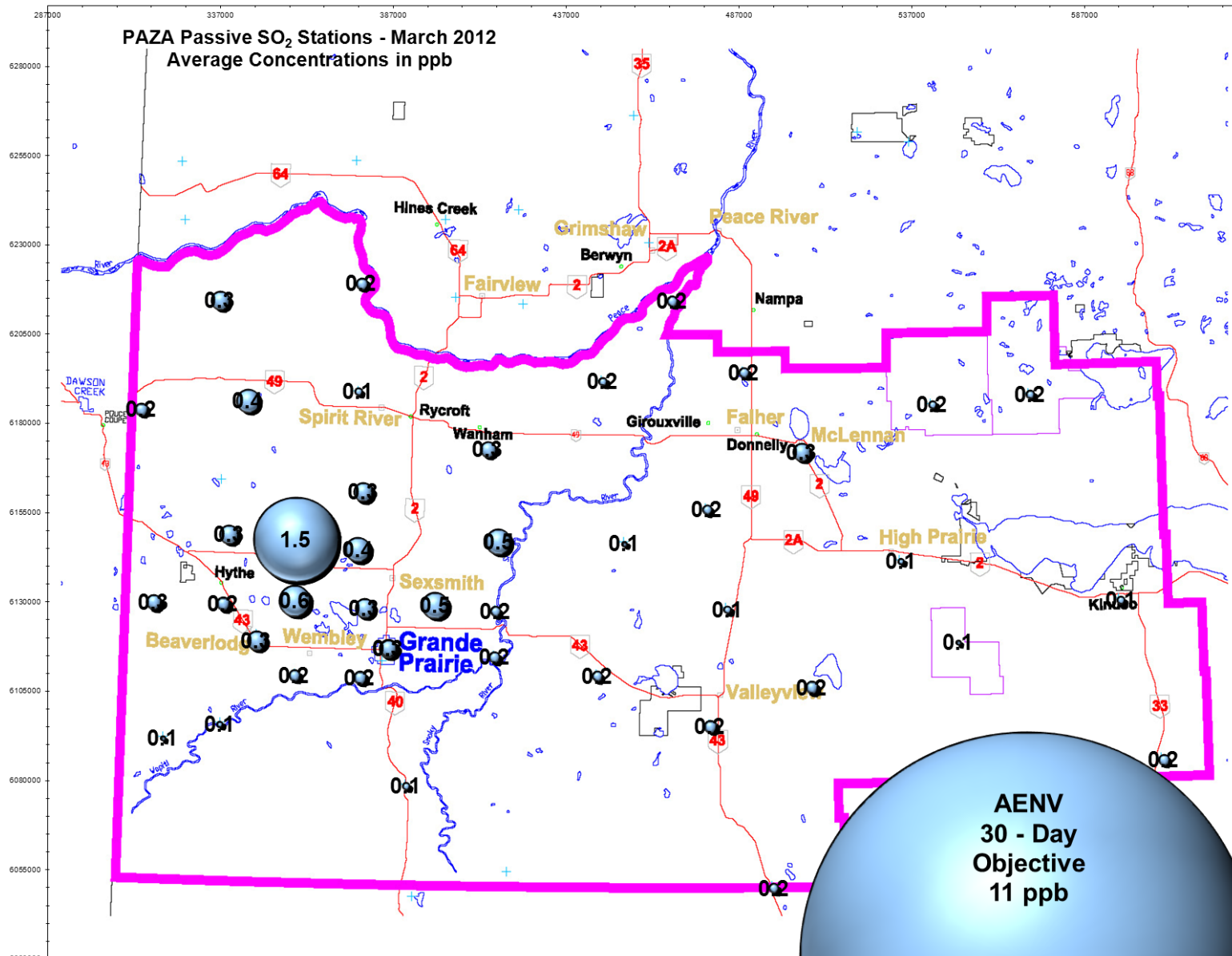
| Passive Summary for March 2012 (PAZA Zone) | | | | |
|--|--------------------|----------------------|------------------------|-----------------|
| Mean | 0.3 | 46.6 | 0.8 | 0.2 |
| Standard Deviation | 0.2 | 5.9 | 1.3 | 0.1 |
| Minimum | 0.1 | 34.4 | 0.1 | 0.1 |
| Minimum At | East Prairie (#62) | Gold Creek (#32) | Wanham (#19a) | Gift Lake (#45) |
| Maximum | 1.5 | 57.9 | 5.0 | 0.3 |
| Maximum At | Webber Creek (#11) | Clairmont Lake (#28) | Grande Prairie I (#27) | Girouxville 3 |

Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)

| | SO ₂ | O ₃ | NO ₂ |
|--------------------------|-----------------|----------------|-----------------|
| PAZA Beaverlodge station | 0.4 | 34.7 | 3.5 |
| PAZA Beaverlodge passive | 0.3 | 39.7 | 1.2 |

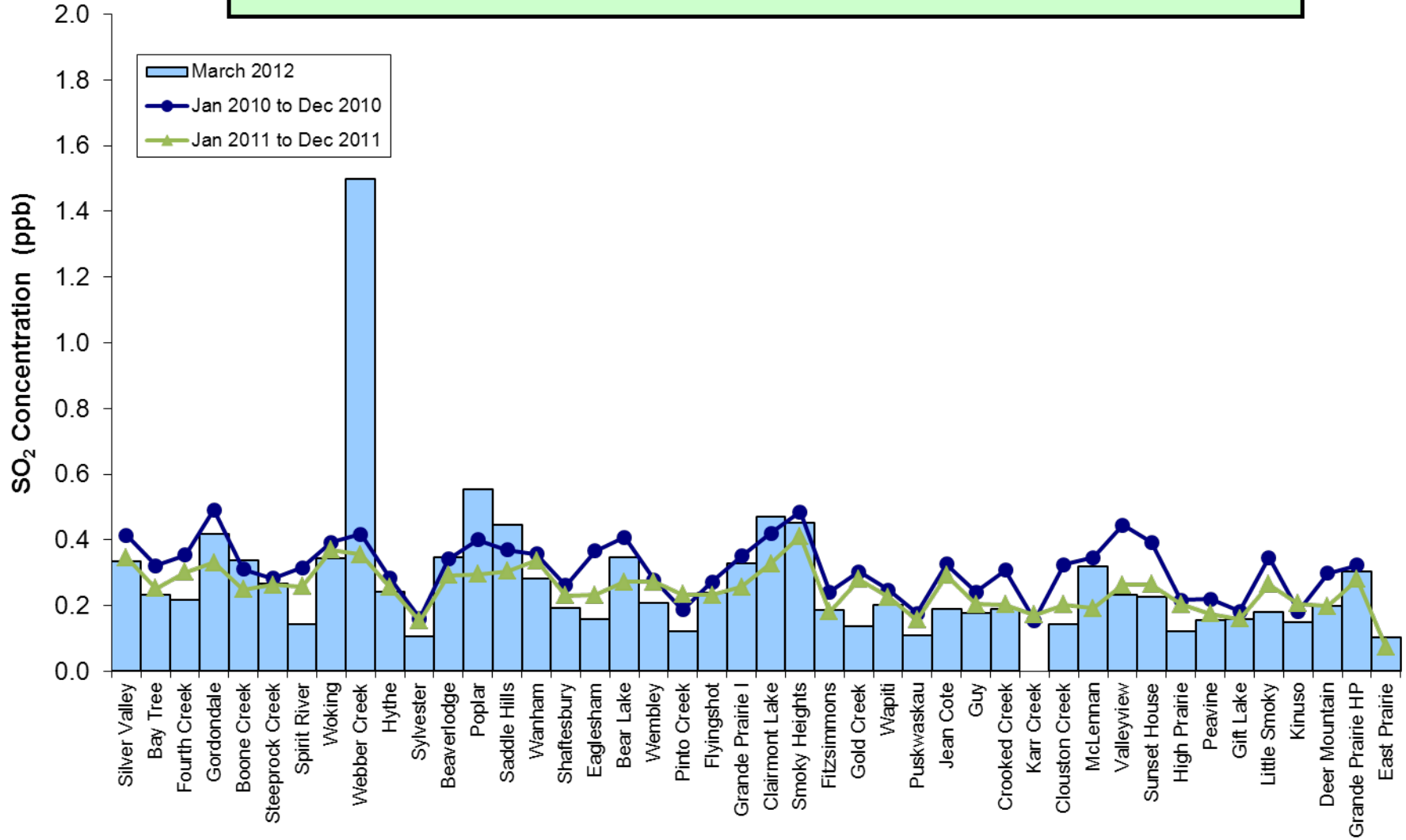
Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)

| | SO ₂ | O ₃ | NO ₂ |
|-----------------------------|-----------------|----------------|-----------------|
| PAZA Henry Pirker station | 0.4 | 26.5 | 11.9 |
| PAZA Grande Prairie passive | 0.3 | 36.0 | 4.8 |

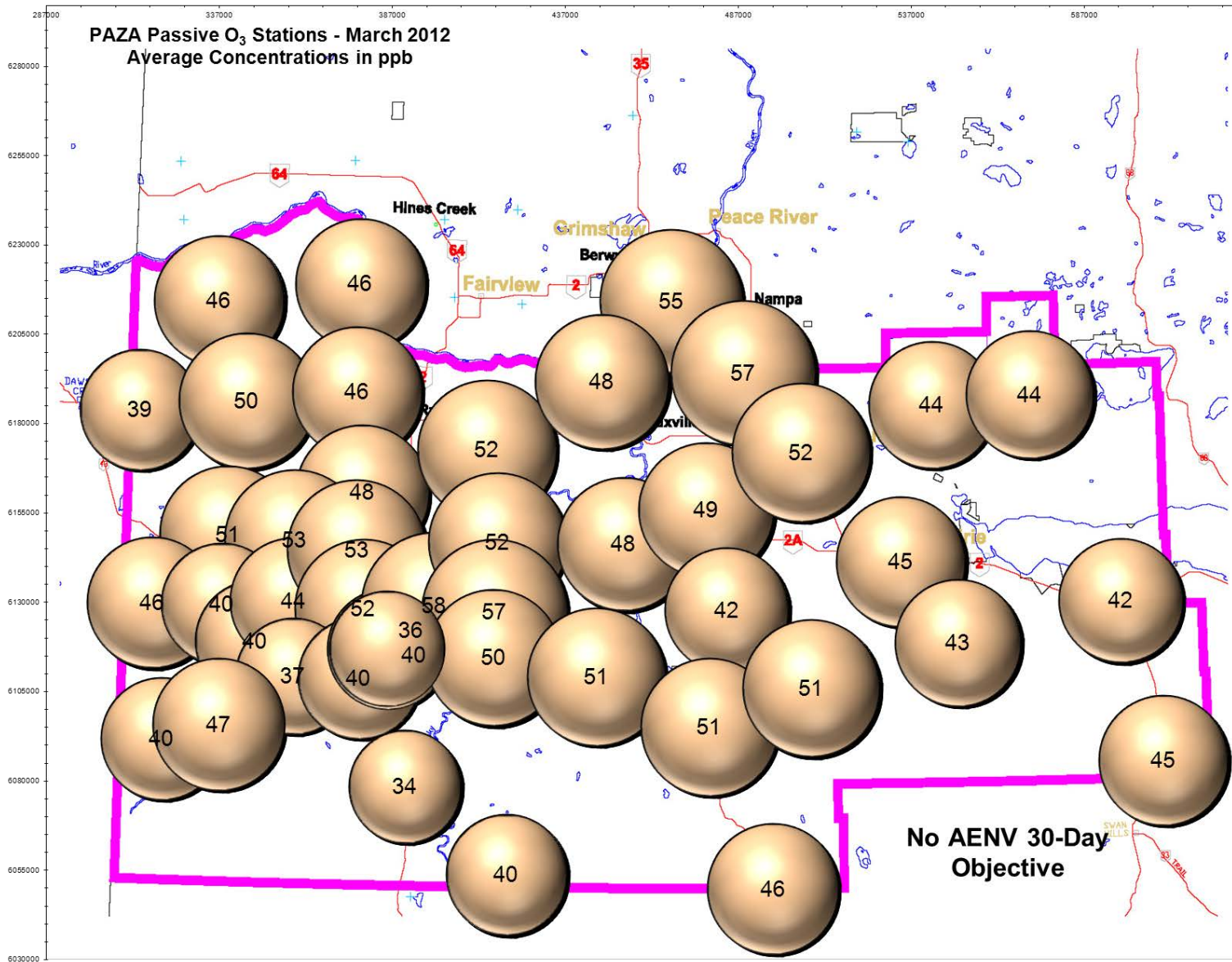


SO₂ Bubble Chart

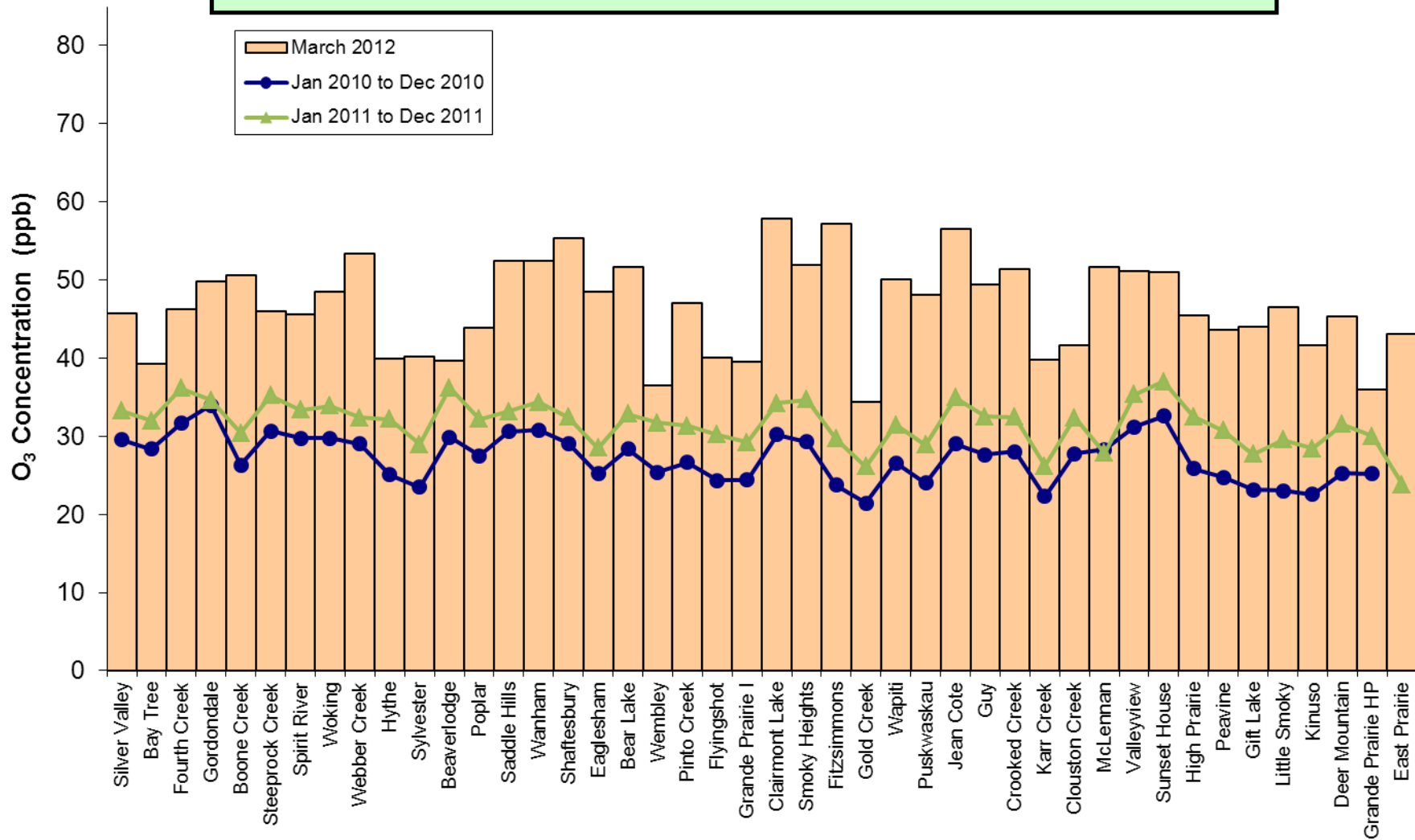
Alberta Ambient Air Quality Objective - 30-day Objective is 11 ppb



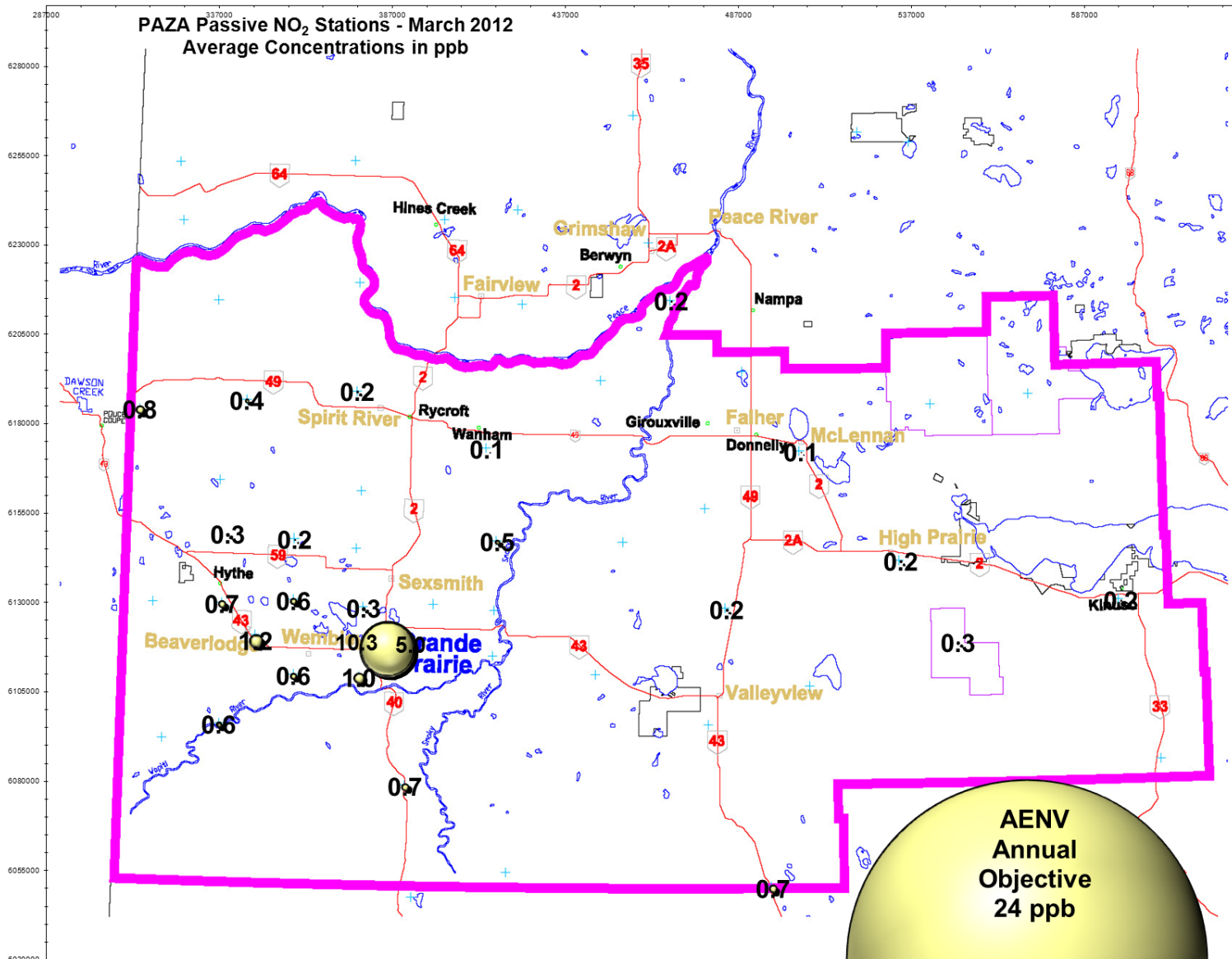
SO₂ Summary Chart



Alberta Ambient Air Quality Objective - No Annual O₃ Objective

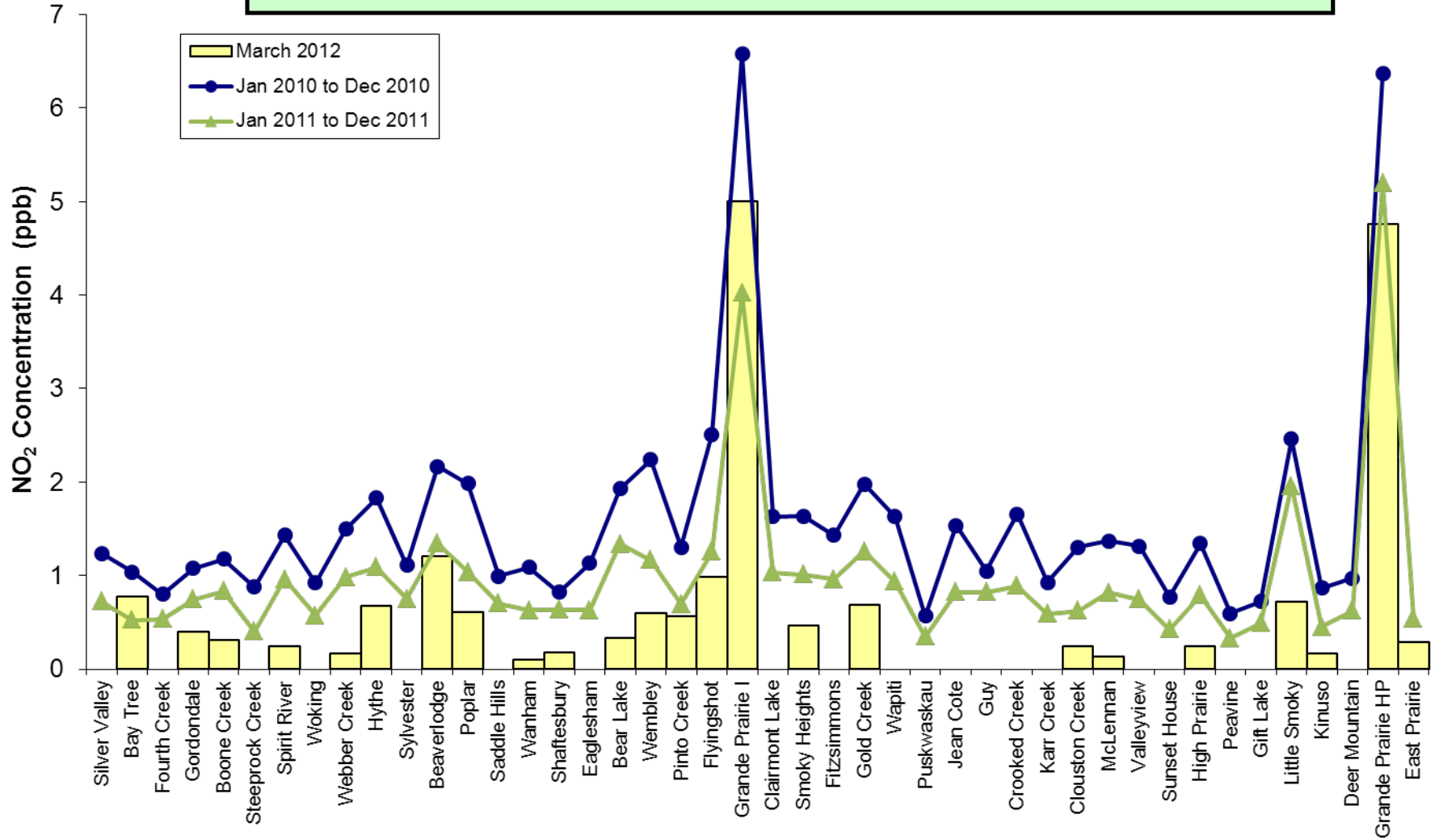


O₃ Summary Chart

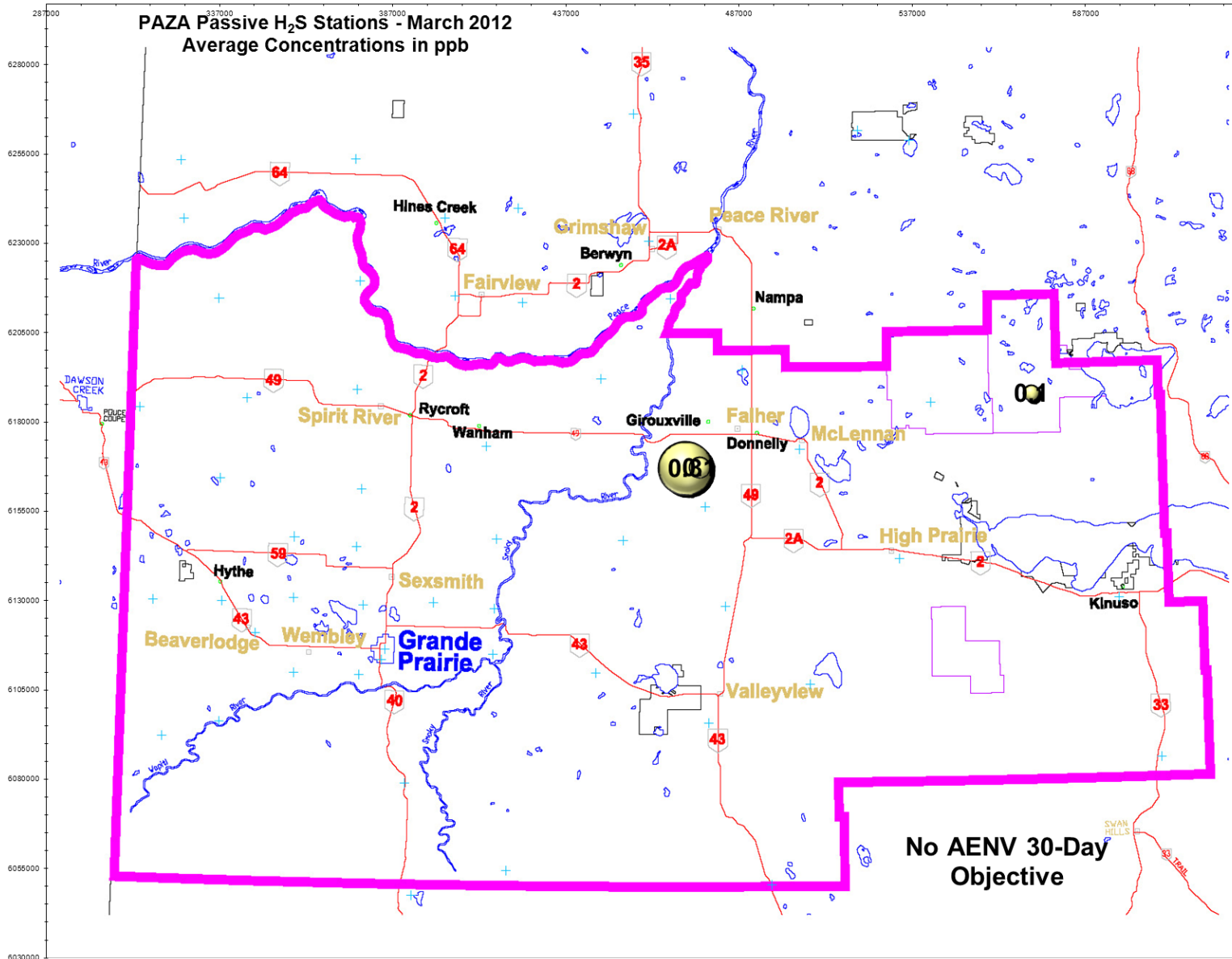


NO₂ Bubble Chart

Alberta Ambient Air Quality Objective - Annual NO₂ Objective is 24 ppb



NO₂ Summary Chart



H₂S Bubble Chart

March 2012 Calibration Reports

**PAZA - Henry Pirker Station with the following calibrations:
SO₂, NO, NO₂, NO_x, O₃, CO, THC, TRS**

**PAZA – Evergreen Park Station with the following calibrations:
SO₂, TRS**

**PAZA – Smoky Heights Station with the following calibrations:
SO₂, TRS**

**PAZA – Beaverlodge Station with the following calibrations:
SO₂, NO, NO₂, NO_x, O₃**

**PAZA – Valleyview Station with the following calibrations:
SO₂ & H₂S**

**PAZA – Sunset House Station with the following calibrations:
SO₂, NO, NO₂, NO_x, O₃, TRS**

Calibration Report



Parameter SO2

Air Monitoring Network PASZA

Station Information

| | | | |
|----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | March 7, 2012 | Previous Calibration | February 3, 2012 |
| Station Number | 1 | Station Location | Henry Pirker |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | <input type="checkbox"/> Other: |
| Start Time (MST) | 10:00 | End Time (MST) | 13:22 |
| Barometric Pressure | 0.918 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | EnviroNics | Serial Number | 3474 |
| Cal Gas Conc | 49.8 ppm | Cal Gas Cert Date | 3/28/2013 |
| | | Cal Gas Cylinder # | LL85275 |
| DACS make | CR3000 | DACS serial No. | 5408 |
| DACS voltage range | 0 - 1 volt | DACS channel # | 10 |
| | Before | | After |
| Calculated slope | 0.998532 | Calculated slope | 1.005024 |
| Calculated intercept | -1.092943 | Calculated intercept | -2.022829 |
| Analyzer make | TEI 43C | Analyzer serial # | 610816292 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 500 | ppb | 0 - 500 | ppb |
| Background | 8.9 | | 8.9 | |
| Coefficient | 0.772 | | 0.772 | |
| Pressure | 639.2 | mm Hg | 634.4 | mm Hg |
| Flow | 0.507 | lpm | 0.504 | lpm |
| Lamp Voltage | 44244 | Hz | 44437 | Hz |

Calibration Data

| Dilution air flow rate (cc/min) | Source gas flow rate (cc/min) | Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4989 | 0.00 | 0.0 | 0.0 | N/A |
| 4989 | 39.84 | 394.5 | 393.6 | 1.0025 |
| 4989 | 19.91 | 198.0 | 199.9 | 0.9903 |
| 4989 | 9.94 | 99.0 | 102.6 | 0.9650 |
| 4989 | 0.00 | 0.0 | 0.0 | As Found Zero |
| 4989 | 39.84 | 394.5 | 393.6 | As Found Span |
| Average Correction Factor | | | | 0.9859 |

Calculated value of As Found Response: 391.9 ppb Percent Change of As Found: 0.7%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.1 | ppb | 0.1 | ppb |
| Auto span | 235.4 | ppb | 234.4 | ppb |

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



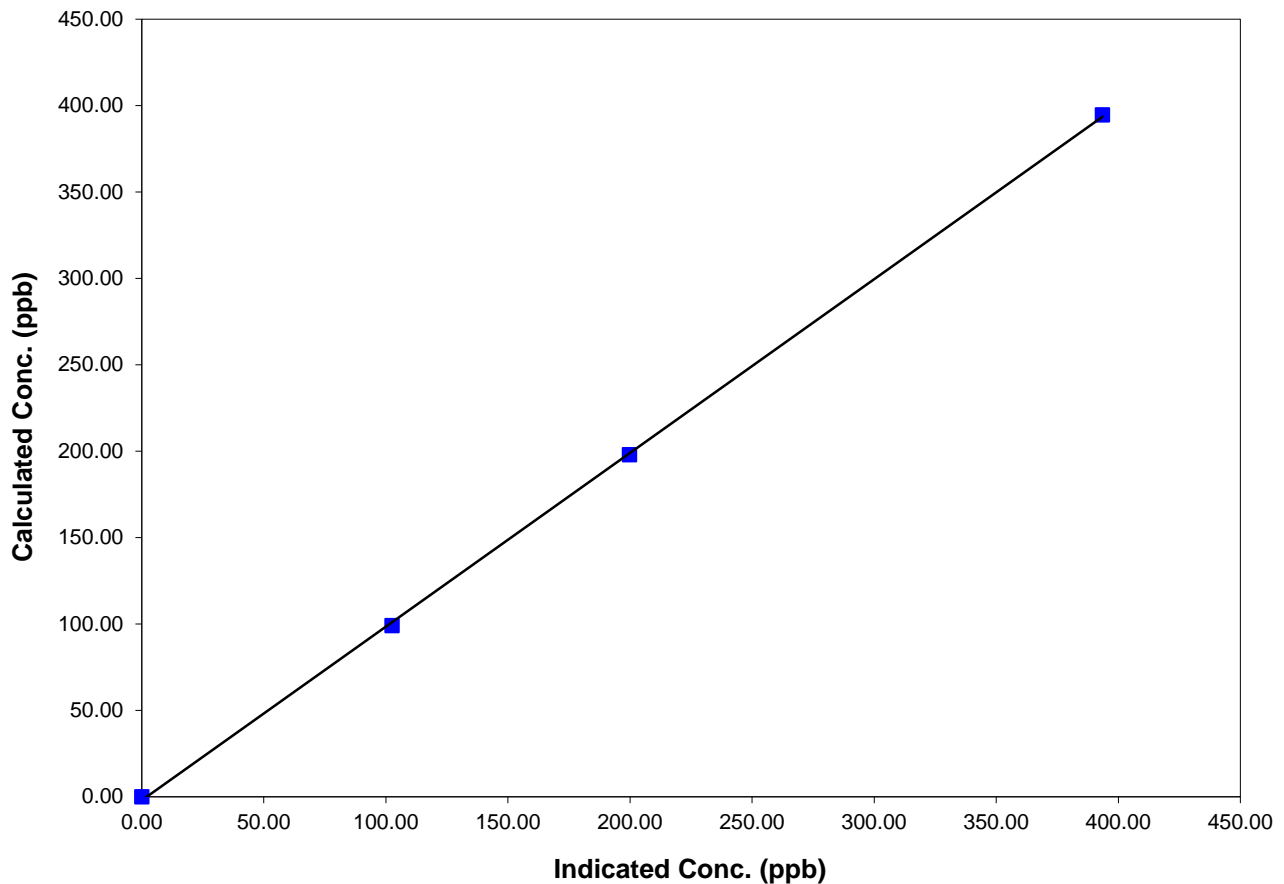
Station Information

| | | | |
|---------------------|---------------|----------------------|------------------|
| Calibration Date | March 7, 2012 | Previous Calibration | February 3, 2012 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 10:00 | End Time (MST) | 13:22 |
| Analyzer make/model | TEI 43C | Analyzer serial # | 610816292 |

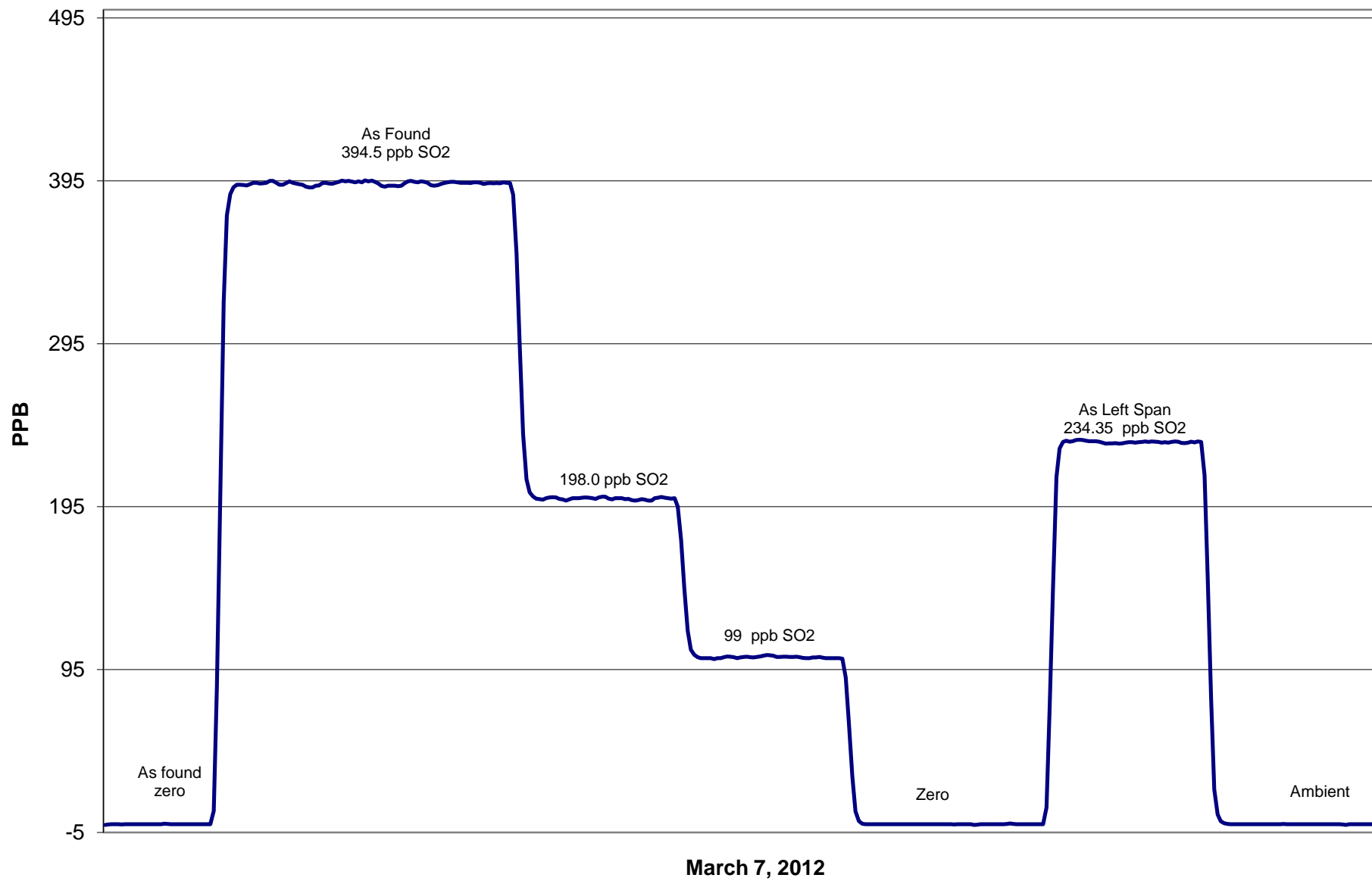
Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.0 | N/A | | |
| 394.5 | 393.6 | 1.0025 | Correlation Coefficient | 0.999880 |
| 198.0 | 199.9 | 0.9903 | | |
| 99.0 | 102.6 | 0.9650 | Slope | 1.005024 |
| | | | Intercept | -2.022829 |

SO2 Calibration Curve



SO2 Calibration



Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PASZA



Station Information

| | | | |
|---------------------|----------------|----------------------|------------------|
| Calibration Date | March 7, 2012 | Previous Calibration | February 3, 2012 |
| Station Number | 1 | Station Location | Henry Pirker |
| Reason: | Routine | Installation | Removal |
| Other: | | | |
| Start Time (MST) | 9:55 | End Time (MST) | 15:20 |
| Barometric Pressure | 0.918 Atm | Station Temperature | 20.0 Deg C |
| Calibrator | EnviroNics | Serial Number | 3474 |
| NO Cal Gas Conc | 52.5 ppm | Cal Gas Expiry Date | March 28, 2013 |
| NOx Cal Gas Conc | 52.5 ppm | Cal Gas Serial # | LL85275 |

DACS Information

| DACS make | CR3000 | DACS serial No. | 5408 |
|---------------|-------------|-----------------|-----------|
| Parameter | NO2 | NOx | NO |
| Before | Data Slope | 0.999643 | 1.003601 |
| | Data Offset | -0.029022 | -2.295570 |
| After | Data Slope | 0.998671 | 0.996737 |
| | Data Offset | -0.937001 | -1.690517 |
| Channel # | 8 | 6 | 7 |
| Voltage Range | 0 - 5 VDC | 0 - 5 VDC | 0 - 5 VDC |

Analyzer Information

| Analyzer make/model | TEI 42C | Analyzer serial # | 508011073 | |
|---------------------|---------|-------------------|-----------|-------|
| Test Point | before | | after | |
| Concentration range | 0 - 500 | ppb | 0 - 500 | ppb |
| NO offset | 10.5 | mV | 10.7 | mV |
| NOx bkgnd | 10.8 | mV | 11.0 | mV |
| NO coefficient | 0.773 | | 0.786 | |
| NOx coefficient | 0.994 | | 1.001 | |
| NO2 conv temp | 318.0 | Deg C | 318.0 | Deg C |
| PMT Temp | -2.5 | Deg C | -2.5 | Deg C |
| PMT Volt | -786.0 | mV | -786.0 | mV |
| R Cell Press | 173.1 | in Hg | 170.6 | in Hg |

Calibration Report

Parameter **NOx-NO-NO₂**
 Air Monitoring Network **PAZA**



Calibration Date: **March 7, 2012** Station Location: **Henry Pirker**

| | Dilution flow rate (ccm) | Source gas flow rate (ccm) | Calculated NOx conc (ppb) | Calculated NO conc (ppb) | Calculated NO2 conc (ppb) | Indicated NOx conc (ppb) | Indicated NO conc (ppb) | Indicated NO2 conc (ppb) | NOx Correction factor | NO Correction factor | |
|------|--------------------------|----------------------------|---------------------------|--------------------------|---------------------------|--------------------------|-------------------------|--------------------------|---------------------------|----------------------|--------|
| zero | 4989 | 0.00 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | N/A | N/A | |
| 1 | 4989 | 39.82 | 415.7 | 415.7 | 0.0 | 418.1 | 418.5 | -0.4 | 0.9943 | 0.9934 | |
| 2 | 4989 | 19.91 | 208.7 | 208.7 | 0.0 | 211.4 | 210.8 | 0.5 | 0.9871 | 0.9898 | |
| 3 | 4989 | 9.94 | 104.4 | 104.4 | 0.0 | 108.4 | 108.0 | 0.3 | 0.9632 | 0.9662 | |
| AFZ | 4989 | 0.00 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0000 | 0.0000 | |
| AFS | 4989 | 39.83 | 415.8 | 415.8 | 0.0 | 407.1 | 409.1 | -2.1 | 1.0215 | 1.0164 | |
| | | | | | | | | | Average Correction Factor | 0.9815 | 0.9831 |

As Found Concentrations: **NO_x= 404.7** **NO= 407.4** As Found Percent Change **NO_x= -2.7%** **NO= -2.0%**

Dilution Flow 4989 ccm Source Gas Flow 39.85 ccm

| O3 Setpoint (ppb) | Indicated NO high point (ppb) | Indicated NO drop conc (ppb) | Calculated NO2 conc (ppb) | Indicated NOx conc (ppb) | Indicated NO conc (ppb) | Indicated NO2 conc (ppb) | NOx Correction factor | NO Correction factor | NO2 Correction factor | Converter Efficiency | |
|-------------------|-------------------------------|------------------------------|---------------------------|--------------------------|-------------------------|--------------------------|---------------------------|----------------------|-----------------------|----------------------|--------|
| 0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | N/A | N/A | N/A | N/A | |
| NO point | 414.8 | 414.8 | 0.0 | 415.3 | 414.8 | 0.5 | 0.9988 | 1.0000 | N/A | N/A | |
| 300 | 414.8 | 119.3 | 295.5 | 415.6 | 119.3 | 296.6 | 0.9980 | 1.0000 | 0.9966 | 100.3% | |
| 200 | 414.8 | 211.5 | 203.3 | 415.3 | 211.5 | 203.9 | 0.9987 | 1.0000 | 0.9969 | 100.3% | |
| 100 | 414.8 | 303.8 | 111.0 | 417.7 | 303.8 | 113.9 | 0.9932 | 1.0000 | 0.9744 | 102.6% | |
| | | | | | | | Average Correction Factor | 0.9966 | 1.0000 | 0.9893 | 101.1% |

| Parameter | Previous calibration | | | | Current calibration | | | |
|-----------|----------------------|-------|-----|-----|---------------------|-------|-----|-----|
| | NOx | NO2 | NO | | NOx | NO2 | NO | |
| Auto zero | -0.1 | 0.0 | 0.0 | ppb | 0.1 | 0.0 | 0.2 | ppb |
| Auto span | 168.4 | 169.5 | 1.2 | ppb | 164.6 | 163.7 | 1.0 | ppb |

Calibration Performed By: Grover Christiansen

Calibration Summary



Parameter NO₂

Air Monitoring Network PASZA

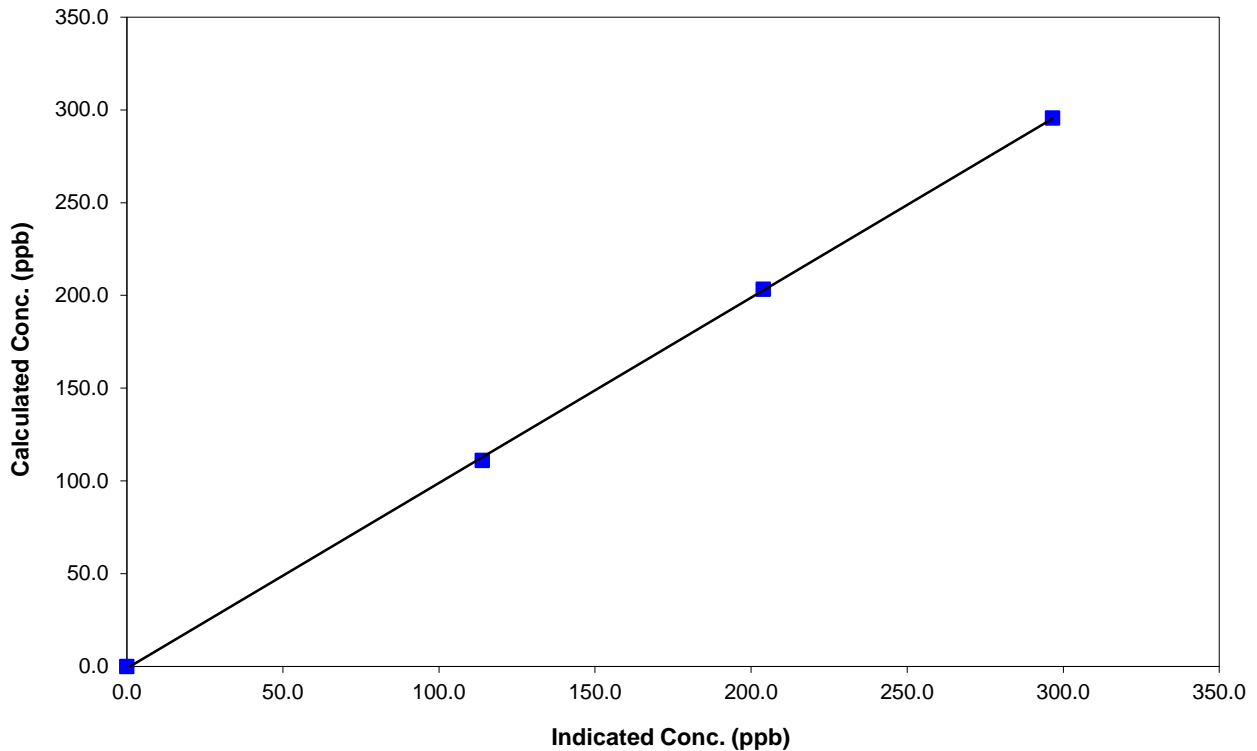
Station Information

| | | | |
|------------------|---------------|----------------------|------------------|
| Calibration Date | March 7, 2012 | Previous Calibration | February 3, 2012 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 9:55 | End Time (MST) | 15:20 |
| Analyzer make | TEI 42C | Analyzer serial # | 508011073 |

Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.0 | N/A | Correlation Coefficient | 0.999903 |
| 295.5 | 296.6 | 0.9966 | | |
| 203.3 | 203.9 | 0.9969 | | |
| 111.0 | 113.9 | 0.9744 | Slope | 0.998671 |
| | | | Intercept | -0.937001 |

NO₂ Calibration Curve



Calibration Summary



Parameter NO_x

Air Monitoring Network PASZA

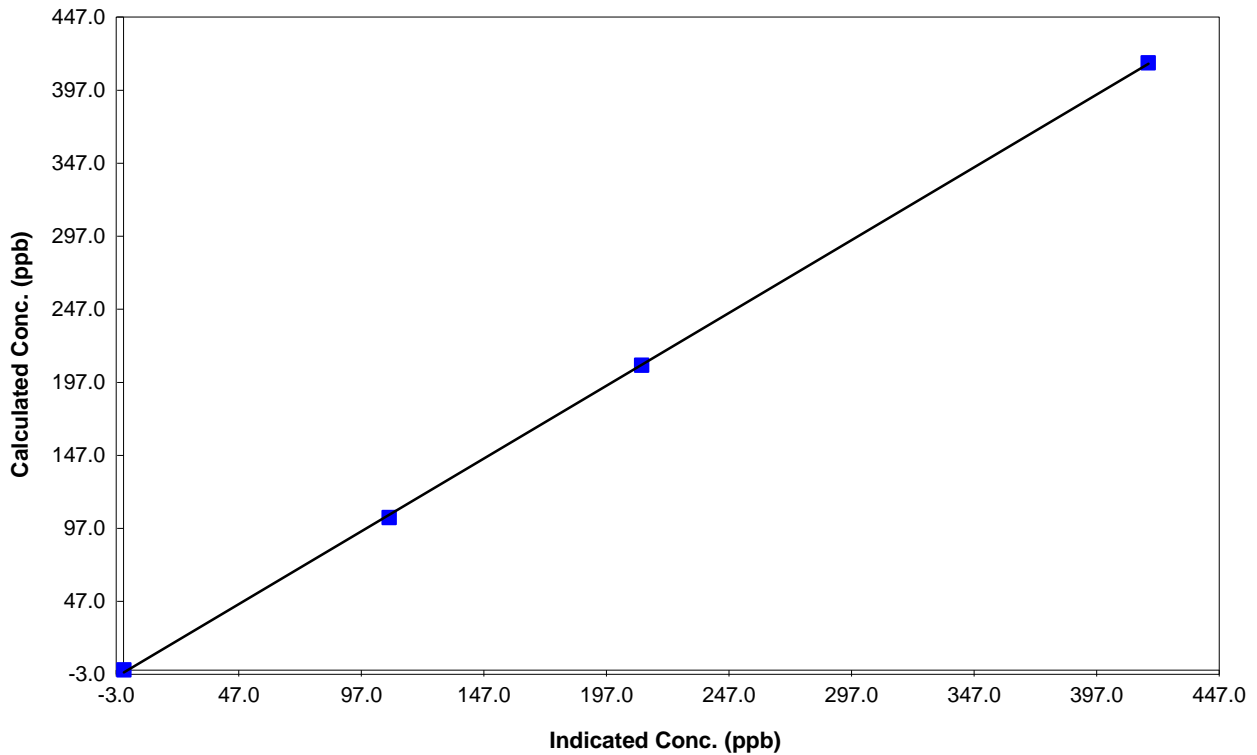
Station Information

| | | | |
|------------------|---------------|----------------------|------------------|
| Calibration Date | March 7, 2012 | Previous Calibration | February 3, 2012 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 9:55 | End Time (MST) | 15:20 |
| Analyzer make | TEI 42C | Analyzer serial # | 508011073 |

Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.1 | N/A | Correlation Coefficient | 0.999927 |
| 415.7 | 418.1 | 0.9943 | | |
| 208.7 | 211.4 | 0.9871 | | |
| 104.4 | 108.4 | 0.9632 | Slope | 0.996737 |
| | | | Intercept | -1.690517 |

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PASZA



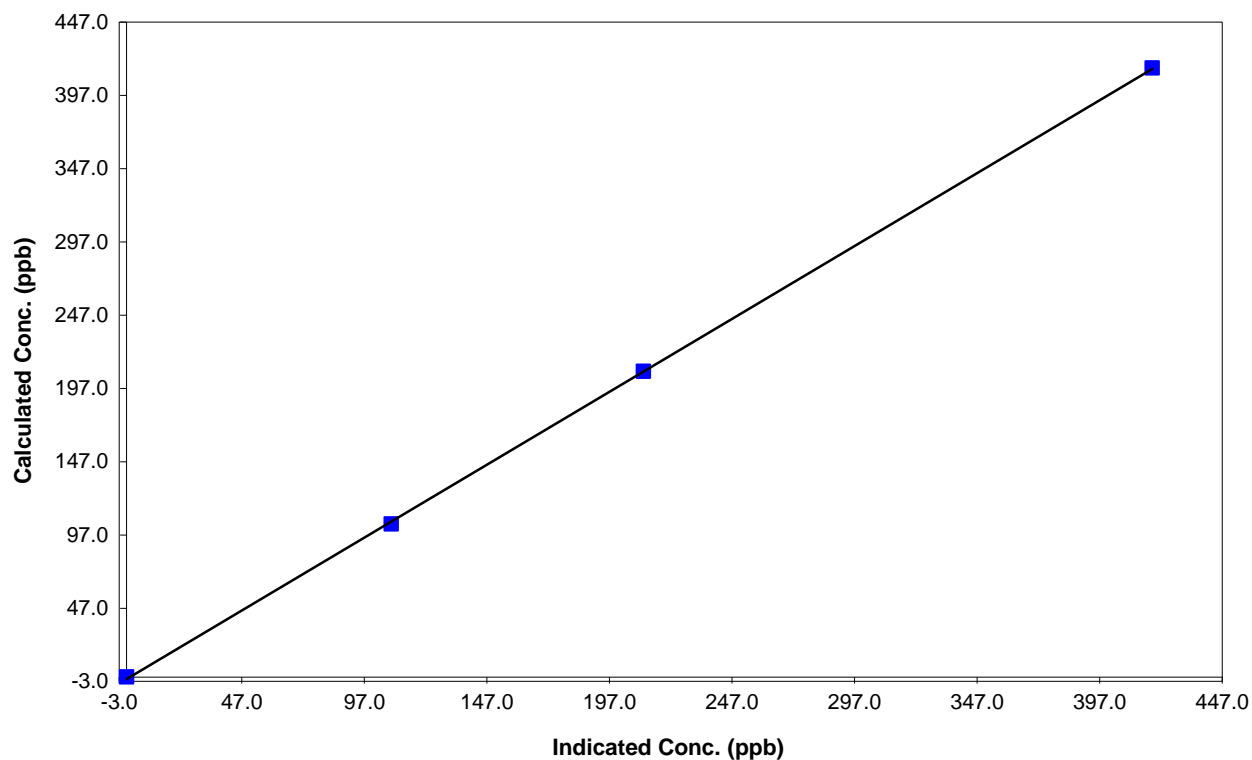
Station Information

| | | | |
|------------------|---------------|----------------------|------------------|
| Calibration Date | March 7, 2012 | Previous Calibration | February 3, 2012 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 9:55 | End Time (MST) | 15:20 |
| Analyzer make | TEI 42C | Analyzer serial # | 508011073 |

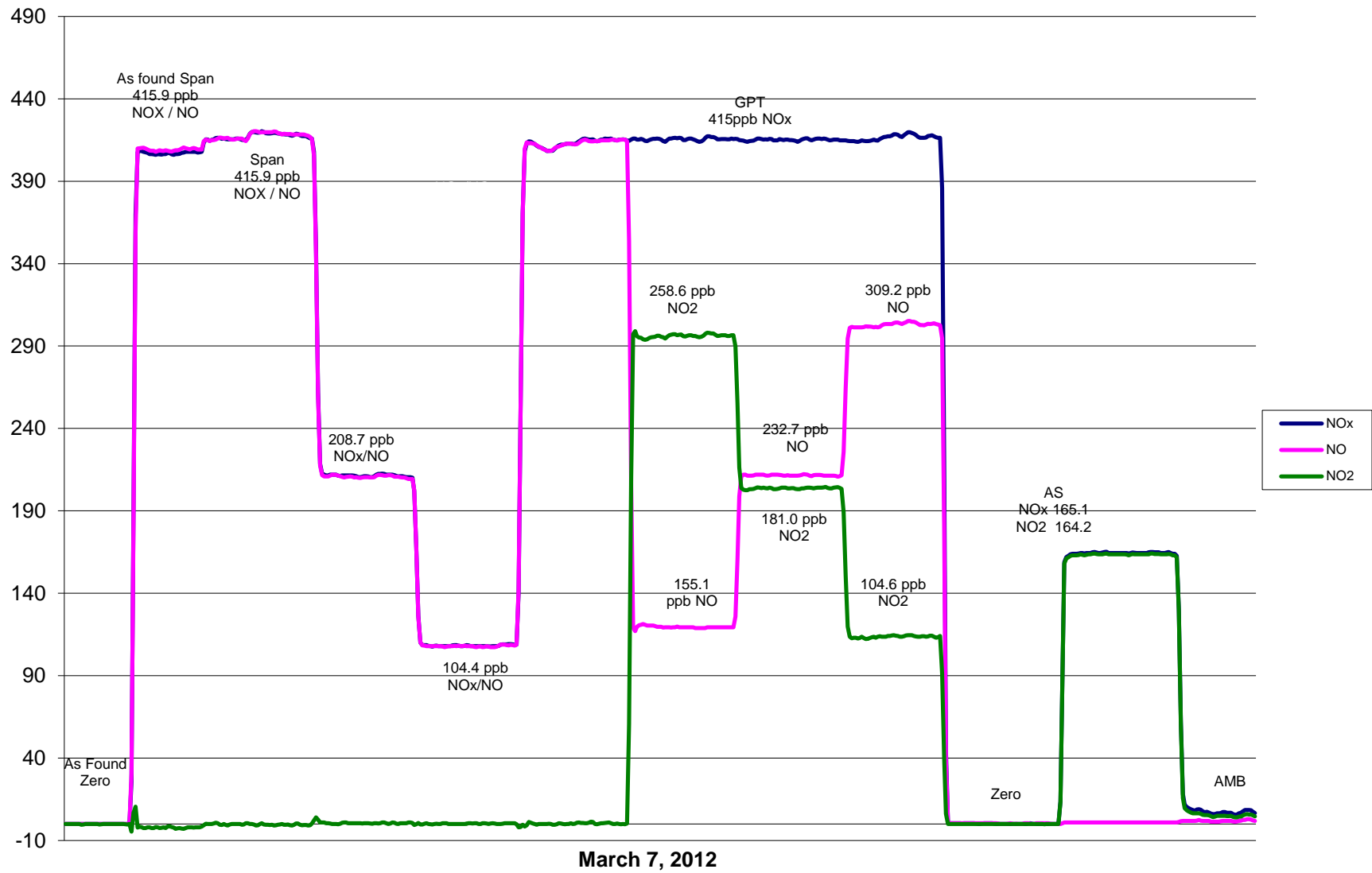
Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.0 | N/A | Correlation Coefficient | 0.999943 |
| 415.7 | 418.5 | 0.9934 | | |
| 208.7 | 210.8 | 0.9898 | Slope | 0.995497 |
| 104.4 | 108.0 | 0.9662 | | |
| | | | | |
| | | | Intercept | -1.306321 |

NO Calibration Curve



PASZA NO_x Calibration



Calibration Report



Parameter 03

Air Monitoring Network PASZA

Station Information

| | | | |
|-----------------------|-----------------|----------------------|------------------|
| Calibration Date | March 7, 2012 | Previous Calibration | February 3, 2012 |
| Station Number | 1 | Station Location | Henry Pirker |
| Reason: | Routine | Install | Removal |
| | | Other: | |
| Start Time (MST) | 13:25 | End Time (MST) | 16:35 |
| Barometric Pressure | 0.928 atm | Station Temperature | 20.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | NA | Cal Gas Expiry Date | NA |
| DACS make | CR3000 | DACS serial No. | 5408 |
| DACS voltage range | 0 - 1 volt | DACS channel # | 5 |
| | Before | | After |
| Calculated slope | 0.988095 | Calculated slope | 1.045328 |
| Calculated intercept | -0.640419 | Calculated intercept | -0.903123 |
| Analyzer make | TECO 49C | Analyzer serial # | 607415761 |

| | before | | after | |
|---------------------|-------------|-----------|-------------|-----------|
| Concentration range | 500 | ppb | 500 | ppb |
| offset | -0.6 | ppb | -0.6 | ppb |
| slope | 1.011 | | 1.011 | |
| O3 Lamp temp | 71.1 | Deg C | 71.1 | Deg C |
| Intensities | 81235/71359 | mV | 81405/71544 | mV |
| Pressure | 685.9 | inches Hg | 686.1 | inches Hg |
| Flow A | 0.717 | ccm | 0.717 | ccm |
| Flow B | 0.735 | ccm | 0.736 | ccm |

Calibration Data

| Referenced concentration (ppb) | Dilution air flow rate (cc/min) | Calculated concentration (ppm) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) |
|--------------------------------|---------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 0 | 4989 | 0.0 | 0.4 | N/A |
| 300 | 4989 | 295.5 | 283.7 | 1.0417 |
| 200 | 4989 | 203.3 | 194.6 | 1.0448 |
| 100 | 4989 | 111.0 | 108.1 | 1.0264 |
| 0 | 4989 | 0.0 | 0.4 | As found zero |
| 300 | 4989 | 295.5 | 283.7 | As found span |
| Average Correction Factor | | | | 1.0377 |

Calculated value of As Found Response: 279.2 ppm Percent Change of As Found: -5.5%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.3 | ppb | 0.3 | ppb |
| Auto span | 161.8 | ppb | 159.0 | ppb |

Notes: No adjustment made.

Calibration Performed By: Grover Christiansen

Calibration Summary



Parameter 03

Air Monitoring Network PASZA

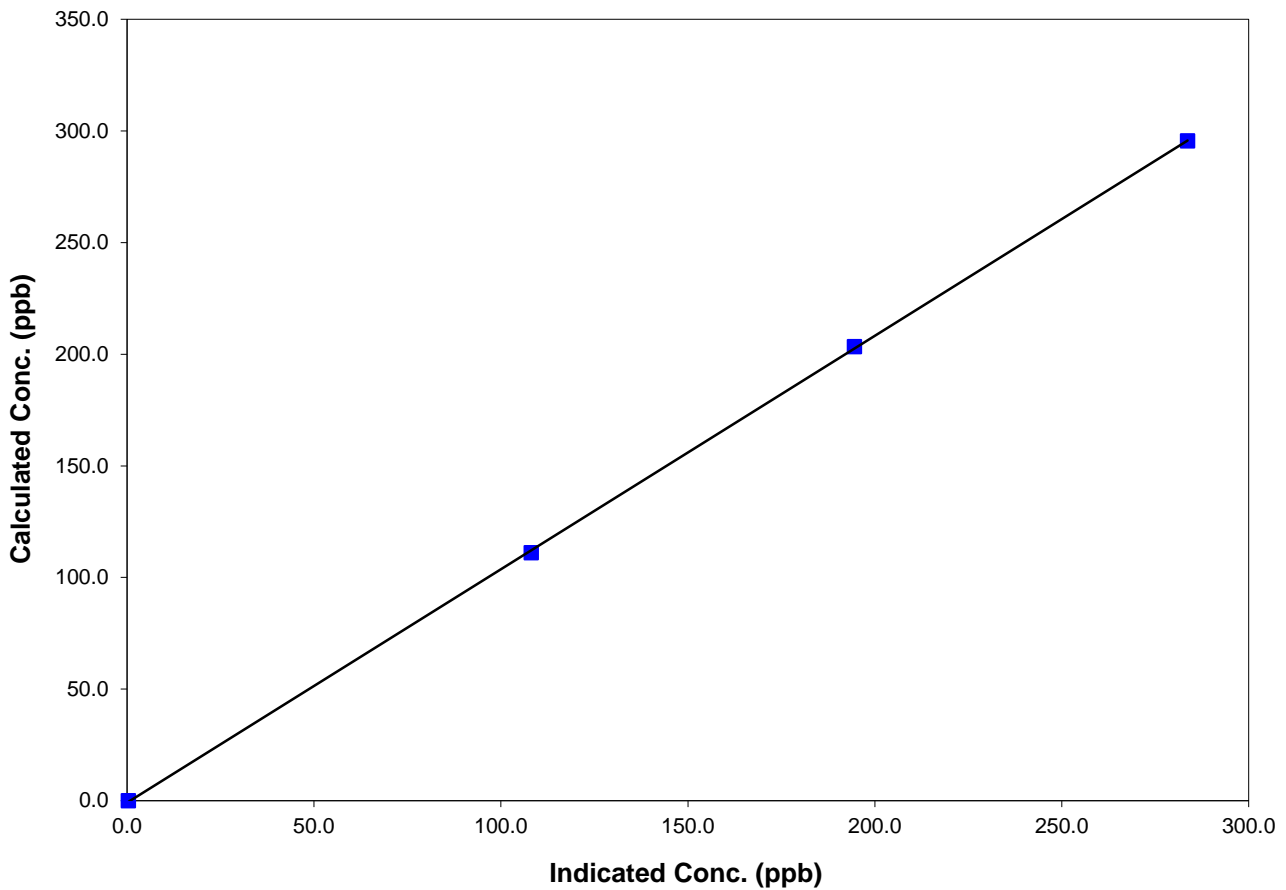
Station Information

| | | | |
|---------------------|---------------|----------------------|------------------|
| Calibration Date | March 7, 2012 | Previous Calibration | February 3, 2012 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 13:25 | End Time (MST) | 16:35 |
| Analyzer make/model | TECO 49C | Analyzer serial # | 607415761 |

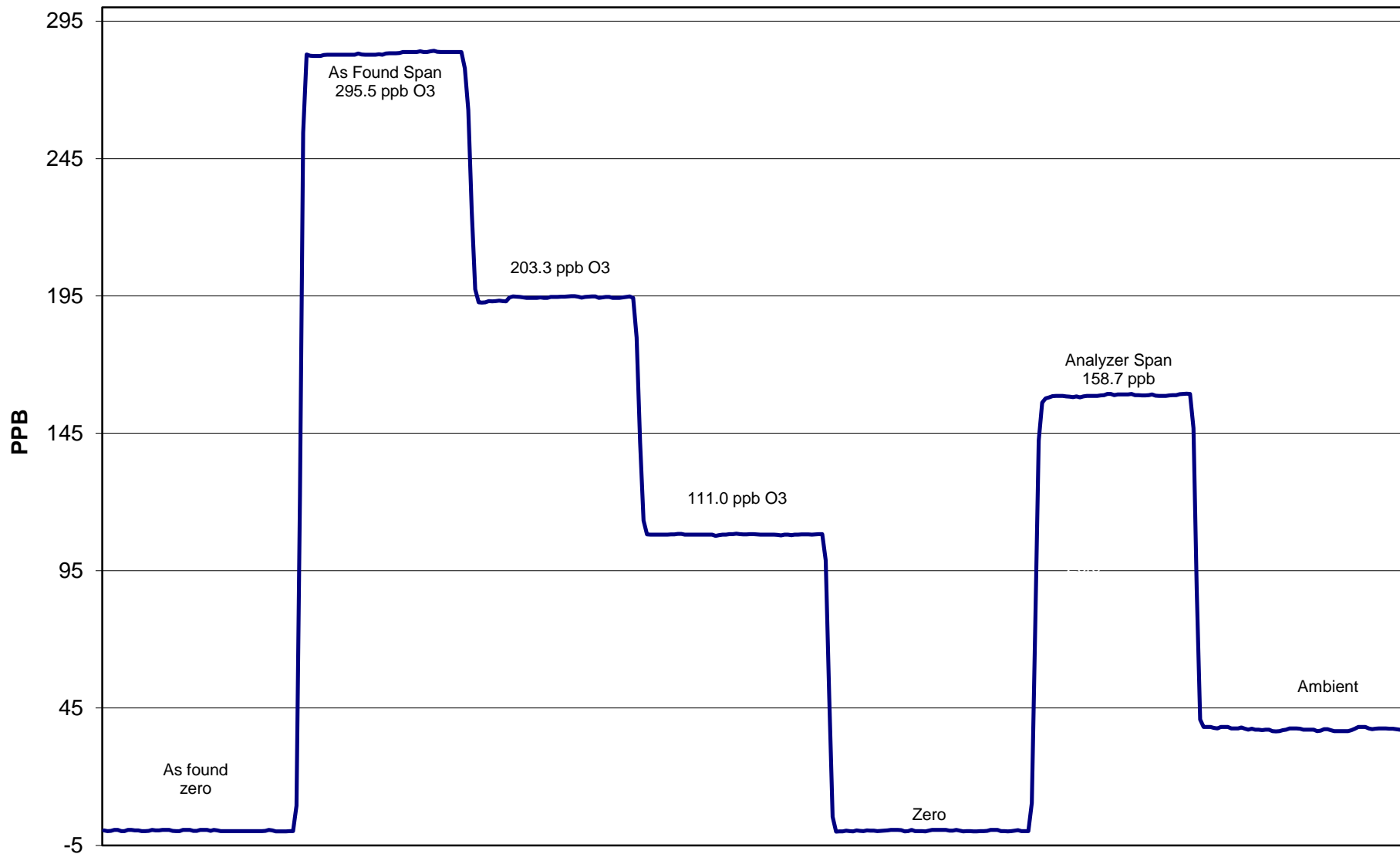
Calibration Data

| Calculated concentration (ppm) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.4 | NA | Correlation Coefficient | 0.999955 |
| 295.5 | 283.7 | 1.0417 | | |
| 203.3 | 194.6 | 1.0448 | Slope | 1.045328 |
| 111.0 | 108.1 | 1.0264 | | |
| | | | | |
| | | | Intercept | -0.903123 |

O3 Calibration Curve



O3 Calibration



March 7, 2012

Calibration Report



Parameter CO

Air Monitoring Network PASZA

Station Information

| | | | |
|----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | March 6, 2012 | Previous Calibration | February 2, 2012 |
| Station Number | 1 | Station Location | Henry Pirker |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | <input type="checkbox"/> Other: | |
| Start Time (MST) | 11:35 | End Time (MST) | 15:25 |
| Barometric Pressure | 0.920 ATM | Station Temperature | 21.0 Deg C |
| Calibrator | EnviroNics | Serial Number | 3474 |
| Cal Gas Conc | 3000 ppm | Cal Gas Expiry Date | AUG 28/05 |
| | | Cal Gas Cylinder # | AAL20565 |
| DACS make | CR3000 | DACS serial No. | 5408 |
| DACS voltage range | 0 - 1 volt | DACS channel # | 9 |
| | Before | | After |
| Calculated slope | 1.000991 | Calculated slope | 1.008923 |
| Calculated intercept | -0.559397 | Calculated intercept | -0.496863 |
| Analyzer make | TEI Model 48C | Analyzer serial # | 508011062 |

| | before | | after | |
|---------------------|--------|-------|--------|-------|
| Concentration range | 0 - 50 | ppm | 0 - 50 | ppm |
| CO span setting | 1.088 | | 1.088 | |
| CO zero setting | 2.484 | | 2.459 | |
| Sample pressure | 683.2 | mm Hg | 693.2 | mm Hg |
| Sample Flow | 1.140 | LPM | 1.151 | 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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4988 | 0.00 | 0.00 | 0.36 | N/A |
| 4988 | 39.83 | 23.77 | 23.97 | 0.9913 |
| 4988 | 19.90 | 11.92 | 12.39 | 0.9624 |
| 4988 | 9.93 | 5.96 | 6.53 | 0.9127 |
| | | | | |
| 4988 | 0.00 | 0.00 | 0.36 | As Found Zero |
| 4988 | 39.85 | 23.78 | 23.97 | As Found Span |
| Average Correction Factor | | | | 0.9555 |

Calculated value of As Found Response: 23.080 ppm Percent Change of As Found: 2.9%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.03 | ppm | 0.03 | ppm |
| Auto span | 19.56 | ppm | 19.46 | ppm |

Notes: No adjustments needed

Calibration Performed By: Grover Christiansen

Calibration Summary



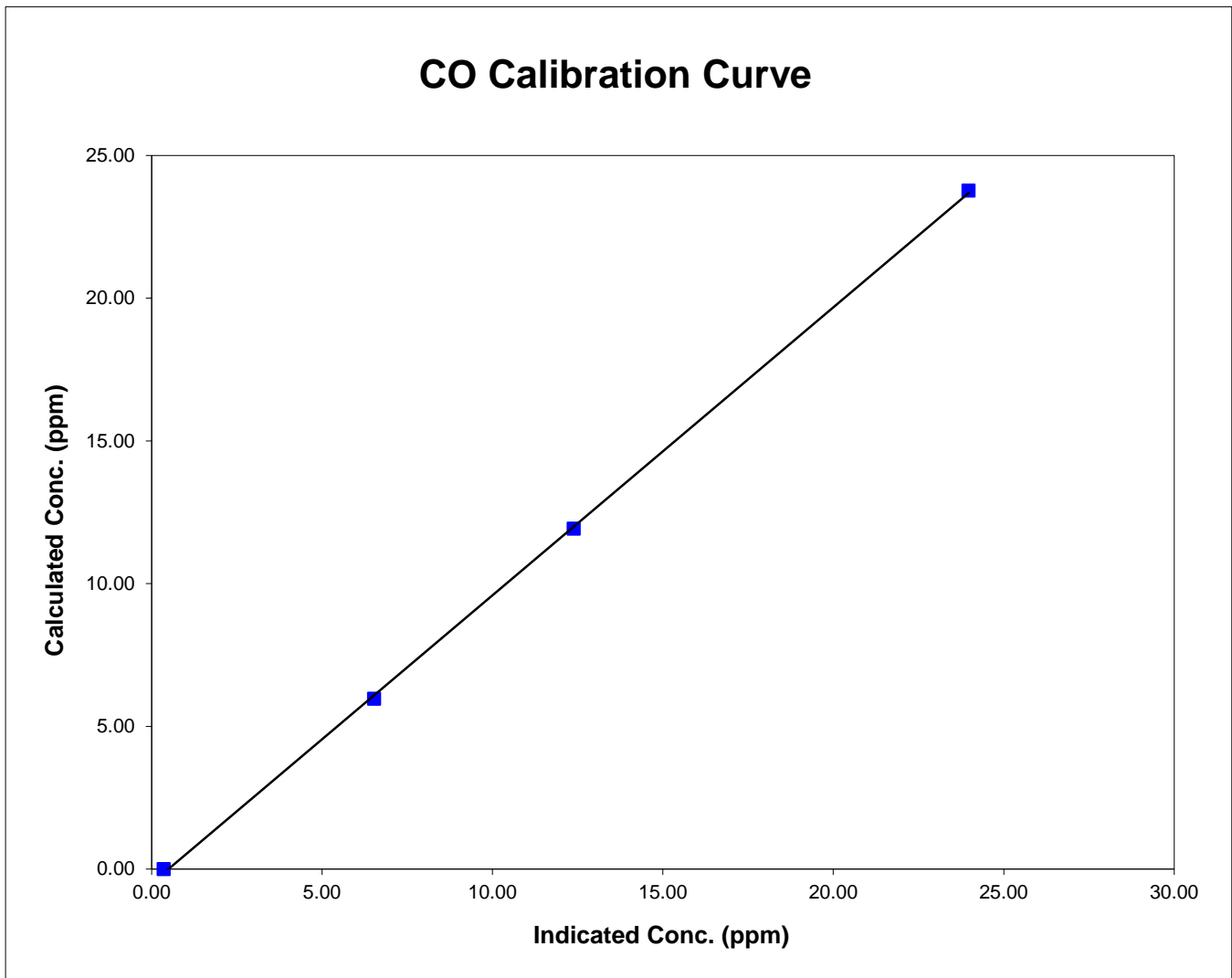
Parameter CO
 Air Monitoring Network PASZA

Station Information

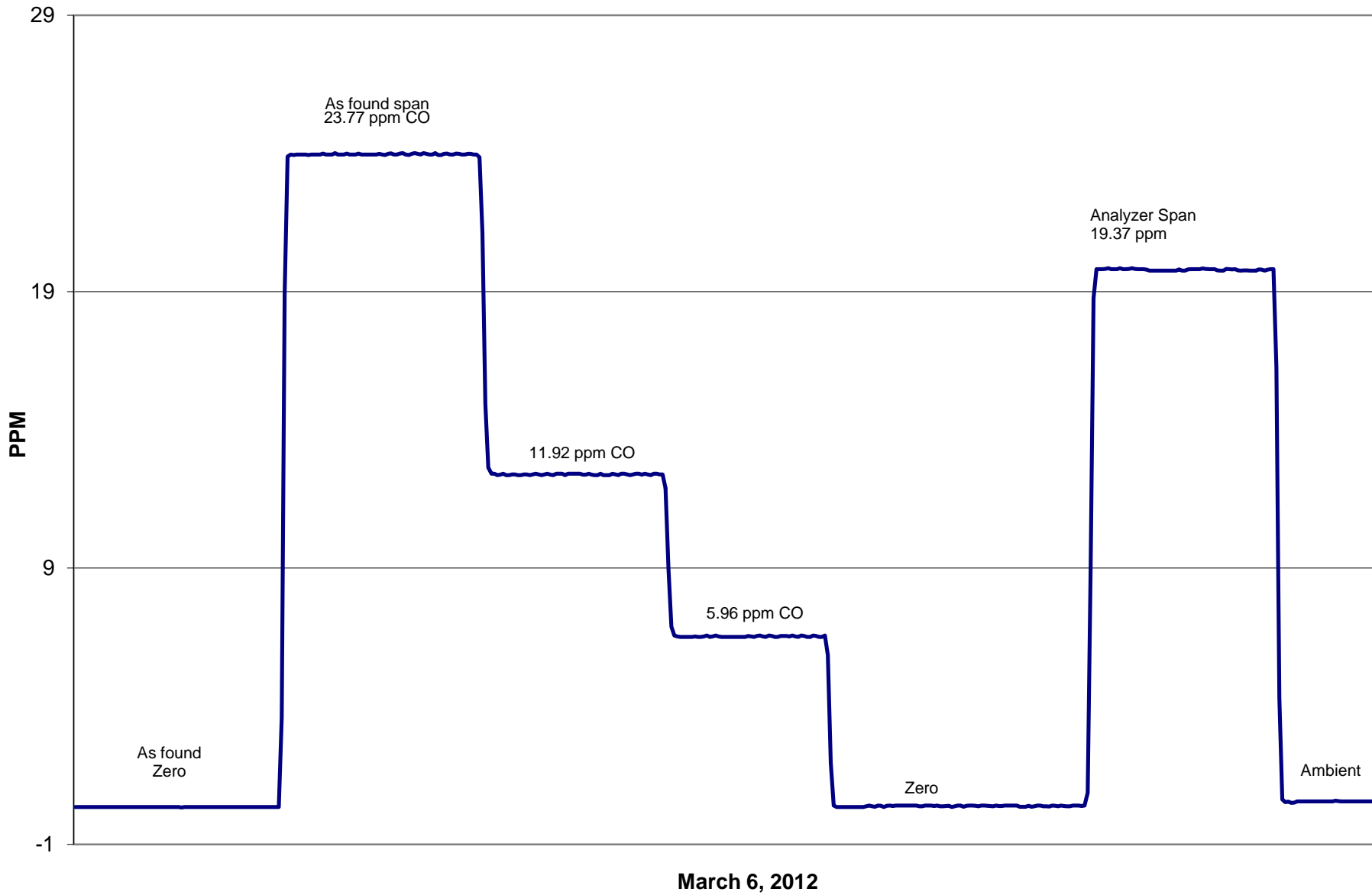
| | | | |
|---------------------|---------------|----------------------|------------------|
| Calibration Date | March 6, 2012 | Previous Calibration | February 2, 2012 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 11:35 | End Time (MST) | 15:25 |
| Analyzer make/model | TEI Model 48C | Analyzer serial # | 508011062 |

Calibration Data

| Calculated concentration (ppm) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.000 | 0.357 | N/A | Correlation Coefficient | 0.999845 |
| 23.766 | 23.974 | 0.9913 | | |
| 11.921 | 12.387 | 0.9624 | Slope | 1.008923 |
| 5.960 | 6.531 | 0.9127 | | |
| | | | Intercept | -0.496863 |



CO Calibration



Calibration Report



Parameter THC

Air Monitoring Network PASZA

Station Information

| | | | |
|-----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | March 6, 2012 | Previous Calibration | February 2, 2012 |
| Station Number | 1 | Station Location | Henry Pirker |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | <input type="checkbox"/> Other: |
| Start Time (MST) | 14:00 | End Time (MST) | 17:44 |
| Barometric Pressure | 0.920 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | 701 ppm CH4/ 299 ppm C3H8 | Cal Gas Expiry Date | 2/4/2010 |
| Cal Gas CH4 equiv | 1523.25 ppm | Cal Gas Cylinder # | ALM 004476 |
| DACS make | CR3000 | DACS serial No. | 5408 |
| DACS voltage range | 0 - 1 volt | DACS channel # | 9 |
| | <u>Before</u> | | <u>After</u> |
| Calculated slope | 1.046026 | Calculated slope | 1.056003 |
| Calculated intercept | -0.262011 | Calculated intercept | -0.220889 |
| Analyzer make | TEI Model 51C-LT | Analyzer serial # | 51CLT-79009-390 |

| | before | | after | |
|---------------------|--------|---------|--------|---------|
| Concentration range | 0 - 25 | ppm | 0 - 25 | ppm |
| THC sample pressure | 6.50 | psi | 6.50 | psi |
| THC span counts | 9616 | capture | 9616 | capture |
| THC zero counts | 447 | capture | 447 | capture |

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 | 0.20 | N/A |
| 4989 | 69.79 | 21.01 | 20.13 | 1.0439 |
| 4989 | 29.87 | 9.07 | 8.72 | 1.0394 |
| 4989 | 9.92 | 3.02 | 3.14 | 0.9639 |
| | | | | |
| 4989 | 0.00 | 0.00 | 0.20 | As Found Zero |
| 4989 | 69.79 | 21.01 | 20.13 | As Found Span |
| Average Correction Factor | | | | 1.0157 |

Calculated value of As Found Response: 20.591 ppm Percent Change of As Found: 2.0%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.10 | ppm | -0.01 | ppm |
| Auto span | 21.83 | ppm | 22.94 | ppm |

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary



Parameter THC
 Air Monitoring Network PASZA

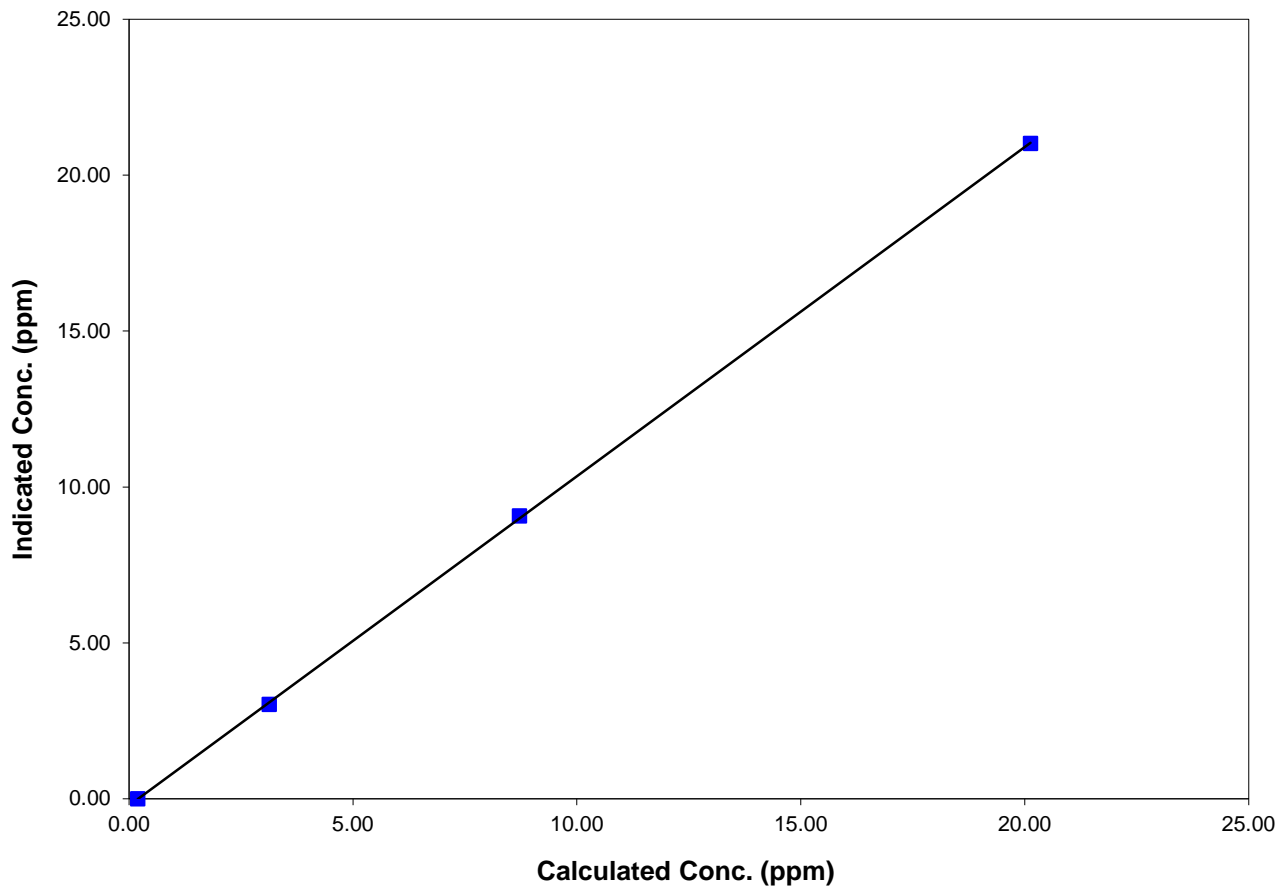
Station Information

| | | | |
|---------------------|------------------|----------------------|------------------|
| Calibration Date | March 6, 2012 | Previous Calibration | February 2, 2012 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 14:00 | End Time (MST) | 17:44 |
| Analyzer make/model | TEI Model 51C-LT | Analyzer serial # | 51CLT-79009-390 |

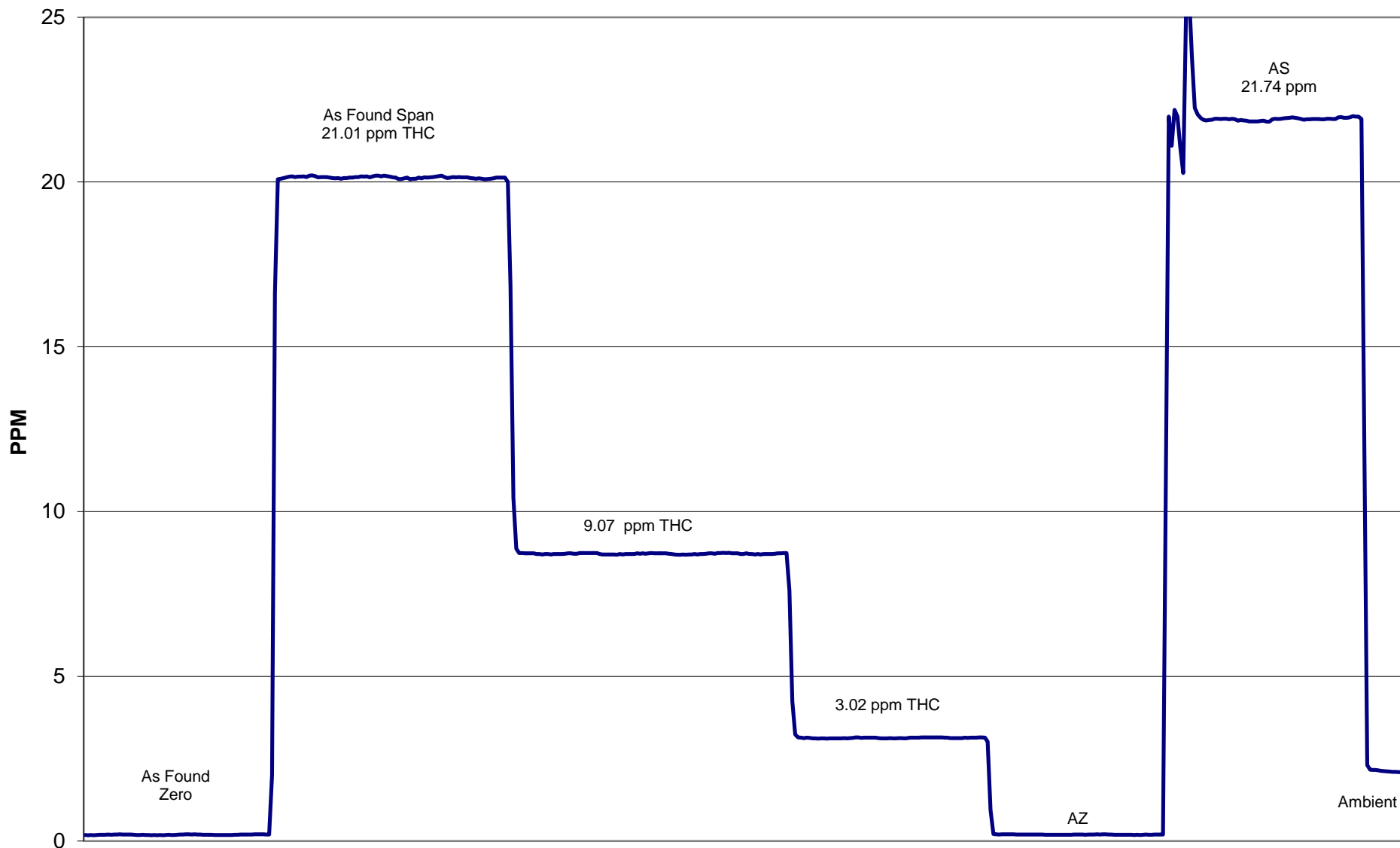
Calibration Data

| Calculated concentration (ppm) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.000 | 0.196 | N/A | Correlation Coefficient | 0.999957 |
| 21.014 | 20.130 | 1.0439 | | |
| 9.066 | 8.722 | 1.0394 | Slope | 1.056003 |
| 3.023 | 3.136 | 0.9639 | | |
| | | | Intercept | -0.220889 |

THC Calibration Curve



THC Calibration



March 6, 2012

Calibration Report



Parameter
 Air Monitoring Network

Station Information

| | | | | | |
|----------------------|---|----------------------------------|----------------------------------|---------------------------------|-------|
| Calibration Date | March 8, 2012 | | Previous Calibration | February 2, 2012 | |
| Station Number | 1 | | Station Location | Henry Pirker | |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal | <input type="checkbox"/> Other: | |
| Start Time (MST) | 11:25 | | End Time (MST) | 15:36 | |
| Barometric Pressure | 0.924 | ATM | Station Temperature | 20.0 | Deg C |
| Calibrator | EnviroNics 6100 | | Serial Number | 3474 | |
| Cal Gas Conc | 5.77 | ppb | Cal Gas Expiry Date | 9/3/2011 | |
| | | | Cal Gas Cylinder # | BLM001434 | |
| DACS make | CR3000 | | DACS serial No. | 5408 | |
| DACS voltage range | 0 - 1 volt | | DACS channel # | 9 | |
| | Before | | | After | |
| Calculated slope | 0.992888 | | Calculated slope | 1.028945 | |
| Calculated intercept | -0.040949 | | Calculated intercept | -0.210201 | |
| Analyzer make | TEI 45C | | Analyzer serial # | 630718528 | |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 100 | ppb | 0 - 100 | ppb |
| Coefficient | 1.066 | | 1.066 | |
| Background | 10.8 | | 10.8 | |
| Pressure | 658.7 | mm Hg | 657.6 | mm Hg |
| Flow | 0.457 | ccm | 0.457 | ccm |
| Lamp Voltage | 822 | V | 822 | V |

Calibration Data

| Dilution air flow rate (cc/min) | Source gas flow rate (cc/min) | Calculated concentration (ppb) (Cc) | | Correction factor (Cc/lc) |
|---------------------------------|-------------------------------|-------------------------------------|-------|---------------------------|
| 4989 | 0.00 | 0.00 | 0.16 | N/A |
| 4989 | 69.78 | 79.59 | 77.57 | 1.0260 |
| 4989 | 34.88 | 40.06 | 39.09 | 1.0249 |
| 4989 | 8.96 | 10.34 | 10.33 | 1.0010 |
| | | | | |
| 4989 | 0.00 | 0.00 | 0.16 | As Found Zero |
| 4989 | 69.78 | 79.59 | 77.57 | As Found Span |
| Average Correction Factor | | | | 1.0173 |

Calculated value of As Found Response: 76.8 ppb Percent Change of As Found: 3.5%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | -0.29 | ppb | -0.07 | ppb |
| Auto span | 33.10 | ppb | 32.90 | ppb |

Notes: No span adjustment made.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter
 Air Monitoring Network



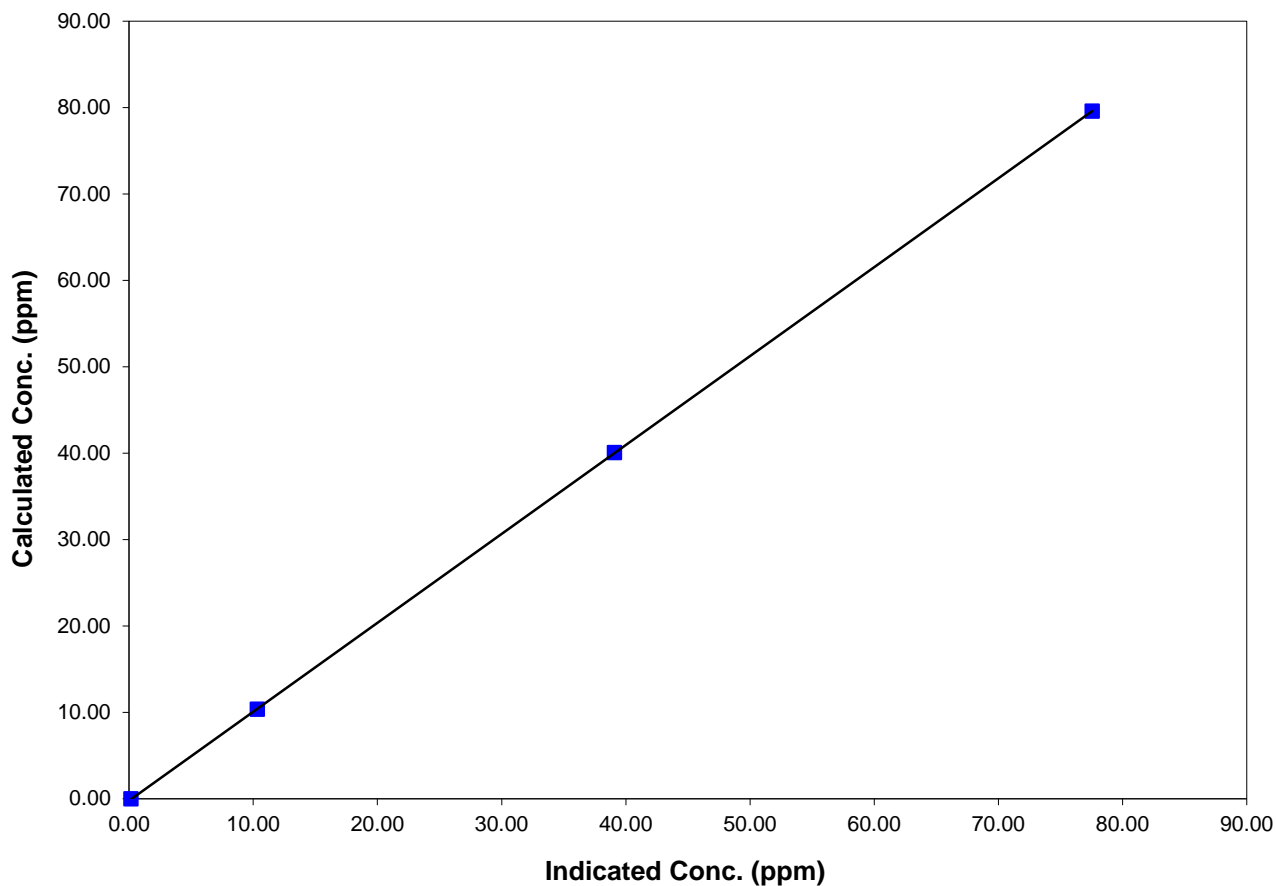
Station Information

| | | | |
|---------------------|---------------|----------------------|------------------|
| Calibration Date | March 8, 2012 | Previous Calibration | February 2, 2012 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 11:25 | End Time (MST) | 15:36 |
| Analyzer make/model | TEI 45C | Analyzer serial # | 630718528 |

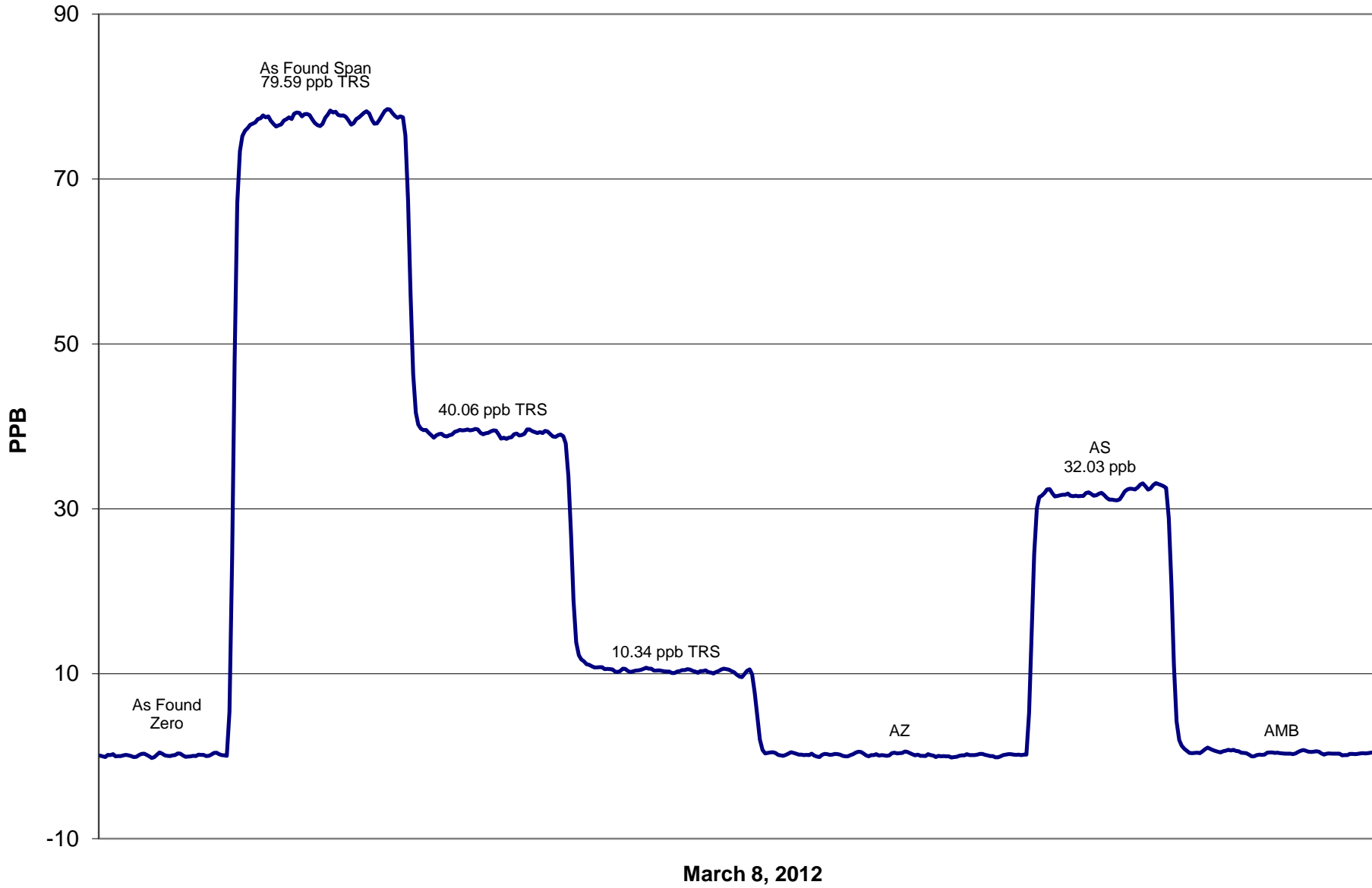
Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| | | | | |
| 0.000 | 0.162 | N/A | | |
| 79.590 | 77.571 | 1.0260 | Correlation Coefficient | 0.999997 |
| 40.060 | 39.088 | 1.0249 | | |
| 10.344 | 10.334 | 1.0010 | Slope | 1.028945 |
| | | | Intercept | -0.210201 |

TRS Calibration Curve



TRS Calibration



Calibration Report



Parameter SO₂

Air Monitoring Network PASZA

Station Information

| | | | |
|-----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | March 21, 2012 | Previous Calibration | February 29, 2012 |
| Station Number | 2 | Station Location | Evergreen Park |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | <input type="checkbox"/> Other: |
| Start Time (MST) | 10:48 | End Time (MST) | 15:17 |
| Barometric Pressure | 0.916 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | EnviroNics | Serial Number | 3474 |
| Cal Gas Concentration | 49.8 ppm | Cal Gas Expiry Date | 3/28/2013 |
| Correction factor | 0.031137 | Cal Gas Cylinder # | SGAL3245 |
| DACS make | CR3000 | DACS serial No. | 5236 |
| DACS voltage range | 0 - 5 volt | DACS channel # | 6 |
| | <u>Before</u> | | <u>After</u> |
| Calculated slope | 0.998624 | Calculated slope | 0.995205 |
| Calculated intercept | -0.791909 | Calculated intercept | -0.077883 |
| Analyzer make | Teco 43i | Analyzer serial # | 701120008 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 500 | ppb | 0 - 500 | ppb |
| Background | 11.2 | | 12.1 | |
| coefficient | 1.072 | | 1.159 | |
| Lamp Voltage | 830 | volts | 830 | volts |
| Chamber Temp | 45.2 | Deg C | 45.2 | Deg C |
| Perm Gas Temp | 45 | Deg C | 45 | Deg C |
| Pressure | 661.9 | mm Hg | 662.8 | mm Hg |
| Sample Flow | 0.452 | ccm | 0.453 | ccm |
| Lamp Intensity | 90 | % | 90 | % |

| Dilution air flow rate (cc/min) | Corrected gas flow rate (cc/min) | Calculated concentration (ppb) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) |
|---------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4989 | 0.0 | 0.00 | -0.4 | N/A |
| 4989 | 39.84 | 394.5 | 396.8 | 0.9943 |
| 4989 | 20.15 | 200.3 | 200.1 | 1.0011 |
| 4989 | 10.10 | 100.6 | 102.6 | 0.9806 |
| | | | | |
| 4989 | 0.0 | 0.0 | -0.3 | As Found Zero |
| 4989 | 39.84 | 394.5 | 361.3 | As Found Span |
| Average Correction Factor | | | | 0.9920 |

Calculated value of As Found Response: 360.398 ppm Percent Change of As Found: 8.7%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.6 | ppm | -0.6 | ppm |
| Auto span | 292.7 | ppm | 286.7 | ppm |

Notes: Flash lamp socket needs replacement. Adjusted Span

Calibration Performed By: Grover Christiansen

Calibration Summary



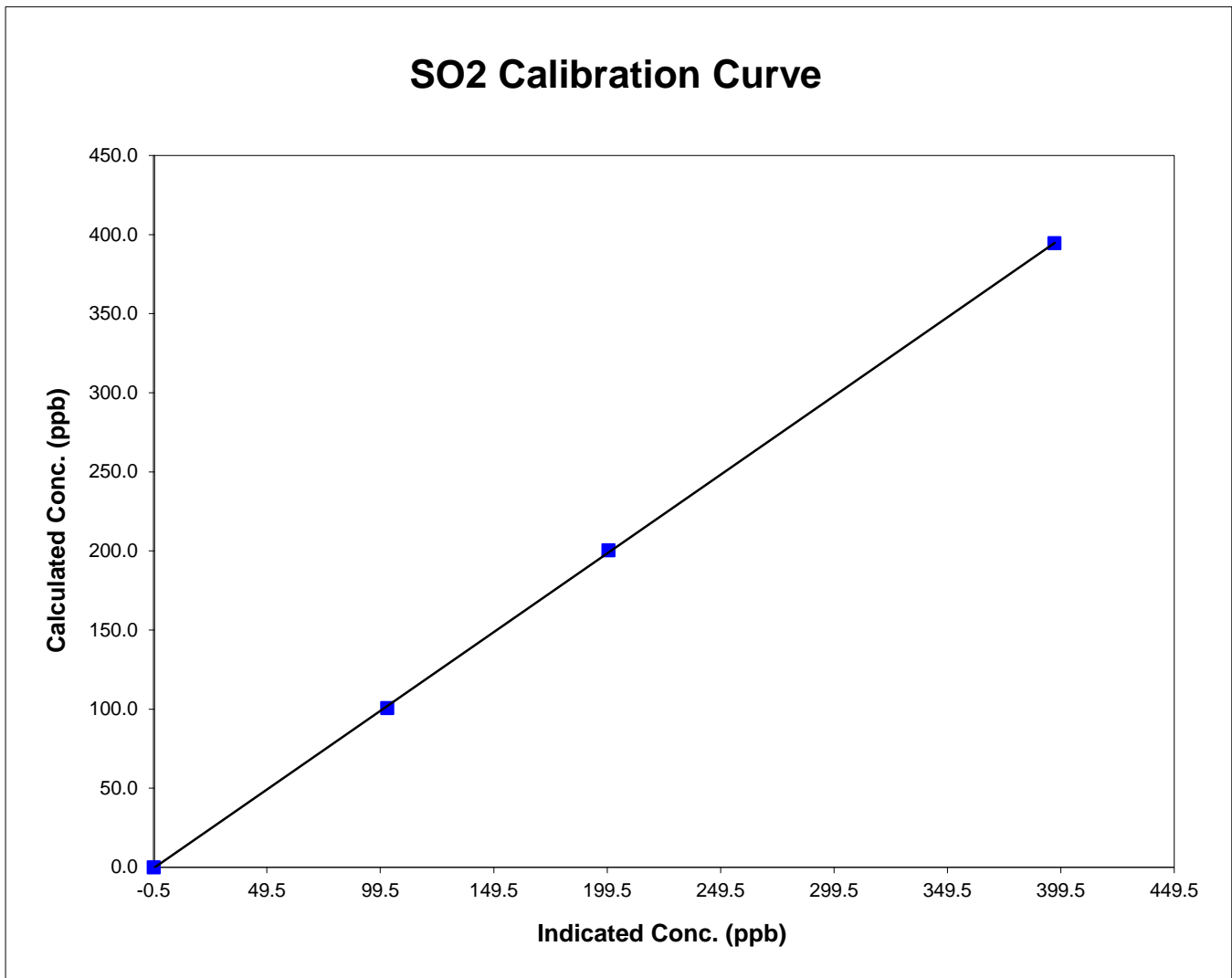
Parameter SO2
 Air Monitoring Network PASZA

Station Information

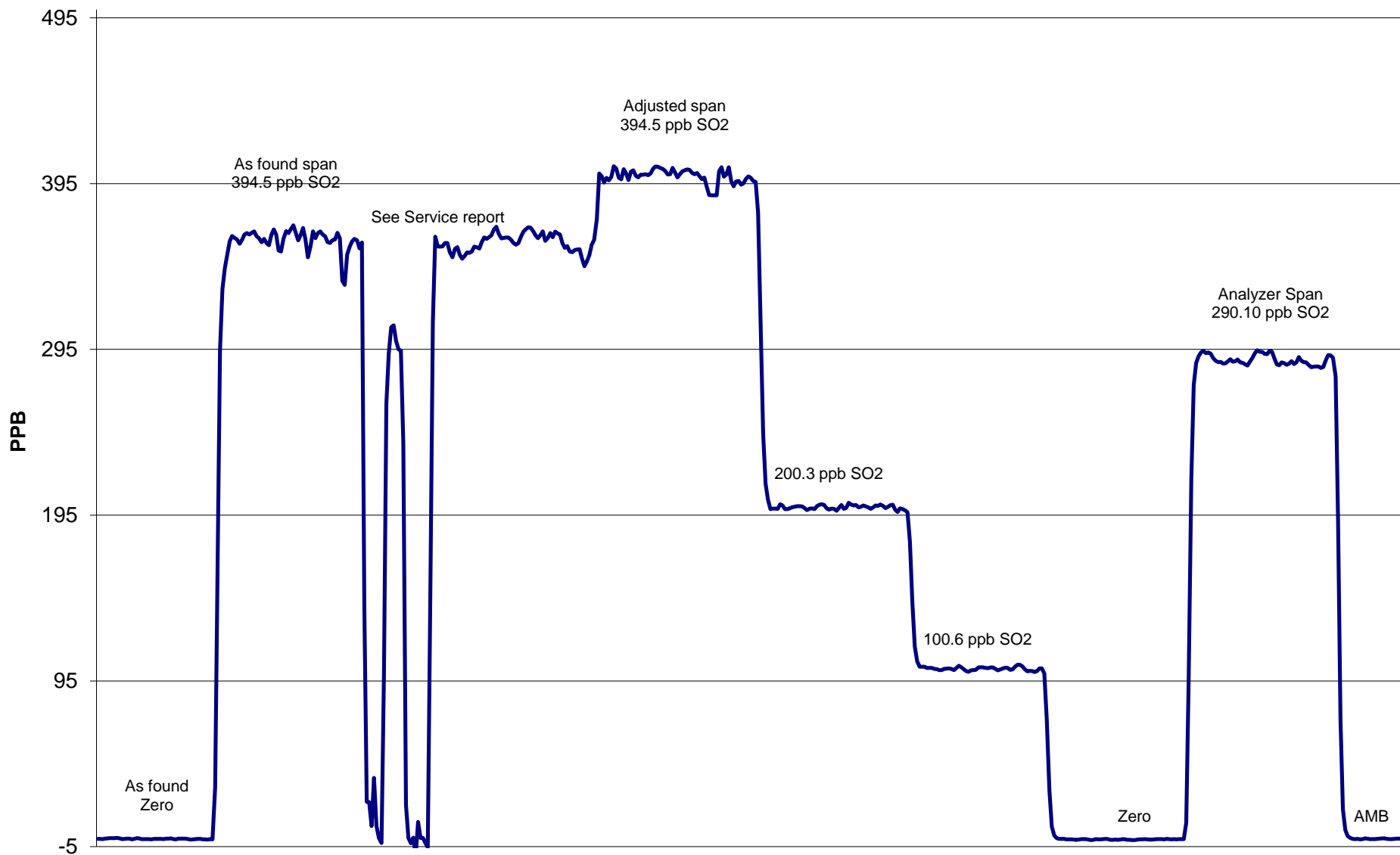
| | | | |
|---------------------|----------------|----------------------|-------------------|
| Calibration Date | March 21, 2012 | Previous Calibration | February 29, 2012 |
| Station Number | 2 | Station Location | Evergreen Park |
| Start Time (MST) | 10:48 | End Time (MST) | 15:17 |
| Analyzer make/model | Teco 43i | Analyzer serial # | 701120008 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | -0.4 | N/A | Correlation Coefficient | 0.999955 |
| 394.5 | 396.8 | 0.9943 | | |
| 200.3 | 200.1 | 1.0011 | Slope | 0.995205 |
| 100.6 | 102.6 | 0.9806 | | |
| | | | Intercept | -0.077883 |



SO2 Calibration



March 21, 2012

Calibration Report



Parameter SO₂

Air Monitoring Network PASZA

Station Information

| | | | |
|-----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | March 24, 2012 | Previous Calibration | March 21, 2012 |
| Station Number | 2 | Station Location | Evergreen Park |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | <input type="checkbox"/> Other: |
| Start Time (MST) | 9:00 | End Time (MST) | 14:03 |
| Barometric Pressure | 0.928 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | Envionics | Serial Number | 3474 |
| Cal Gas Concentration | 49.8 ppm | Cal Gas Expiry Date | 3/28/2013 |
| Correction factor | 0.031545 | Cal Gas Cylinder # | SGAL3245 |
| DACS make | CR3000 | DACS serial No. | 5236 |
| DACS voltage range | 0 - 5 volt | DACS channel # | 6 |
| | <u>Before</u> | | <u>After</u> |
| Calculated slope | 0.995205 | Calculated slope | 1.006711 |
| Calculated intercept | -0.077883 | Calculated intercept | -2.167942 |
| Analyzer make | Teco 43i | Analyzer serial # | 701120008 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 500 | ppb | 0 - 500 | ppb |
| Background | 12.1 | | 11.6 | |
| coefficient | 1.159 | | 1.193 | |
| Lamp Voltage | 830 | volts | 828 | volts |
| Chamber Temp | 45.2 | Deg C | 45.2 | Deg C |
| Perm Gas Temp | 45 | Deg C | 45 | Deg C |
| Pressure | 672.8 | mm Hg | 671.9 | mm Hg |
| Sample Flow | 0.452 | ccm | 0.456 | ccm |
| Lamp Intensity | 90 | % | 90 | % |

| Dilution air flow rate (cc/min) | Corrected gas flow rate (cc/min) | Calculated concentration (ppb) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) |
|---------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4989 | 0.0 | 0.00 | 0.2 | N/A |
| 4989 | 39.84 | 394.5 | 393.3 | 1.0032 |
| 4989 | 20.15 | 200.3 | 201.4 | 0.9945 |
| 4989 | 10.10 | 100.6 | 104.5 | 0.9626 |
| | | | | |
| 4989 | 0.0 | 0.0 | 0.6 | As Found Zero |
| 4989 | 39.84 | 394.5 | 405.5 | As Found Span |
| Average Correction Factor | | | | 0.9868 |

Calculated value of As Found Response: 402.876 ppm Percent Change of As Found: -2.1%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.6 | ppm | 0.4 | ppm |
| Auto span | 292.7 | ppm | 283.9 | ppm |

Notes: Still waiting for fan, socket & lamp installed.

Calibration Performed By: Grover Christiansen

Calibration Summary



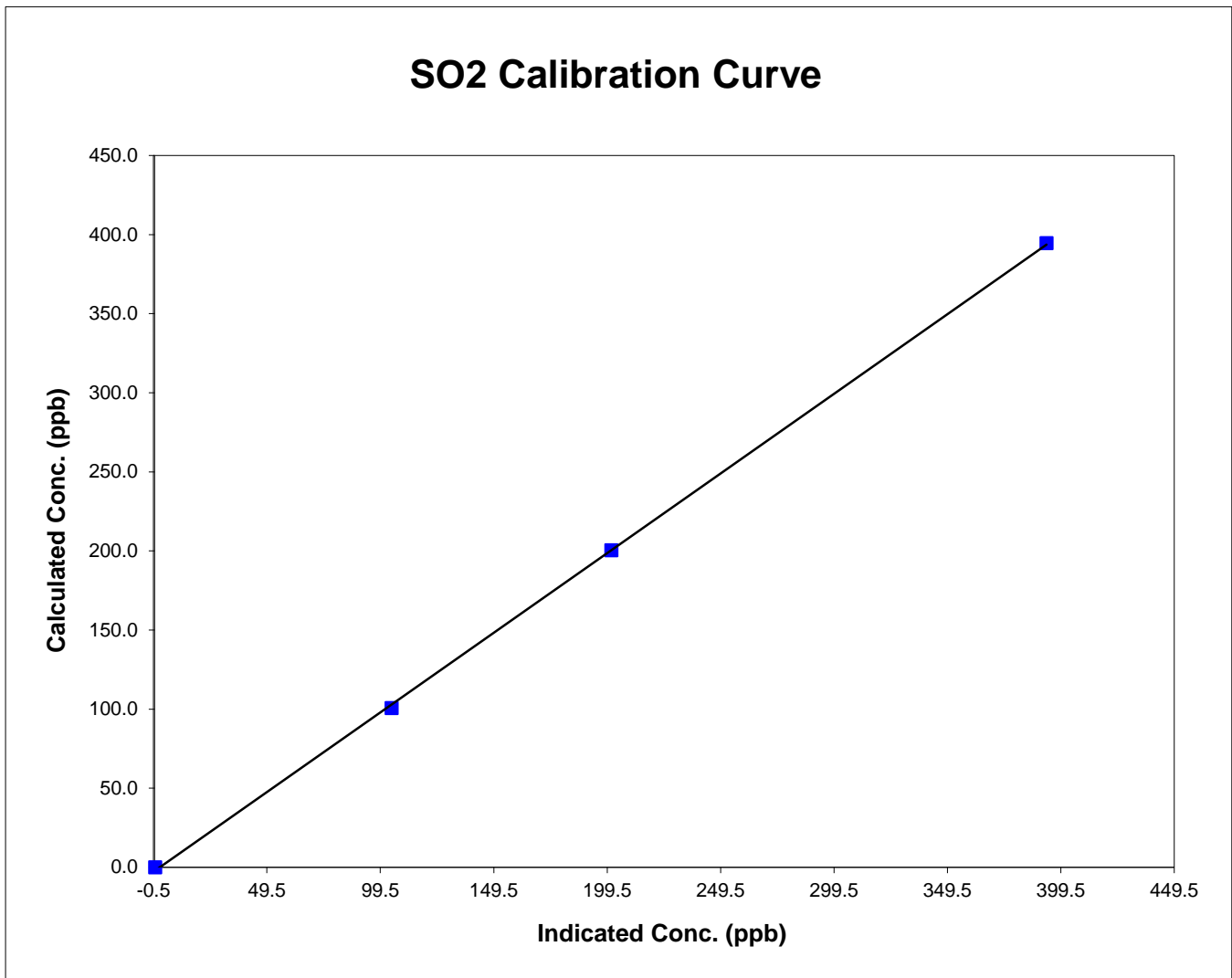
Parameter SO2
 Air Monitoring Network PASZA

Station Information

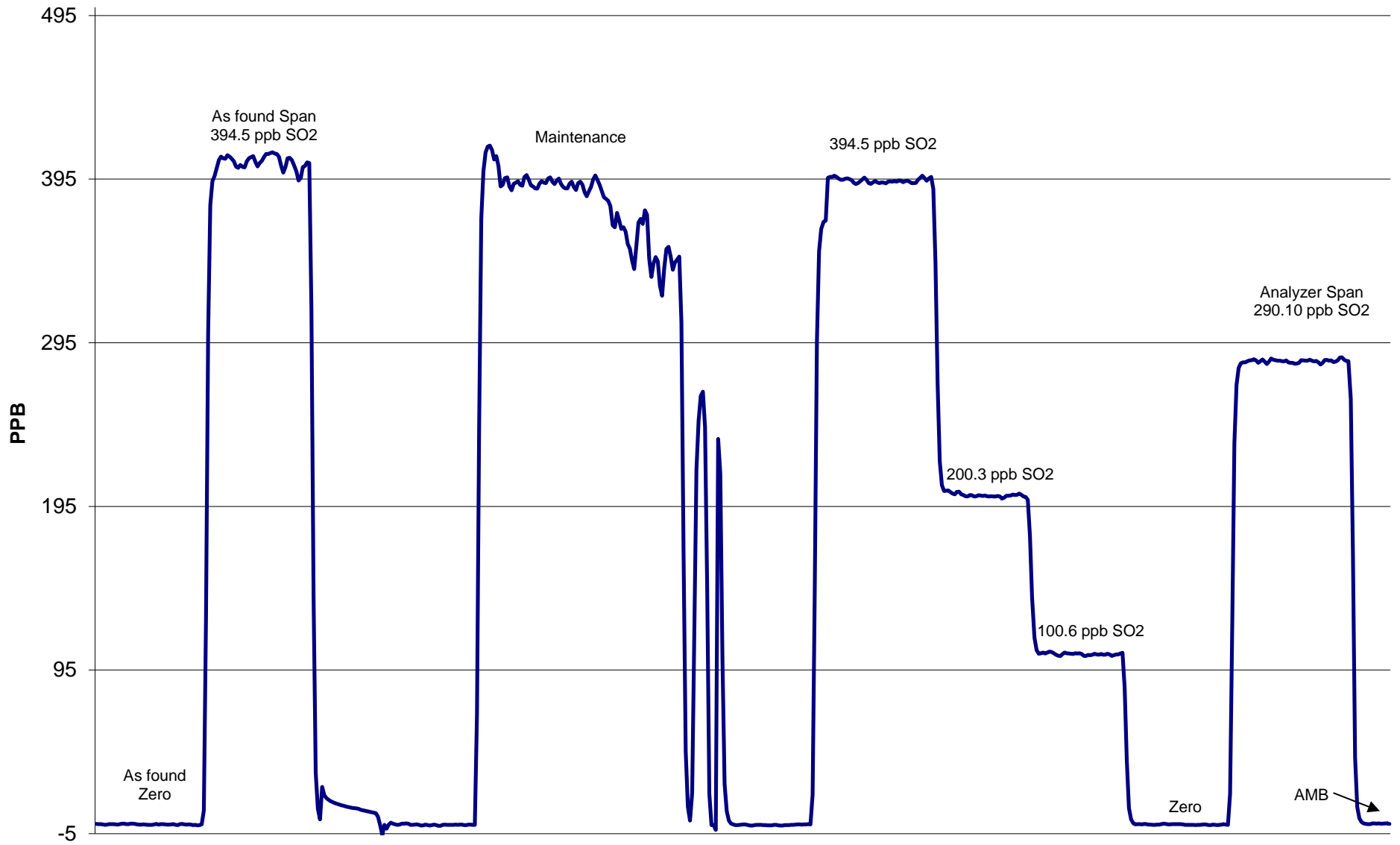
| | | | |
|---------------------|----------------|----------------------|----------------|
| Calibration Date | March 24, 2012 | Previous Calibration | March 21, 2012 |
| Station Number | 2 | Station Location | Evergreen Park |
| Start Time (MST) | 9:00 | End Time (MST) | 14:03 |
| Analyzer make/model | Teco 43i | Analyzer serial # | 701120008 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.2 | N/A | Correlation Coefficient | 0.999877 |
| 394.5 | 393.3 | 1.0032 | | |
| 200.3 | 201.4 | 0.9945 | Slope | 1.006711 |
| 100.6 | 104.5 | 0.9626 | | |
| | | | Intercept | -2.167942 |



SO2 Calibration



March 24, 2012

Calibration Report



Parameter TRS

Air Monitoring Network PASZA

Station Information

| | | | |
|----------------------|----------------|----------------------|-------------------|
| Calibration Date | March 21, 2012 | Previous Calibration | February 29, 2012 |
| Station Number | 2 | Station Location | Evergreen Park |
| Reason: | Routine | Install | Removal |
| | | Other: | |
| Start Time (MST) | 8:55 | End Time (MST) | 12:24 |
| Barometric Pressure | 0.913 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | EnviroNics | Serial Number | 3474 |
| Cal Gas Conc | 5.77 ppm | Cal Gas Expiry Date | 9/3/2011 |
| Correction factor | 0.031035 | Cal Gas Cylinder # | BLM1715 |
| DACS make | CR3000 | DACS serial No. | 5236 |
| DACS voltage range | 0 - 5 volt | DACS channel # | 5 |
| | Before | | After |
| Calculated slope | 0.997122 | Calculated slope | 1.000745 |
| Calculated intercept | -0.105565 | Calculated intercept | -0.210469 |
| Analyzer make | TEI Model 43C | Analyzer serial # | 436610005 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 100 | ppb | 0 - 100 | ppb |
| Background | 19.7 | ppb | 19.7 | ppb |
| coefficient | 0.922 | | 0.922 | |
| Lamp Voltage | 812 | volts | 812 | volts |
| Chamber Temp | 45 | Deg C | 44.3 | Deg C |
| Perm Gas Temp | 45.01 | Deg C | 44.97 | Deg C |
| Pressure | 639.7 | mm Hg | 639.5 | mm Hg |
| Sample Flow | 0.473 | ccm | 0.473 | ccm |
| Lamp Intensity | 45,204 | mv | 45,499 | mv |

Calibration Data

| Dilution air flow rate (cc/min) | Corrected gas flow rate (cc/min) | Calculated concentration (ppb) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) |
|---------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4989 | 0.00 | 0.00 | 0.0 | N/A |
| 4989 | 69.81 | 79.62 | 79.8 | 0.9979 |
| 4989 | 34.88 | 40.06 | 40.1 | 0.9983 |
| 4989 | 8.96 | 10.34 | 10.9 | 0.9523 |
| 4989 | 0.00 | 0.00 | 0.0 | As Found Zero |
| 4989 | 69.81 | 79.62 | 79.8 | As Found Span |
| Average Correction Factor | | | | 0.9829 |

Calculated value of As Found Response: 79.43 ppm Percent Change of As Found: **0.2%**

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.2 | ppm | -0.1 | ppm |
| Auto span | 71.9 | ppm | 72.1 | ppm |

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary



Parameter TRS

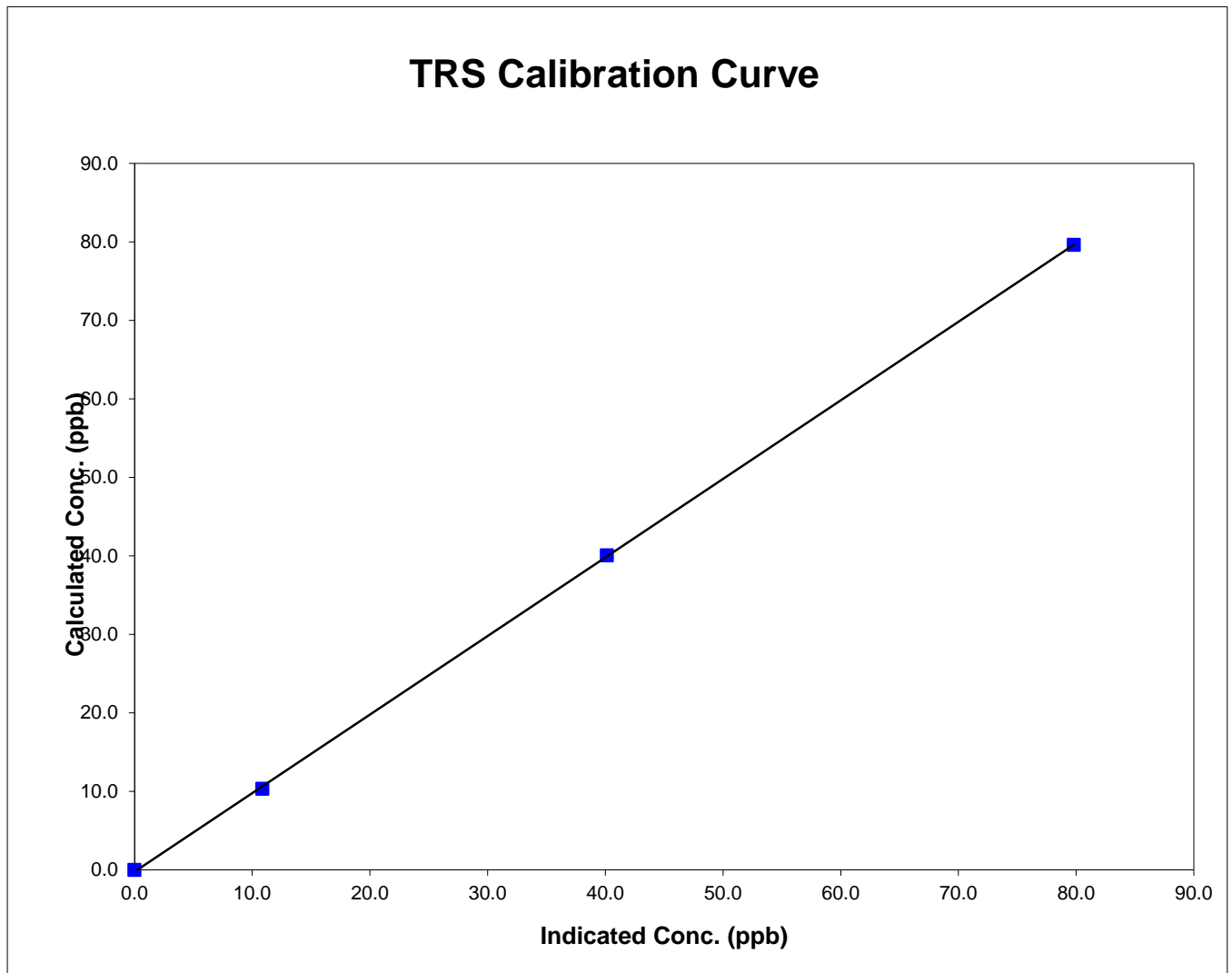
Air Monitoring Network PASZA

Station Information

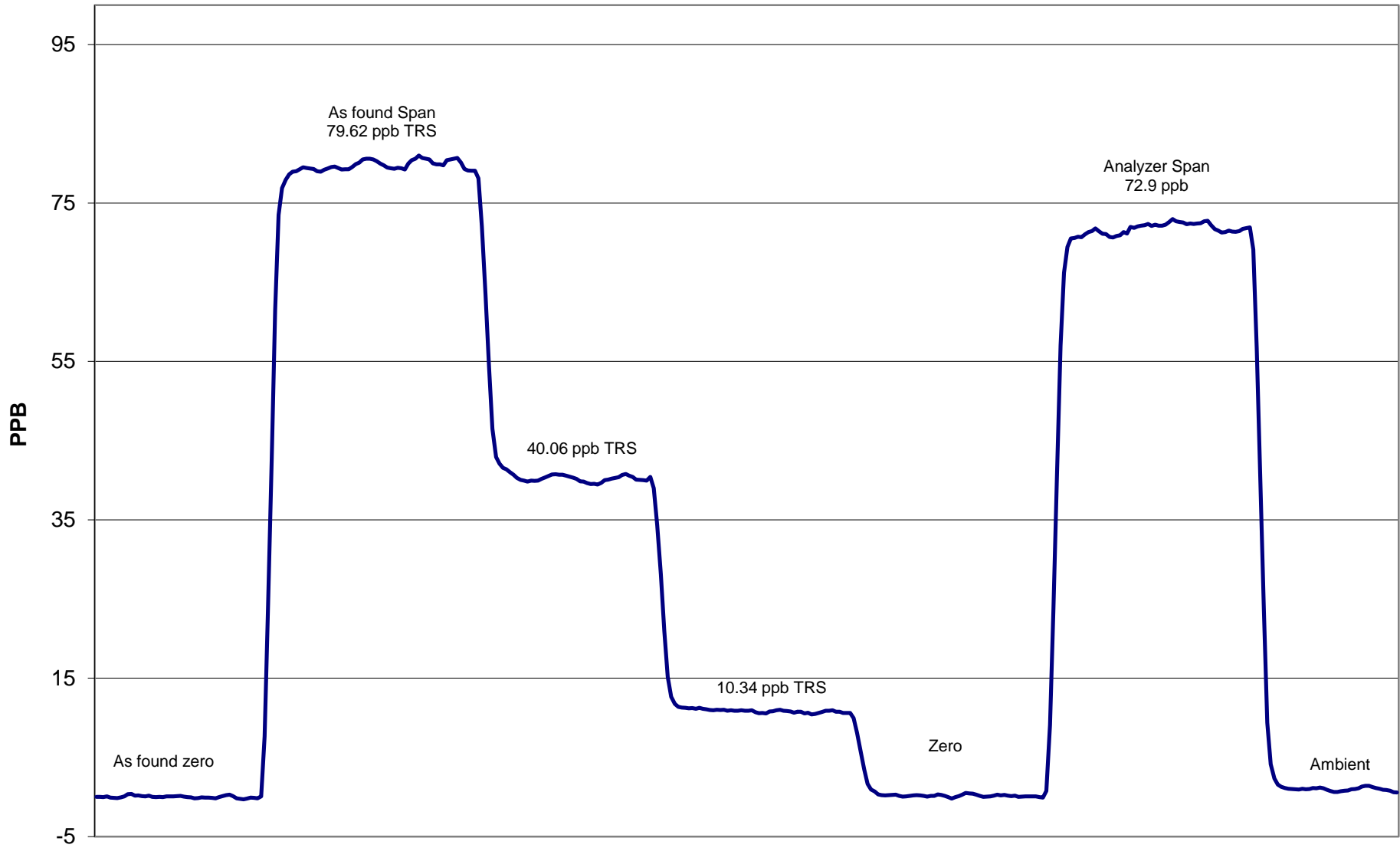
| | | | |
|---------------------|----------------|----------------------|-------------------|
| Calibration Date | March 21, 2012 | Previous Calibration | February 29, 2012 |
| Station Number | 2 | Station Location | Evergreen Park |
| Start Time (MST) | 8:55 | End Time (MST) | 12:24 |
| Analyzer make/model | TEI Model 43C | Analyzer serial # | 436610005 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.0 | N/A | | |
| 79.6 | 79.8 | 0.9979 | Correlation Coefficient | 0.999958 |
| 40.1 | 40.1 | 0.9983 | | |
| 10.3 | 10.9 | 0.9523 | Slope | 1.000745 |
| | | | Intercept | -0.210469 |



TRS Calibration



March 21, 2012

Calibration Report



Parameter SO₂

Air Monitoring Network PASZA

Station Information

| | | | |
|-----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | March 28, 2012 | Previous Calibration | February 10, 2012 |
| Station Number | 3 | Station Location | Smokey Heights |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | <input type="checkbox"/> Other: |
| Start Time (MST) | 10:25 | End Time (MST) | 14:00 |
| Barometric Pressure | 0.909 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | 49.8 ppm | Cal Gas Cert Date | 3/28/2011 |
| Correction factor | 0.030899 | Cal Gas Cylinder # | LL85275 |
| DACS make | CR3000 | DACS serial No. | 5238 |
| DACS voltage range | 0 - 5 volt | DACS channel # | 6 |
| | <u>Before</u> | | <u>After</u> |
| Calculated slope | 0.996406 | Calculated slope | 0.994084 |
| Calculated intercept | -2.492315 | Calculated intercept | -2.518770 |
| Analyzer make | Teco 43i | Analyzer serial # | 701120009 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 500 | ppb | 0 - 500 | ppb |
| Background | 9.8 | | 10 | |
| coefficient | 0.978 | | 0.978 | |
| Lamp Voltage | 920 | volts | 920 | volts |
| Chamber Temp | 45 | Deg C | 45 | Deg C |
| Perm Gas Temp | 45 | Deg C | 45 | Deg C |
| Pressure | 658.1 | mm Hg | 659.9 | mm Hg |
| Sample Flow | 0.434 | ccm | 0.435 | ccm |
| Lamp Intensity | 87 | % | 87 | % |

Calibration Data

| Dilution air flow rate (cc/min) | Corrected gas flow rate (cc/min) | Calculated concentration (ppb) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) |
|---------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4989 | 0.0 | 0.00 | 0.5 | N/A |
| 4989 | 39.84 | 394.53 | 398.2 | 0.9908 |
| 4989 | 19.91 | 197.95 | 203.2 | 0.9740 |
| 4989 | 9.94 | 99.02 | 103.8 | 0.9537 |
| | | | | |
| 4989 | 0.0 | 0.00 | 0.5 | As Found Zero |
| 4989 | 39.84 | 394.53 | 398.7 | As Found Span |
| Average Correction Factor | | | | 0.9729 |

Calculated value of As Found Response: 394.238 ppm Percent Change of As Found: 0.1%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.4 | ppb | 0.6 | ppb |
| Auto span | 304.5 | ppb | 277.2 | ppb |

Notes: No adjust.

Calibration Performed By: Grover Christiansen

Calibration Summary



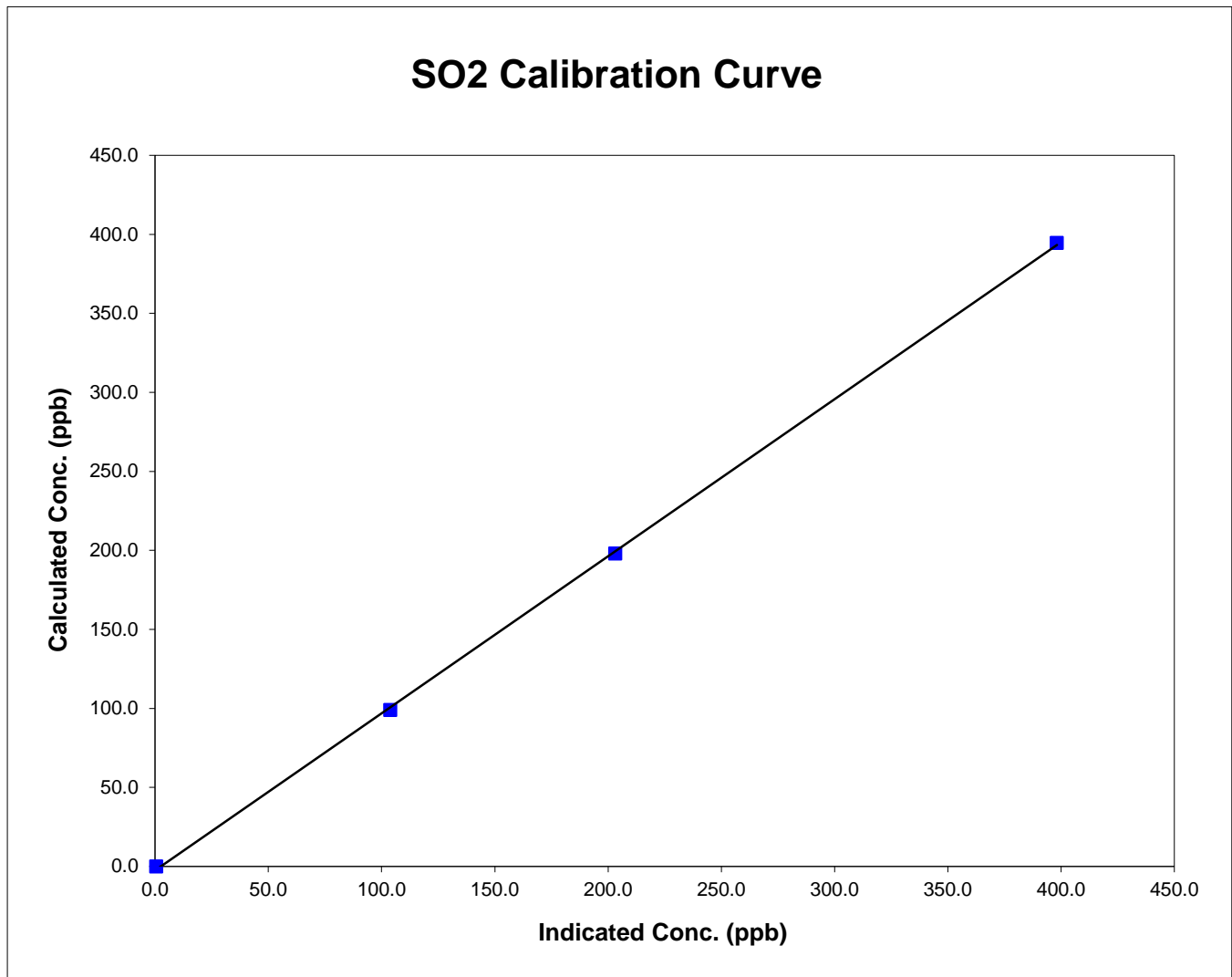
Parameter SO2
 Air Monitoring Network PASZA

Station Information

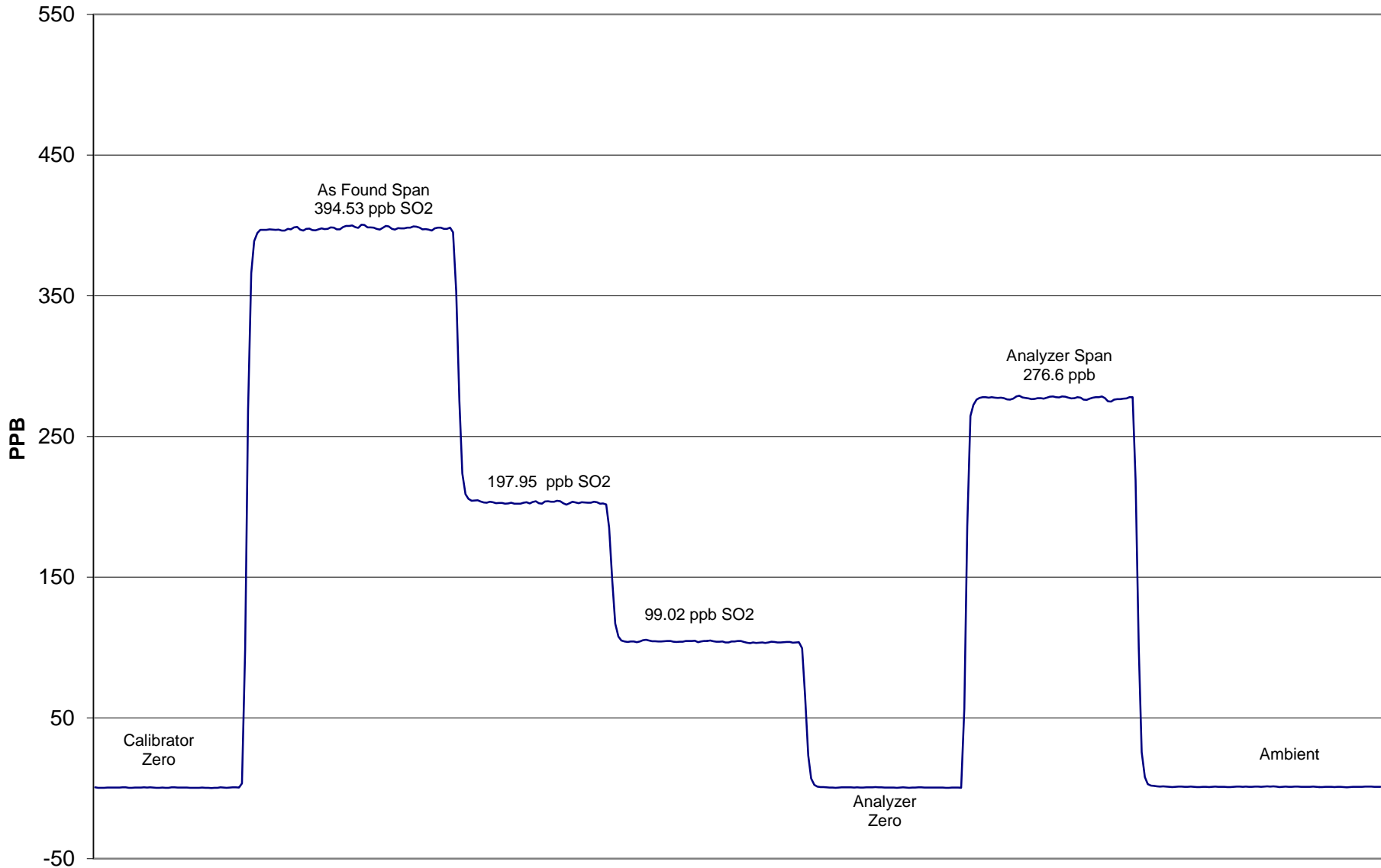
| | | | |
|---------------------|----------------|----------------------|-------------------|
| Calibration Date | March 28, 2012 | Previous Calibration | February 10, 2012 |
| Station Number | 3 | Station Location | Smokey Heights |
| Start Time (MST) | 10:25 | End Time (MST) | 14:00 |
| Analyzer make/model | Teco 43i | Analyzer serial # | 701120009 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.5 | N/A | Correlation Coefficient | 0.999874 |
| 394.5 | 398.2 | 0.9908 | | |
| 198.0 | 203.2 | 0.9740 | | |
| 99.0 | 103.8 | 0.9537 | Slope | 0.994084 |
| | | | Intercept | -2.518770 |



Smokey Heights SO₂ Calibration



March 28, 2012

Calibration Report



Parameter TR5

Air Monitoring Network PASZA

Station Information

| | | | |
|----------------------|--|----------------------------------|--|
| Calibration Date | <u>March 28, 2012</u> | Previous Calibration | <u>February 10, 2012</u> |
| Station Number | <u>3</u> | Station Location | <u>Smokey Heights</u> |
| Reason: | Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal <input type="checkbox"/> Other: |
| Start Time (MST) | <u>8:40</u> | End Time (MST) | <u>12:05</u> |
| Barometric Pressure | <u>0.909</u> ATM | Station Temperature | <u>20.0</u> Deg C |
| Calibrator | <u>EnviroNics 6100</u> | Serial Number | <u>3474</u> |
| Cal Gas Conc | <u>5.77</u> ppm | Cal Gas Expiry Date | <u>9/3/2011</u> |
| Correction factor | <u>0.030899</u> | Cal Gas Cylinder # | <u>BLM001434</u> |
| DACS make | <u>CR3000</u> | DACS serial No. | <u>5238</u> |
| DACS voltage range | <u>0 - 5 volt</u> | DACS channel # | <u>5</u> |
| | <u>Before</u> | | <u>After</u> |
| Calculated slope | <u>0.998410</u> | Calculated slope | <u>1.009694</u> |
| Calculated intercept | <u>-0.769283</u> | Calculated intercept | <u>-0.330838</u> |
| Analyzer make | <u>TEI Model 43C</u> | Analyzer serial # | <u>0436610005</u> |

| | before | | after | |
|---------------------|--------|-------|--------|-------|
| Concentration range | 100 | ppb | 100 | ppb |
| Background | 17.4 | ppb | 18.6 | ppb |
| coefficient | 0.946 | | 0.946 | |
| Lamp Voltage | 797 | volts | 807 | volts |
| Chamber Temp | 44 | Deg C | 44.99 | Deg C |
| Perm Gas Temp | 45 | Deg C | 45 | Deg C |
| Pressure | 541.5 | mm Hg | 527.6 | mm Hg |
| Sample Flow | 0.587 | ccm | 0.573 | ccm |
| Lamp Intensity | 35,382 | mv | 35,003 | mv |

| Dilution air flow rate (cc/min) | Corrected gas flow rate (cc/min) | Calculated concentration (ppb) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) |
|---------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4989 | 0.0 | 0.00 | -0.1 | N/A |
| 4989 | 69.80 | 79.61 | 79.0 | 1.0076 |
| 4989 | 34.88 | 40.06 | 40.2 | 0.9966 |
| 4989 | 8.96 | 10.34 | 11.0 | 0.9403 |
| | | | | |
| 4989 | 0.0 | 0.00 | 0.7 | As Found Zero |
| 4989 | 69.80 | 79.61 | 79.0 | As Found Span |
| Average Correction Factor | | | | 0.9815 |

Calculated value of As Found Response: 77.32 ppm Percent Change of As Found: 2.9%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.0 | ppm | -0.5 | ppm |
| Auto span | 52.9 | ppm | 54.0 | ppm |

Notes: No span adjust

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter TRS
 Air Monitoring Network PASZA



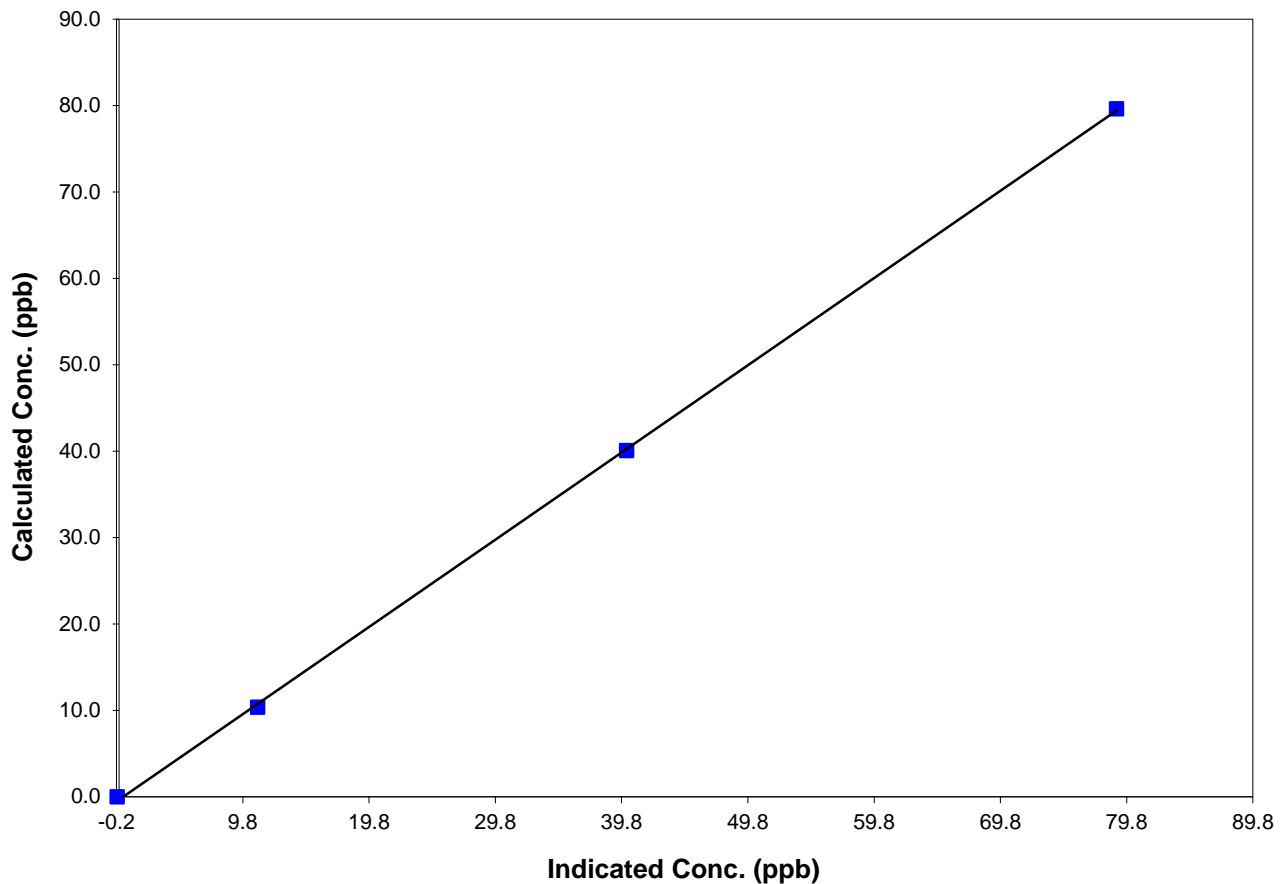
Station Information

| | | | |
|---------------------|----------------|----------------------|-------------------|
| Calibration Date | March 28, 2012 | Previous Calibration | February 10, 2012 |
| Station Number | 3 | Station Location | Smokey Heights |
| Start Time (MST) | 8:40 | End Time (MST) | 12:05 |
| Analyzer make/model | TEI Model 43C | Analyzer serial # | 0436610005 |

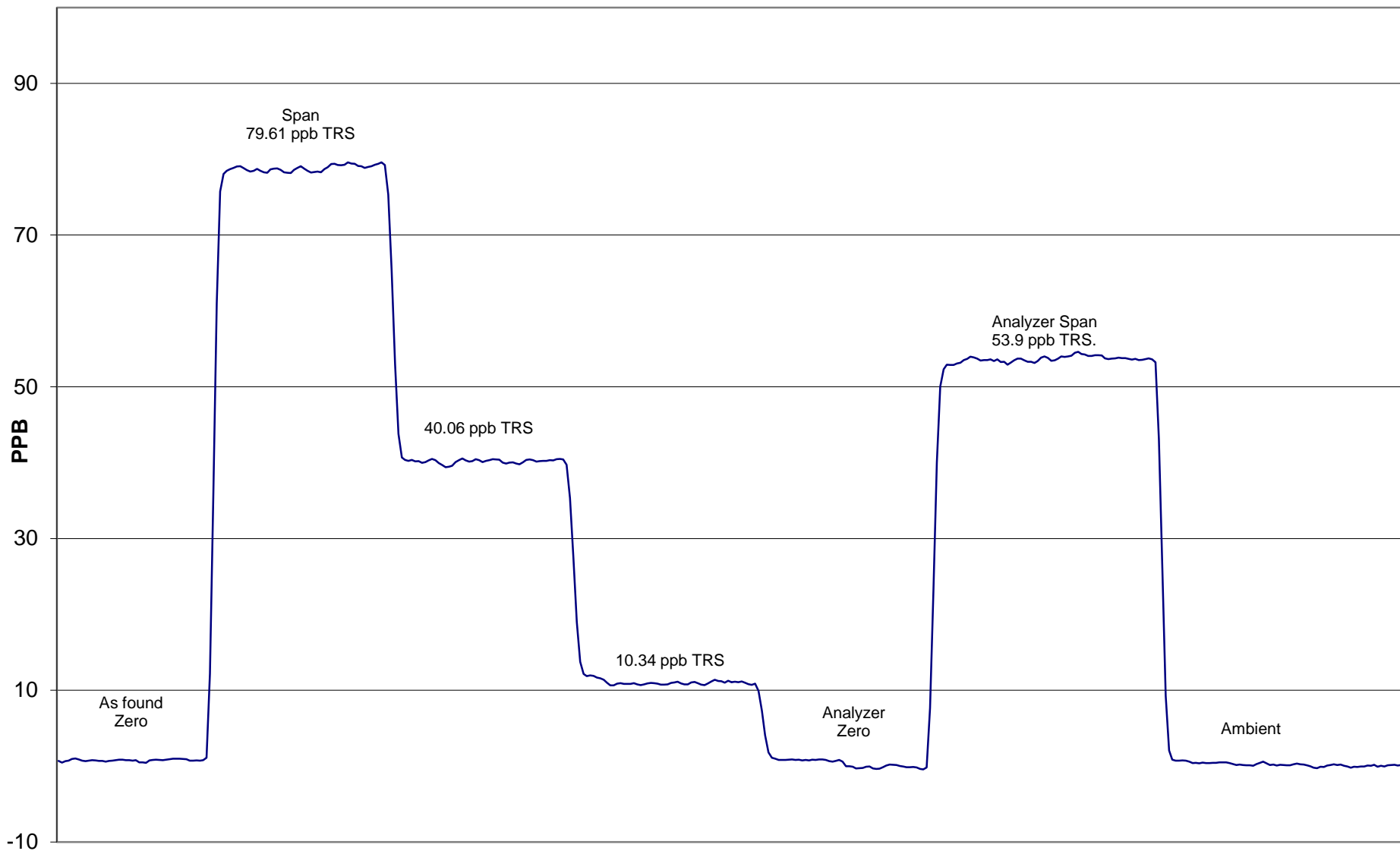
Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | -0.1 | N/A | Correlation Coefficient | 0.999876 |
| 79.6 | 79.0 | 1.0076 | | |
| 40.1 | 40.2 | 0.9966 | | |
| 10.3 | 11.0 | 0.9403 | Slope | 1.009694 |
| | | | Intercept | -0.330838 |

TRS Calibration Curve



Smokey Heights TRS Calibration



March 28, 2012

Calibration Report



Parameter SO2

Air Monitoring Network PASZA

Station Information

| | | | |
|-----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | March 14, 2012 | Previous Calibration | February 5, 2012 |
| Station Number | 4 | Station Location | Beaverlodge |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | <input type="checkbox"/> Other: |
| Start Time (MST) | 15:00 | End Time (MST) | 18:06 |
| Barometric Pressure | 0.899 atm | Station Temperature | 23.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | 10.1 ppm | Cal Gas Expiry Date | 1/25/2010 |
| Gas Cert Reference | SAGL 671 | | |
| DACS make | CR3000 | DACS serial No. | 5237 |
| DACS voltage range | 0 - 5 volt | DACS channel # | 5 |
| | <u>Before</u> | | <u>After</u> |
| DACS Scale High | 100 | DACS slope | 100 |
| DACS Scale Low | 0 | DACS intercept | 0 |
| Calculated slope | 0.995984 | Calculated slope | 1.002765 |
| Calculated intercept | -0.733106 | Calculated intercept | -0.860842 |
| Analyzer make | TEI Model 43i-TLE | Analyzer serial # | 713021137 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 100 | ppb | 0 - 100 | ppb |
| Background | 2.37 | | 2.37 | |
| Coefficient | 1.071 | | 1.071 | |
| PMT | -767.8 | V | -767.6 | V |
| UV Lamp Voltage | 1051 | V | 1052 | V |
| Chamber Temp | 45 | Deg C | 45.2 | Deg C |
| Pressure | 654 | mm Hg | 653.1 | mm Hg |
| Sample Flow | 0.482 | LPM | 0.481 | LPM |
| Lamp Intesity | 96% | % | 96% | % |

Calibration Data

| Dilution air flow rate (cc/min) | Source gas flow rate (cc/min) | Calculated concentration (ppb) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4989 | 0.00 | 0.0 | 0.3 | N/A |
| 4989 | 39.83 | 80.0 | 80.3 | 0.9962 |
| 4989 | 19.90 | 40.1 | 41.2 | 0.9729 |
| 4989 | 9.93 | 20.1 | 21.4 | 0.9367 |
| 4989 | 0.00 | 0.0 | 0.3 | As found zero |
| 4989 | 39.83 | 80.0 | 80.3 | As found span |
| Average Correction Factor | | | | 0.9686 |

Calculated value of As Found Response: 78.986 ppm Percent Change of As Found: 1.3%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | -0.3 | ppb | -0.6 | ppb |
| Auto span | 58.2 | ppb | 58.6 | ppb |

Notes: No adjustments made.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



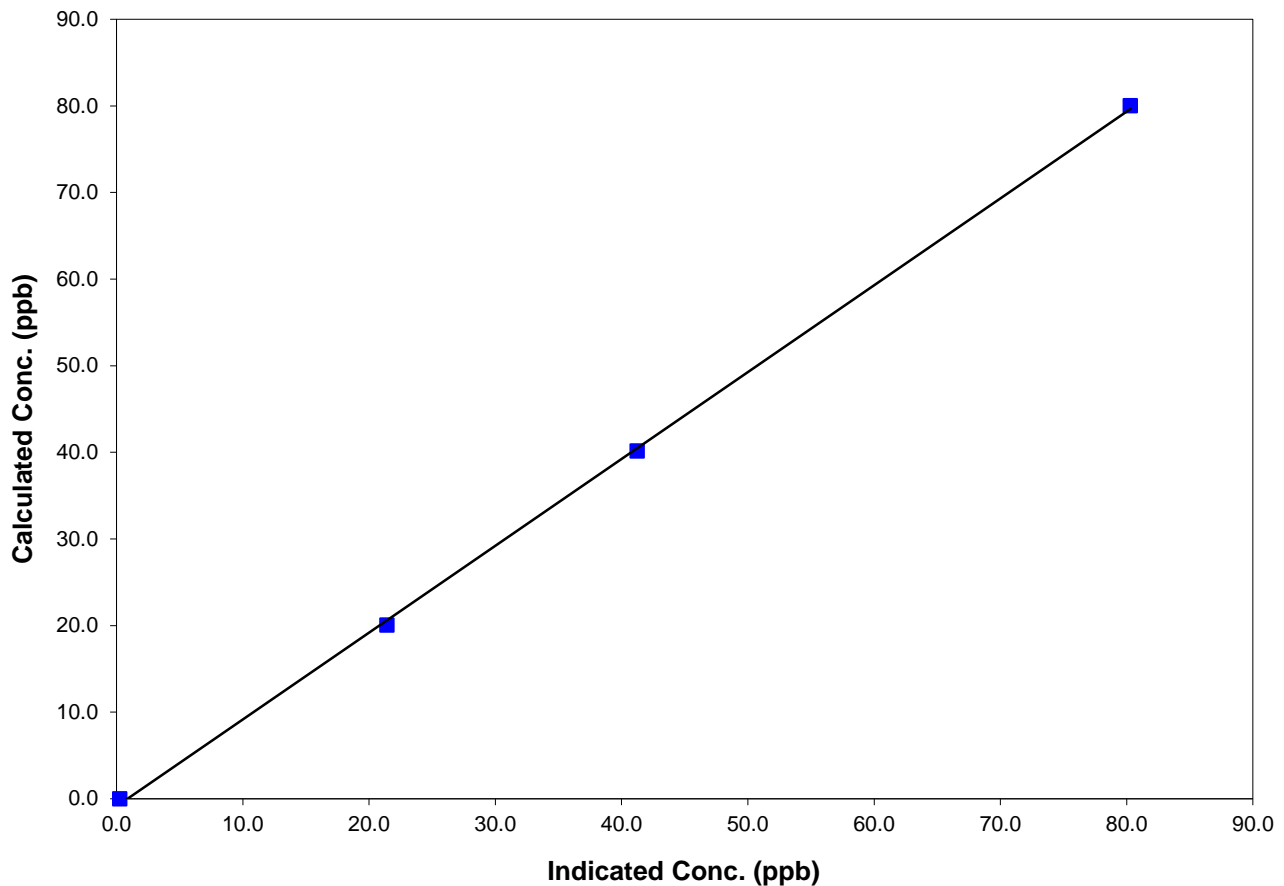
Station Information

| | | | |
|---------------------|-------------------|----------------------|------------------|
| Calibration Date | March 14, 2012 | Previous Calibration | February 5, 2012 |
| Station Number | 4 | Station Location | Beaverlodge |
| Start Time (MST) | 15:00 | End Time (MST) | 18:06 |
| Analyzer make/model | TEI Model 43i-TLE | Analyzer serial # | 713021137 |

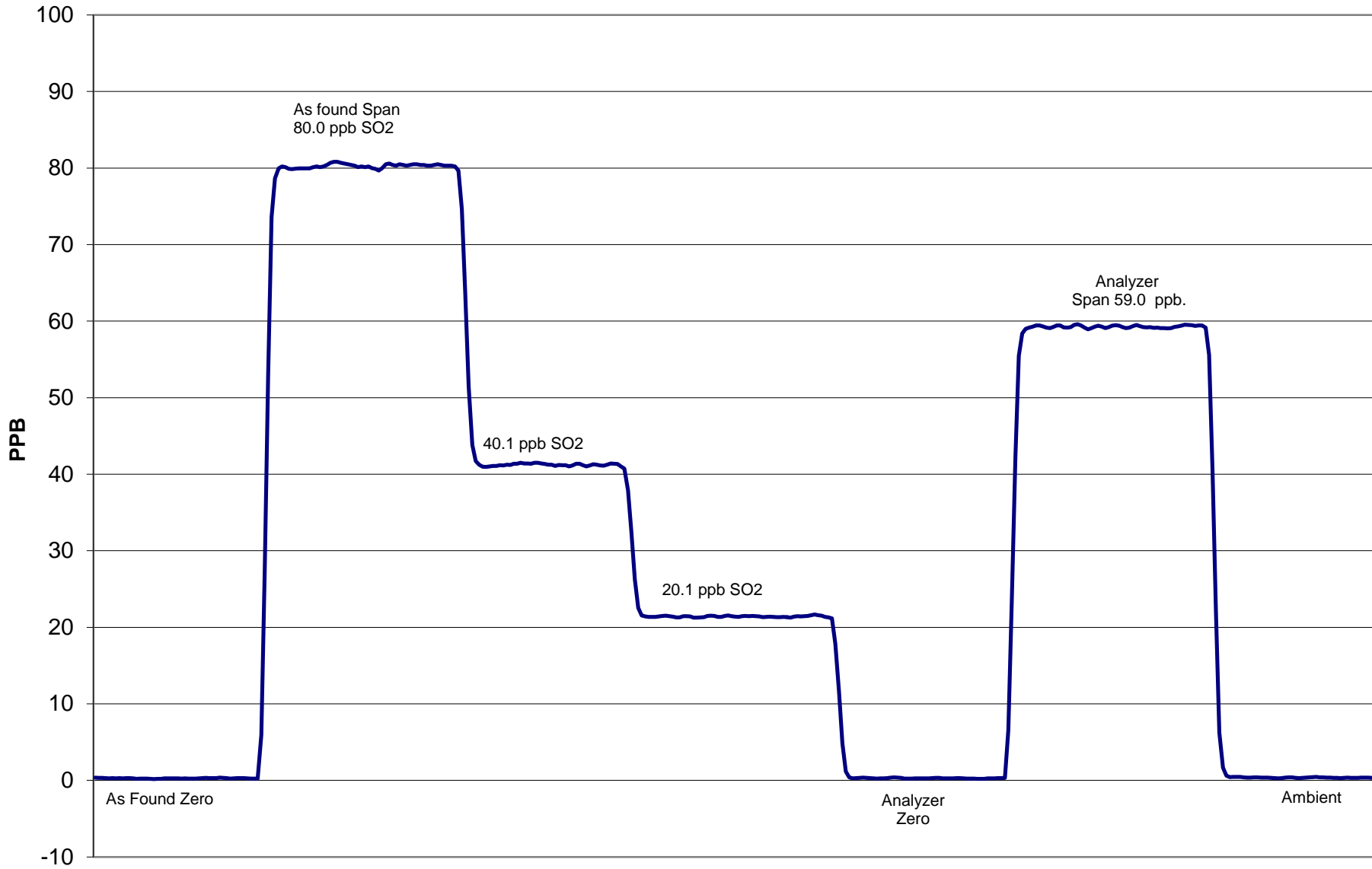
Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.3 | N/A | Correlation Coefficient | 0.999742 |
| 80.0 | 80.3 | 0.9962 | | |
| 40.1 | 41.2 | 0.9729 | Slope | 1.002765 |
| 20.1 | 21.4 | 0.9367 | | |
| | | | Intercept | -0.860842 |
| | | | | |

SO2 Calibration Curve



SO2 Calibration



March 14, 2012

Calibration Report

Parameter
Air Monitoring Network

NO_x-NO-NO₂
PAZA



Station Information

| | | | |
|---------------------|--|----------------------|------------------|
| Calibration Date | March 14, 2012 | Previous Calibration | February 5, 2012 |
| Station Number | 4 | Station Location | Beaverlodge |
| Reason: | Routine Installation Removal Other: | | |
| Start Time (MST) | 8:50 | End Time (MST) | 14:38 |
| Barometric Pressure | 0.899 Atm | Station Temperature | 23.0 Deg C |
| Calibrator | EnviroNics | Serial Number | 2844 |
| NO Cal Gas Conc | 52.5 ppm | Cal Gas Expiry Date | March 28, 2013 |
| NOx Cal Gas Conc | 52.5 ppm | Cal Gas Serial # | LL8575 |

DACS Information

| | | | | |
|-----------|---------------|-----------------|-----------|-----------|
| DACS make | AP1000 | DACS serial No. | | |
| | | | | |
| | Parameter | NO2 | NOx | NO |
| Before | Data Slope | 0.998706 | 1.002531 | 1.003183 |
| | Data Offset | -0.149139 | -2.768092 | -2.467744 |
| After | Data Slope | 0.999841 | 1.007735 | 1.008115 |
| | Data Offset | 0.375366 | -2.378101 | -2.020992 |
| | Channel # | 8 | 6 | 7 |
| | Voltage Range | 0 - 5 VDC | 0 - 5 VDC | 0 - 5 VDC |

Analyzer Information

| | | | | |
|---------------------|---------|-------------------|-----------|-------|
| Analyzer make/model | TEI 42i | Analyzer serial # | 906535068 | |
| | | | | |
| Test Point | before | | after | |
| Concentration range | 0-500 | ppb | 0-500 | ppb |
| NO offset | 2.0 | mV | 2.1 | mV |
| NOx bkgnd | 2.2 | mV | 2.3 | mV |
| NO coefficient | 1.349 | | 1.366 | |
| NOx coefficient | 0.999 | | 0.999 | |
| NO2 conv temp | 325.7 | Deg C | 326.8 | Deg C |
| PMT Temp | -3.0 | Deg C | -2.9 | Deg C |
| PMT Volt | -671.9 | mV | -671.2 | mV |
| R Cell Press | 166.9 | in Hg | 166.6 | in Hg |
| Sample Flow | 0.781 | ccm | 0.770 | ccm |

Notes:

Calibration Report

Parameter **NOX-NO-NO2**
 Air Monitoring Network **PAZA**



Station Information

Calibration Date: **March 14, 2012** Station Location: **Beaverlodge**

Calibration Data

| | Dilution flow rate (ccm) | Source gas flow rate (ccm) | Calculated NOx conc (ppb) | Calculated NO conc (ppb) | Calculated NO2 conc (ppb) | Indicated NOx conc (ppb) | Indicated NO conc (ppb) | Indicated NO2 conc (ppb) | NOx Correction factor | NO Correction factor | |
|------|--------------------------|----------------------------|---------------------------|--------------------------|---------------------------|--------------------------|-------------------------|--------------------------|---------------------------|----------------------|--------|
| zero | 4989 | 0.00 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.0 | N/A | N/A | |
| 1 | 4989 | 39.84 | 415.9 | 415.9 | 0.0 | 414.0 | 413.8 | 0.0 | 1.0045 | 1.0052 | |
| 2 | 4989 | 19.91 | 208.7 | 208.7 | 0.0 | 210.2 | 209.3 | 0.1 | 0.9930 | 0.9972 | |
| 3 | 4989 | 9.93 | 104.3 | 104.3 | 0.0 | 108.5 | 108.1 | 0.2 | 0.9615 | 0.9651 | |
| AFZ | 4989 | 0.00 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.0 | 0.0000 | 0.0000 | |
| AFS | 4989 | 39.84 | 415.9 | 415.9 | 0.8 | 414.0 | 413.8 | 0.0 | 1.0045 | 1.0052 | |
| | | | | | | | | | Average Correction Factor | 0.9863 | 0.9892 |

As Found Concentrations: **NO_x= 411.2** **NO= 411.3** As Found Percent Change **NO_x= -1.1%** **NO= -1.1%**

GPT Calibration Data

Dilution Flow 4989 ccm Source Gas Flow 39.84 ccm

| O3 Setpoint (ppb) | Indicated NO high point (ppb) | Indicated NO drop conc (ppb) | Calculated NO2 conc (ppb) | Indicated NOx conc (ppb) | Indicated NO conc (ppb) | Indicated NO2 conc (ppb) | NOx Correction factor | NO Correction factor | NO2 Correction factor | Converter Efficiency | |
|-------------------|-------------------------------|------------------------------|---------------------------|--------------------------|-------------------------|--------------------------|---------------------------|----------------------|-----------------------|----------------------|-------|
| 0 | -0.1 | -0.1 | 0.0 | 0.1 | -0.1 | 0.0 | N/A | N/A | N/A | N/A | |
| NO point | 418.8 | 418.8 | 0.0 | 419.1 | 418.8 | 0.0 | 0.9994 | 1.0000 | N/A | N/A | |
| 300 | 418.8 | 126.0 | 292.8 | 419.4 | 126.0 | 292.9 | 0.9986 | 1.0000 | 0.9998 | 100.0% | |
| 200 | 418.8 | 215.8 | 203.0 | 418.7 | 215.8 | 202.3 | 1.0002 | 1.0000 | 1.0034 | 99.7% | |
| 100 | 418.8 | 303.9 | 114.9 | 418.3 | 303.9 | 114.2 | 1.0013 | 1.0000 | 1.0065 | 99.4% | |
| | | | | | | | Average Correction Factor | 1.0000 | 1.0000 | 1.0032 | 99.7% |

AIC Data

| Parameter | Previous calibration | | | | Current calibration | | | |
|-----------|----------------------|-------|------|-----|---------------------|-------|-----|-----|
| | NOx | NO2 | NO | | NOx | NO2 | NO | |
| Auto zero | -0.2 | -0.3 | -0.2 | ppb | 0.1 | -0.1 | 0.0 | ppb |
| Auto span | 238.0 | 235.5 | 1.6 | ppb | 224.1 | 222.1 | 1.3 | ppb |

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter NO₂

Air Monitoring Network PAZA



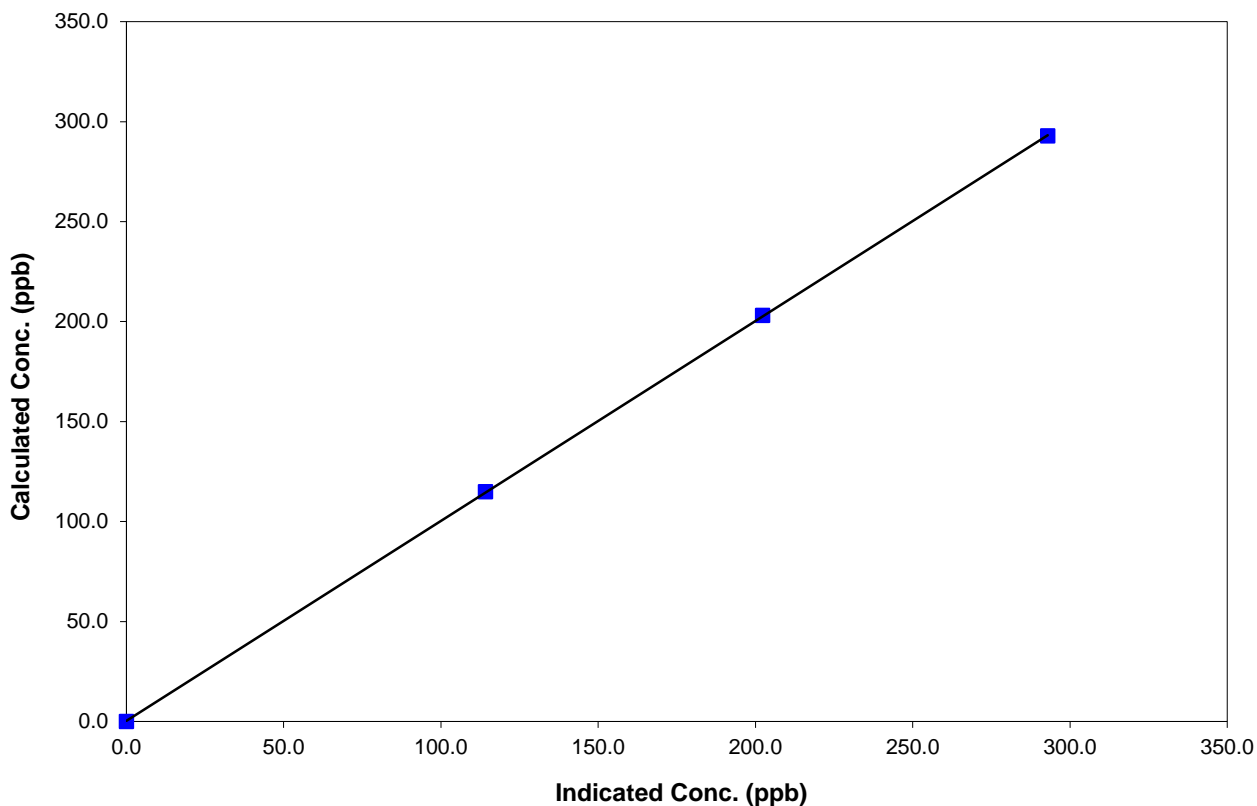
Station Information

| | | | |
|------------------|----------------|----------------------|------------------|
| Calibration Date | March 14, 2012 | Previous Calibration | February 5, 2012 |
| Station Number | 4 | Station Location | Beaverlodge |
| Start Time (MST) | 8:50 | End Time (MST) | 14:38 |
| Analyzer make | TEI 42i | Analyzer serial # | 906535068 |

Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|----------|
| 0.0 | 0.0 | N/A | Correlation Coefficient | 0.999989 |
| 292.8 | 292.9 | 0.9998 | | |
| 203.0 | 202.3 | 1.0034 | Slope | 0.999841 |
| 114.9 | 114.2 | 1.0065 | | |
| | | | Intercept | 0.375366 |

NO₂ Calibration Curve



Calibration Summary



Parameter NO_x

Air Monitoring Network PAZA

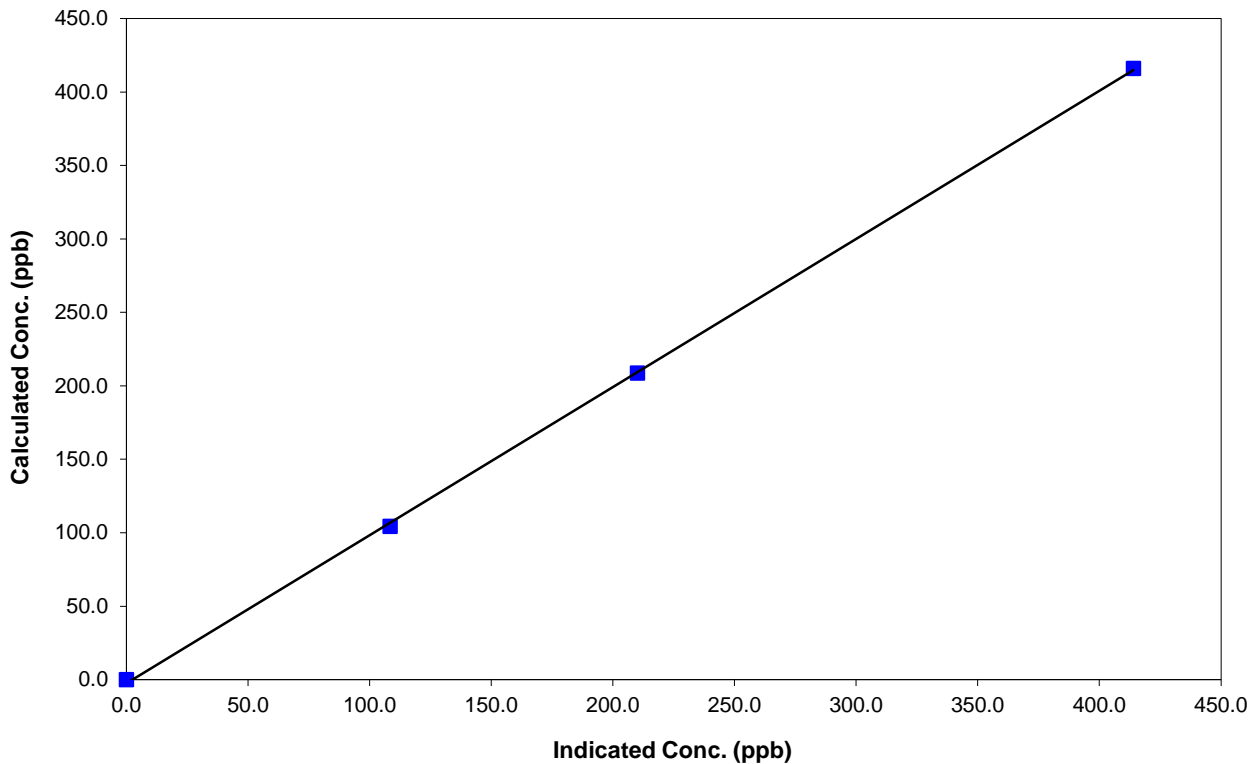
Station Information

| | | | |
|------------------|----------------|----------------------|------------------|
| Calibration Date | March 14, 2012 | Previous Calibration | February 5, 2012 |
| Station Number | 4 | Station Location | Beaverlodge |
| Start Time (MST) | 8:50 | End Time (MST) | 14:38 |
| Analyzer make | TEI 42i | Analyzer serial # | 906535068 |

Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.1 | N/A | Correlation Coefficient | 0.999853 |
| 415.9 | 414.0 | 1.0045 | | |
| 208.7 | 210.2 | 0.9930 | | |
| 104.3 | 108.5 | 0.9615 | Slope | 1.007735 |
| | | | Intercept | -2.378101 |

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PAZA



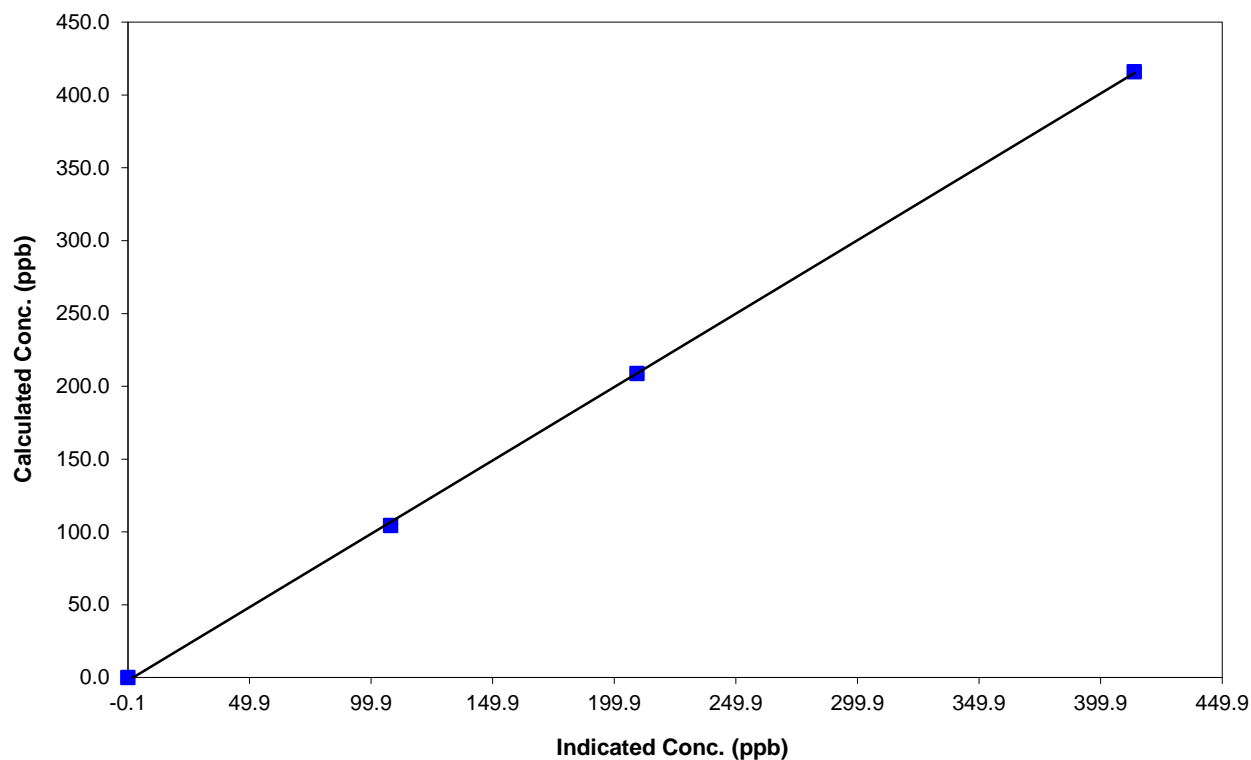
Station Information

| | | | |
|------------------|----------------|----------------------|------------------|
| Calibration Date | March 14, 2012 | Previous Calibration | February 5, 2012 |
| Station Number | 4 | Station Location | Beaverlodge |
| Start Time (MST) | 8:50 | End Time (MST) | 14:38 |
| Analyzer make | TEI 42i | Analyzer serial # | 906535068 |

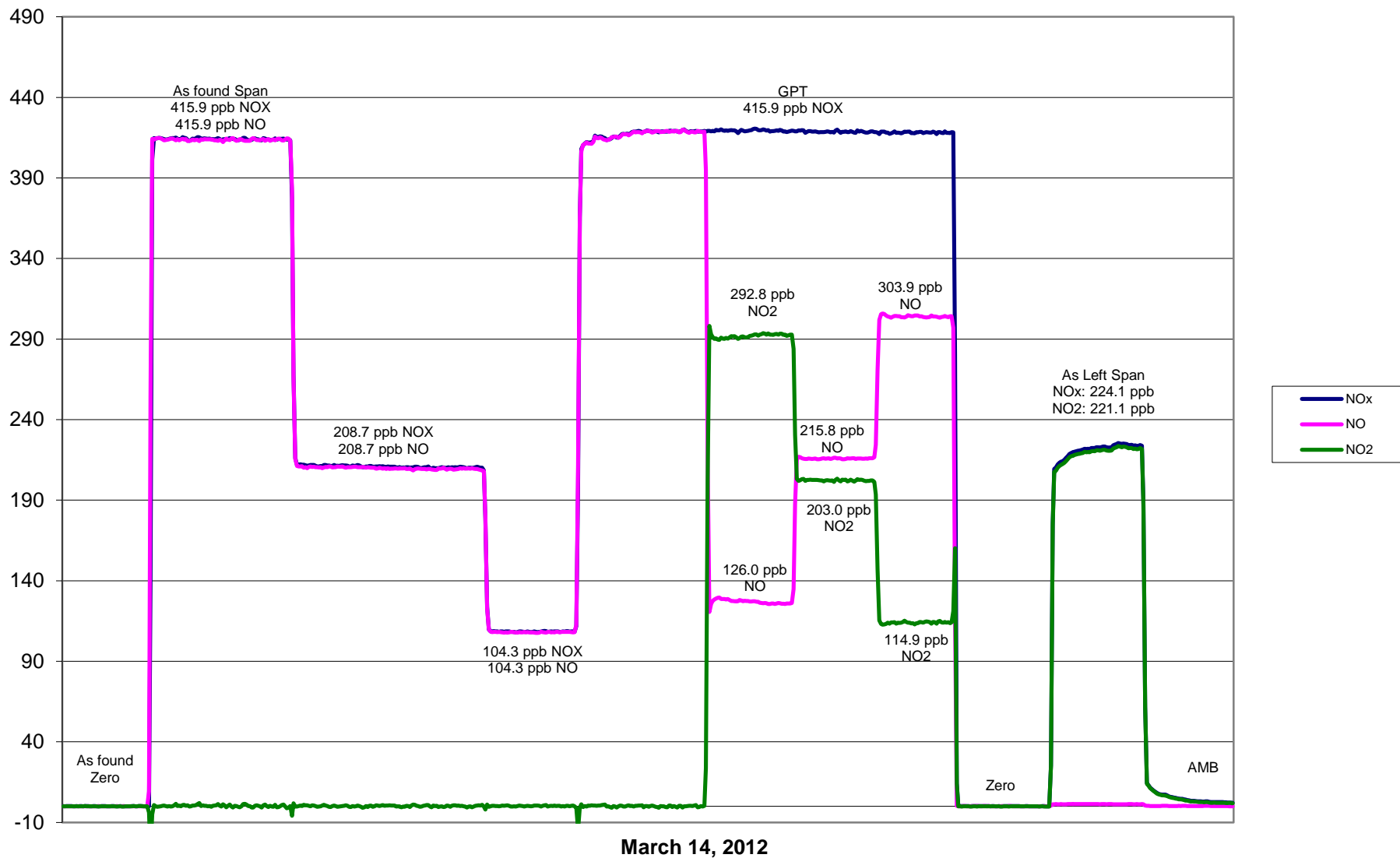
Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | -0.1 | N/A | Correlation Coefficient | 0.999873 |
| 415.9 | 413.8 | 1.0052 | | |
| 208.7 | 209.3 | 0.9972 | | |
| 104.3 | 108.1 | 0.9651 | Slope | 1.008115 |
| | | | Intercept | -2.020992 |

NO Calibration Curve



PASZA Beaverlodge NO_x Calibration



Calibration Report



Parameter 03

Air Monitoring Network PASZA

Station Information

| | | | |
|-----------------------|-----------------|----------------------|------------------|
| Calibration Date | March 14, 2012 | Previous Calibration | February 5, 2012 |
| Station Number | 4 | Station Location | Beaverlodge |
| Reason: | Routine | Install | Removal |
| | | Other: | |
| Start Time (MST) | 13:15 | End Time (MST) | 16:01 |
| Barometric Pressure | 0.899 atm | Station Temperature | 23.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | NA | Cal Gas Expiry Date | NA |
| DACS make | CR3000 | DACS serial No. | 5237 |
| DACS voltage range | 0 - 5 volt | DACS channel # | 9 |
| | Before | | After |
| Calculated slope | 0.998476 | Calculated slope | 0.996949 |
| Calculated intercept | 0.542914 | Calculated intercept | -0.574433 |
| Analyzer make | Teco 49C | Analyzer serial # | 49C-76443-383 |

| | before | | after | |
|---------------------|-------------|-------|-------------|-------|
| Concentration range | 0 - 500 | ppb | 0 - 500 | ppb |
| offset | -0.90 | ppb | -0.90 | ppb |
| slope | 1.030 | | 1.000 | |
| Lamp temp | 56.3 | mV | 56.3 | mV |
| Lamp Intensity A/B | 55066/61547 | mV | 54683/60752 | mV |
| Pressure | 689.8 | mm Hg | 674.7 | mm Hg |
| Flow A | 0.76 | ccm | 0.752 | ccm |
| Flow B | 0.713 | ccm | 0.703 | ccm |

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 | 0.0 | 0.0 | -0.3 | N/A |
| 4989 | 0.3 | 292.8 | 293.4 | 0.9979 |
| 4989 | 0.2 | 203.0 | 204.7 | 0.9917 |
| 4989 | 0.1 | 114.9 | 117.1 | 0.9812 |
| 4989 | 0.0 | 0.0 | -0.3 | As found zero |
| 4989 | 0.3 | 292.8 | 289.9 | As found span |
| Average Correction Factor | | | | 0.9903 |

Calculated value of As Found Response: 290.3 ppm Percent Change of As Found: **-0.8%**

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.1 | ppb | -0.9 | ppb |
| Auto span | 114.3 | ppb | 113.4 | ppb |

Notes: No span adjustment made.

Calibration Performed By: Grover Christiansen

Calibration Summary



Parameter O3
Air Monitoring Network PASZA

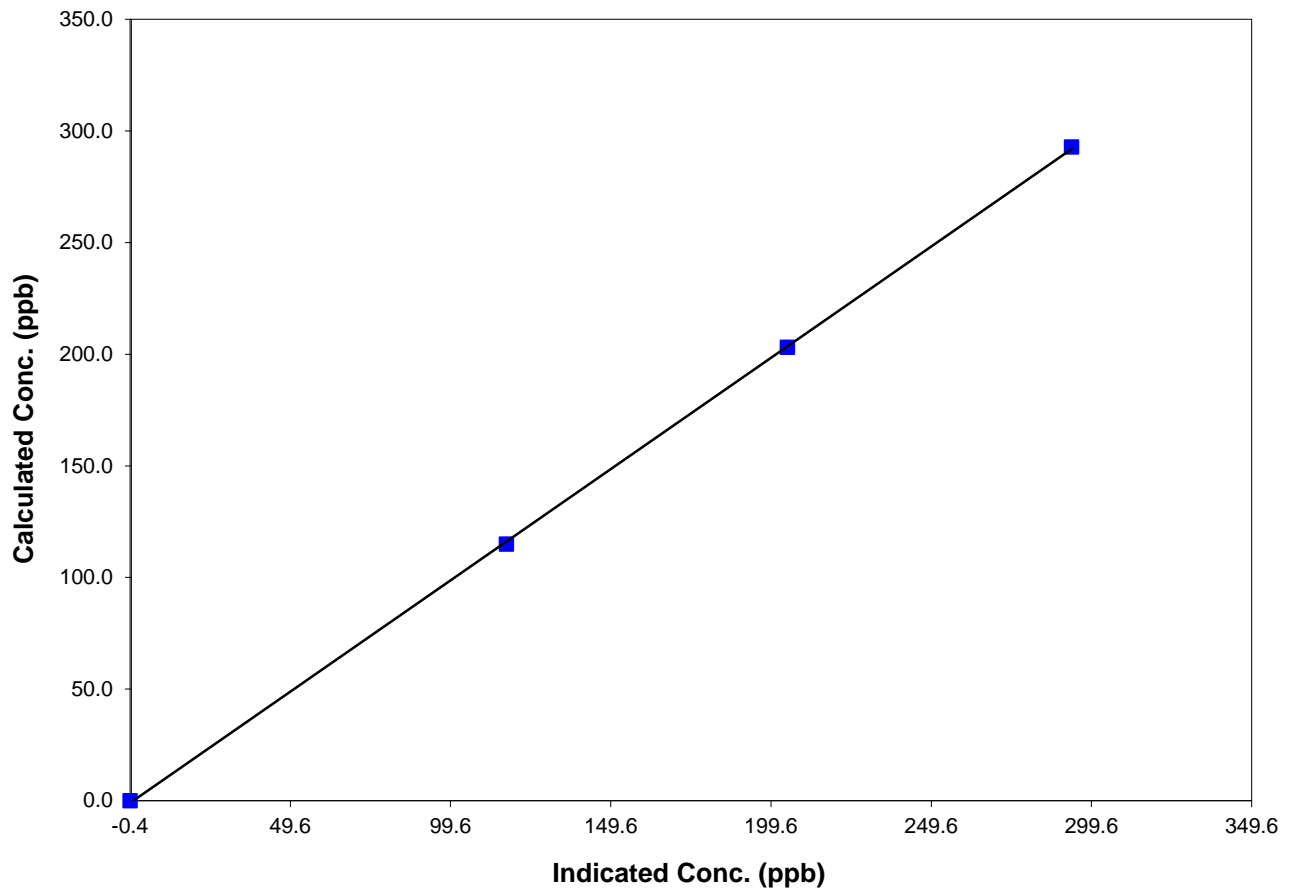
Station Information

| | | | |
|---------------------|---|----------------------|--|
| Calibration Date | <u> March 14, 2012 </u> | Previous Calibration | <u> February 5, 2012 </u> |
| Station Number | <u> 4 </u> | Station Location | <u> Beaverlodge </u> |
| Start Time (MST) | <u> 13:15 </u> | End Time (MST) | <u> 16:01 </u> |
| Analyzer make/model | <u> Teco 49C </u> | Analyzer serial # | <u> 49C-76443-383 </u> |

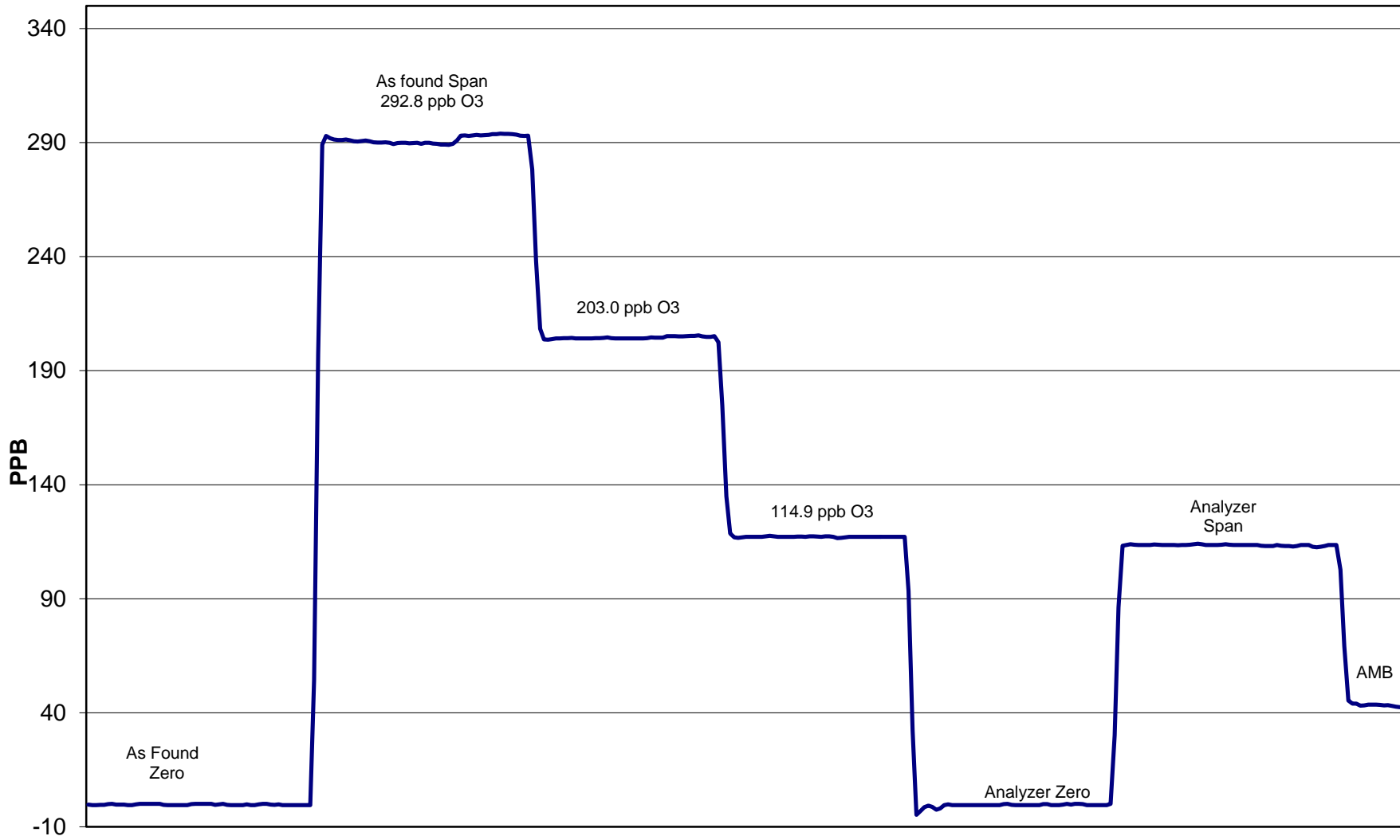
Calibration Data

| Calculated concentration (ppm) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | -0.3 | NA | Correlation Coefficient | 0.999927 |
| 292.8 | 293.4 | 0.9979 | | |
| 203.0 | 204.7 | 0.9917 | Slope | 0.996949 |
| 114.9 | 117.1 | 0.9812 | | |
| | | | | |
| | | | Intercept | -0.574433 |

O3 Calibration Curve



O3 Calibration



March 14, 2012

Calibration Report

Parameter SO2

Air Monitoring Network PASZA



Station Information

| | | | |
|-----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | March 12, 2012 | Previous Calibration | February 14, 2012 |
| Station Number | 6 | Station Location | Valleyview |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | <input type="checkbox"/> Other: |
| Start Time (MST) | 9:06 | End Time (MST) | 13:15 |
| Barometric Pressure | 702.00 mmHg | Station Temperature | 20.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3016 |
| Cal Gas Concentration | 50.58 ppm | Cal Gas Cert Date | 11/29/2011 |
| Gas Cylinder Num. | LL158102 | Cal gas Exp. Date | 11/29/2013 |
| DACS make | CR3000 | DACS serial No. | 5409 |
| DACS voltage range | 0 - 5 volt | DACS channel # | 4 |
| | <u>Before</u> | | <u>After</u> |
| DACS Scale High | 500 | DACS slope | 500 |
| DACS Scale Low | 0 | DACS intercept | 0 |
| Calculated slope | 1.005356 | Calculated slope | 0.992272 |
| Calculated intercept | -2.677803 | Calculated intercept | 1.492818 |
| Analyzer make | TEI 45C | Analyzer serial # | 45C-57531-313 |

| | before | | after | |
|---------------------|----------|-------|----------|-------|
| Concentration range | 0 - 1000 | ppb | 0 - 1000 | ppb |
| Background | 30.9 | | 35.3 | |
| Coefficient | 0.865 | | 0.977 | |
| UV Lamp Voltage | 964 | LPM | 966 | LPM |
| Chamber Temp | 44.4 | V | 44.2 | V |
| Perm Gas Temp | 28 | C | 25.7 | C |
| Pressure | 607.1 | in Hg | 597 | in Hg |
| Sample Flow | 0.559 | LPM | 0.554 | LPM |
| Lamp Intensity | 47964 | Hz | 48167 | Hz |

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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4997 | 0.00 | 0.0 | 0.0 | N/A |
| 4997 | 39.93 | 401.0 | 403.0 | 0.9949 |
| 4997 | 19.97 | 201.3 | 201.5 | 0.9990 |
| 4997 | 9.94 | 100.4 | 97.7 | 1.0280 |
| 4997 | 0.00 | 0.0 | 0.0 | As found zero |
| 4997 | 39.93 | 401.0 | 351.1 | As found span |
| Average Correction Factor | | | | 1.0073 |

Calculated value of As Found Response: 350.4 ppm Percent Change of As Found: 12.6%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.0 | ppm | 0.0 | ppm |
| Auto span | 155.5 | ppm | 179.2 | ppm |

Notes: Cal went well, adjustment made to span. Possible cause of adjustment, is new cal gear / gas being used

Calibration Performed By: Virginia McKergow

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



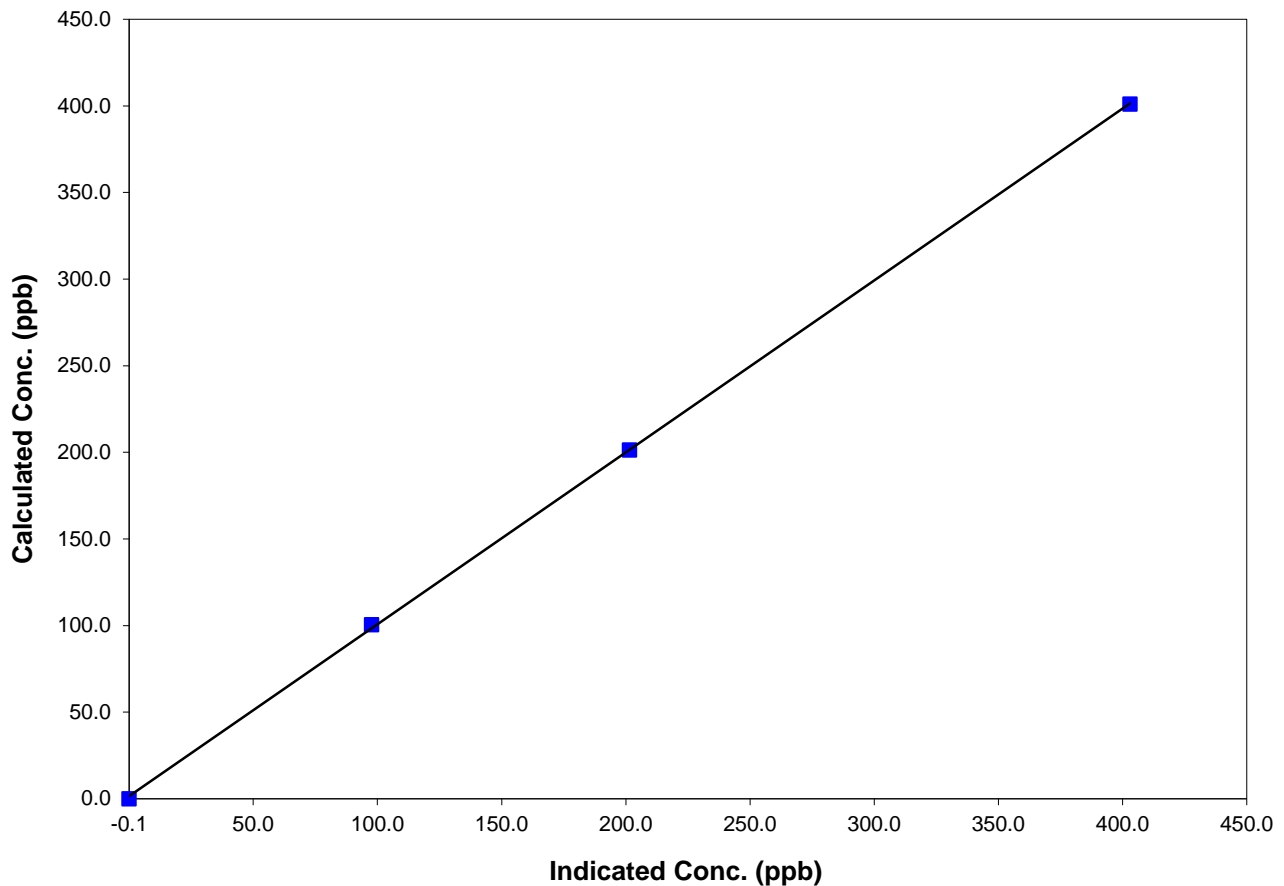
Station Information

| | | | |
|---------------------|----------------|----------------------|-------------------|
| Calibration Date | March 12, 2012 | Previous Calibration | February 14, 2012 |
| Station Number | 6 | Station Location | Valleyview |
| Start Time (MST) | 9:06 | End Time (MST) | 14:42 |
| Analyzer make/model | TEI 45C | Analyzer serial # | 45C-57531-313 |

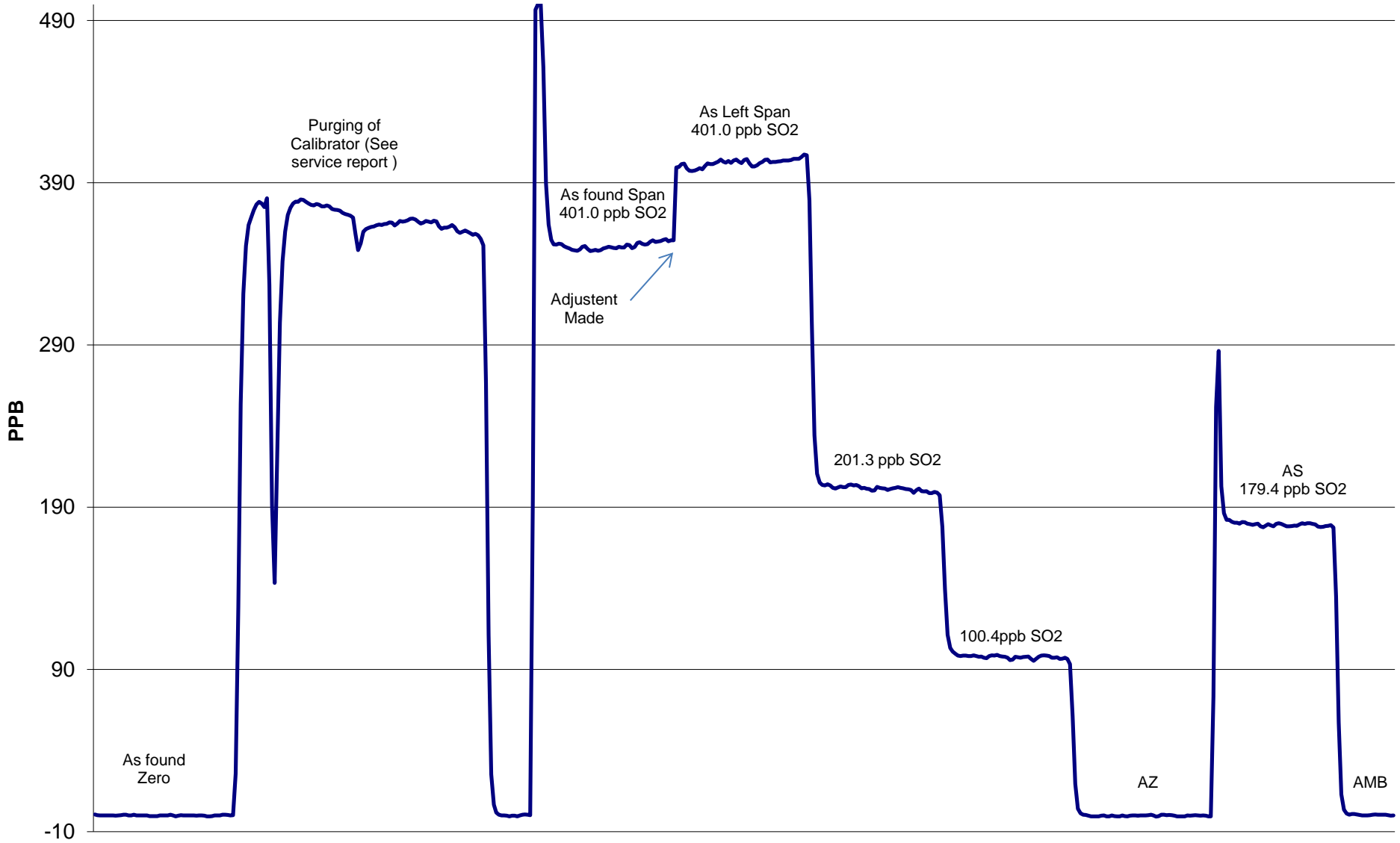
Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|----------|
| 0.0 | 0.0 | N/A | Correlation Coefficient | 0.999929 |
| 401.0 | 403.0 | 0.9949 | | |
| 201.3 | 201.5 | 0.9990 | Slope | 0.992272 |
| 100.4 | 97.7 | 1.0280 | | |
| | | | Intercept | 1.492818 |
| | | | | |

SO2 Calibration Curve



SO2 Calibration



March 12, 2012

Calibration Report



Parameter H2S
 Air Monitoring Network PASZA

Station Information

| | | | |
|-----------------------|-----------------------|----------------------|-------------------|
| Calibration Date | March 12, 2012 | Previous Calibration | February 14, 2012 |
| Station Number | 6 | Station Location | Valleyview |
| Reason: | Routine | Install | Removal |
| | | Other: | |
| Start Time (MST) | 12:20 | End Time (MST) | 16:10 |
| Barometric Pressure | 702.00 mm | Station Temperature | 21.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3016 |
| Cal Gas Concentration | 5.02 ppm | Cal Gas Expiry Date | 7/22/2011 |
| Gas Cert Reference | BLM001715 | | |
| DACS make | CR3000 | DACS serial No. | 5409 |
| DACS voltage range | 0 - 5 volt | DACS channel # | 9 |
| | <u>Before</u> | | <u>After</u> |
| DACS Scale High | 100 | DACS slope | 100 |
| DACS Scale Low | 0 | DACS intercept | 0 |
| Calculated slope | 0.994324 | Calculated slope | 0.991380 |
| Calculated intercept | -0.663710 | Calculated intercept | 0.360495 |
| Analyzer make | TEI Model 43i - APSCB | Analyzer serial # | 701120010 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 100 | ppb | 0 - 100 | ppb |
| Back Ground | 7.1 | ppb | 6.4 | ppb |
| Coefficient | 1.368 | | 1.2 | |
| Lamp Voltage | 785 | v | 788 | v |
| Chamber Temp | 45.1 | c | 45.0 | c |
| Perm Oven Temp | 45.01 | c | 44.33 | c |
| Pressure | 620.00 | mm Hg | 607.60 | mm Hg |
| Sample Flow | 420 | ccm | 0.413 | ccm |
| Lamp Intensity | 91.0 | % | 91.0 | % |

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 | 0.0 | -0.1 | N/A |
| 4997 | 79.93 | 79.0 | 79.5 | 0.9938 |
| 4997 | 39.95 | 39.8 | 39.5 | 1.0072 |
| 4997 | 14.96 | 15.0 | 14.5 | 1.0306 |
| 4997 | 0.00 | 0.0 | -0.1 | As found zero |
| 4997 | 79.93 | 79.0 | 89.6 | As found span |
| Average Correction Factor | | | | 1.0105 |

Calculated value of As Found Response: 88.50 ppm Percent Change of As Found: **-12.0%**

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.0 | ppm | 0.5 | ppm |
| Auto span | 70.6 | ppm | 67.0 | ppm |

Notes: Cal went well, adjustment made to span. Possible cause, new cal gear / gas being used

Calibration Performed By: Virginia McKergow

Calibration Summary

Parameter H2S
 Air Monitoring Network PASZA

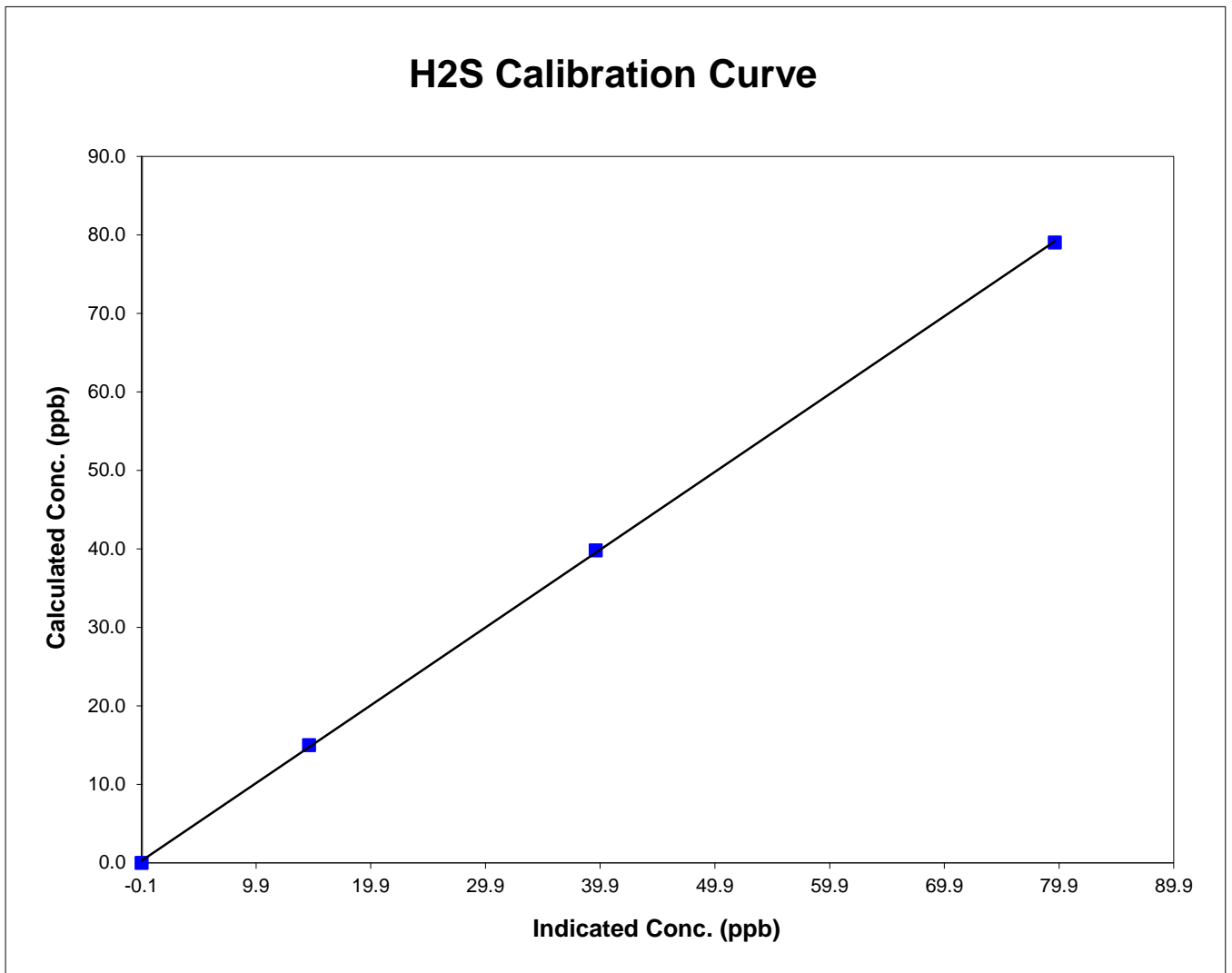


Station Information

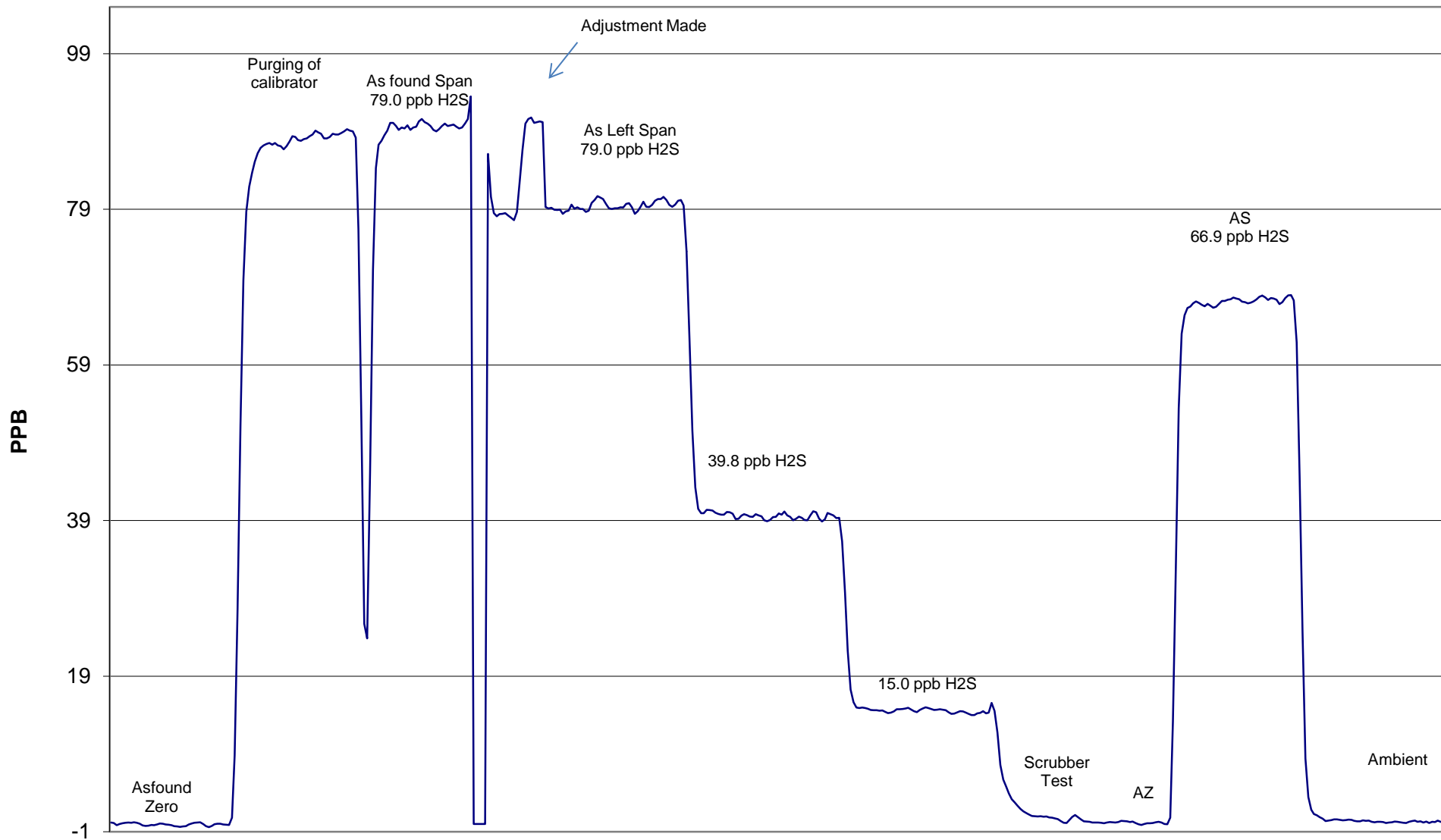
| | | | |
|---------------------|--|----------------------|---|
| Calibration Date | <u> March 12, 2012 </u> | Previous Calibration | <u> February 14, 2012 </u> |
| Station Number | <u> 6 </u> | Station Location | <u> Valleyview </u> |
| Start Time (MST) | <u> 12:20 </u> | End Time (MST) | <u> 16:10 </u> |
| Analyzer make/model | <u> TEI Model 43i - APSCB </u> | Analyzer serial # | <u> 701120010 </u> |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|----------|
| 0.0 | -0.1 | N/A | | |
| 79.0 | 79.5 | 0.9938 | Correlation Coefficient | 0.999934 |
| 39.8 | 39.5 | 1.0072 | | |
| 15.0 | 14.5 | 1.0306 | Slope | 0.991380 |
| | | | Intercept | 0.360495 |



H2S Calibration



March 12, 2012

Calibration Report



Parameter SO2
 Air Monitoring Network PASZA

Station Information

| | | | |
|-----------------------|-----------------|----------------------|-------------------|
| Calibration Date | March 12, 2012 | Previous Calibration | February 15, 2012 |
| Station Number | 9 | Station Location | Sunset House |
| Reason: | Routine | Install | Removal |
| | | | Other: |
| Start Time (MST) | 10:10 | End Time (MST) | 13:50 |
| Barometric Pressure | 31.70 inches Hg | Station Temperature | 19.7 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | 49.8 ppm | Cal Gas Expiry Date | 4/6/2012 |
| Gas Cert Reference | SGAL3245 | | |
| DACS make | CR3000 | DACS serial No. | 5407 |
| DACS voltage range | 0 - 5 Volt | DACS channel # | 2 |
| | <u>Before</u> | | <u>After</u> |
| DACS Scale High | 500 | DACS slope | 500 |
| DACS Scale Low | 0 | DACS intercept | 0 |
| Calculated slope | 0.998582 | Calculated slope | 1.002264 |
| Calculated intercept | -1.357476 | Calculated intercept | -2.008437 |
| Analyzer make | TEI 43C | Analyzer serial # | 609716238 |

| | before | | after | |
|---------------------|--------|-------|-------|-------|
| Concentration range | 0-500 | ppb | 0-500 | ppb |
| Background | 16.5 | | 16.6 | |
| Coefficient | 0.983 | | 0.972 | |
| UV Lamp Voltage | 824 | V | 824 | V |
| Chamber Temp | 44.2 | C | 44.6 | C |
| Perm Gas Temp | 45 | C | 45 | C |
| Pressure | 650.1 | mm Hg | 643.3 | mm Hg |
| Sample Flow | 0.475 | LPM | 0.471 | LPM |
| Lamp Intesity | 37687 | Hz | 37742 | Hz |

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 | 0.0 | 0.1 | N/A |
| 4989 | 39.84 | 394.5 | 394.8 | 0.9994 |
| 4989 | 19.90 | 197.9 | 200.0 | 0.9895 |
| 4989 | 9.93 | 98.9 | 103.0 | 0.9609 |
| | | | | |
| 4989 | 0.00 | 0.0 | 0.0 | As found zero |
| 4989 | 39.84 | 394.5 | 397.9 | As found span |
| Average Correction Factor | | | | 0.9833 |

Calculated value of As Found Response: 396.0 ppm Percent Change of As Found: -0.4%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.3 | ppm | 0.3 | ppm |
| Auto span | 264.0 | ppm | 275.7 | ppm |

Notes: Slight span adjustment

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA

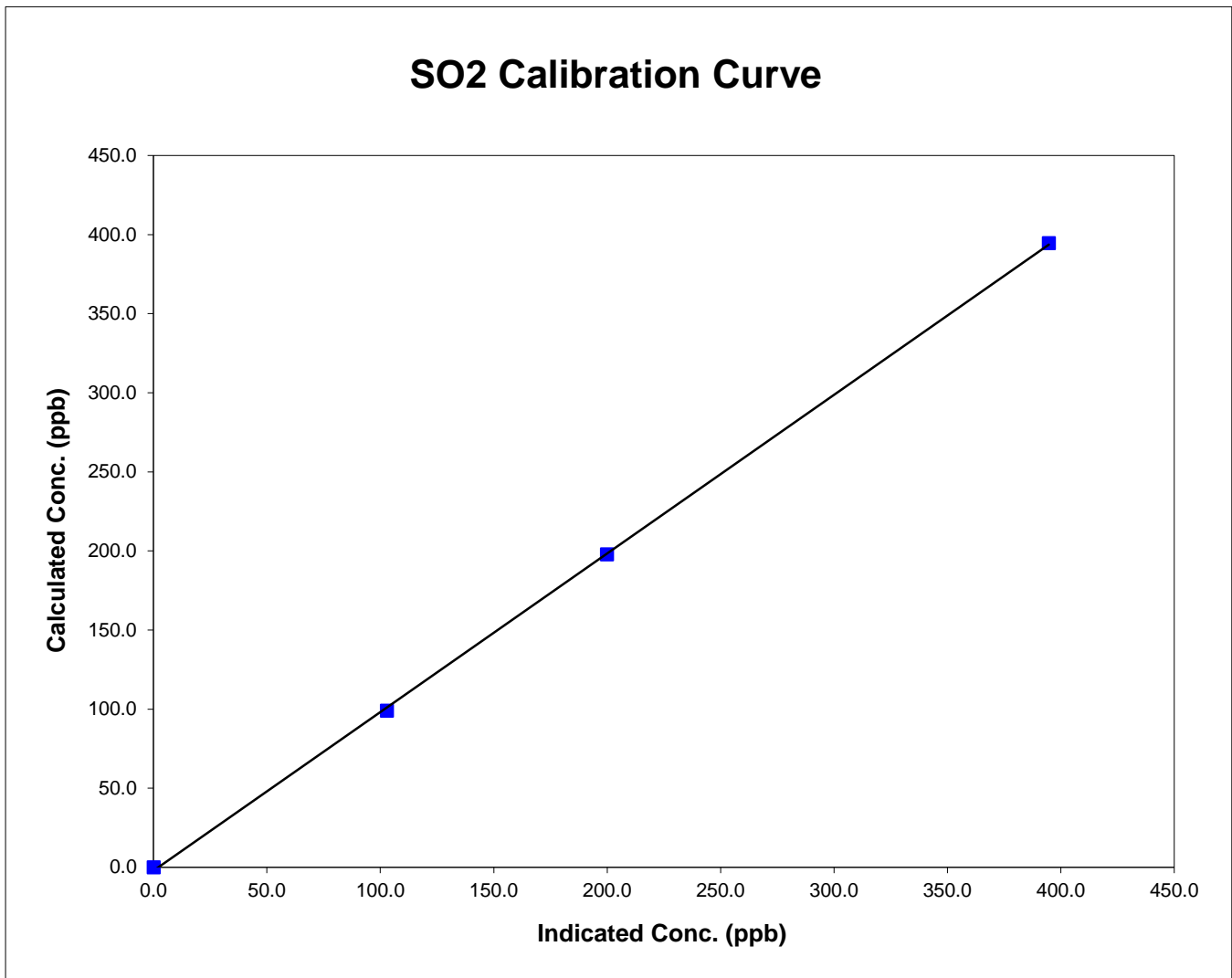


Station Information

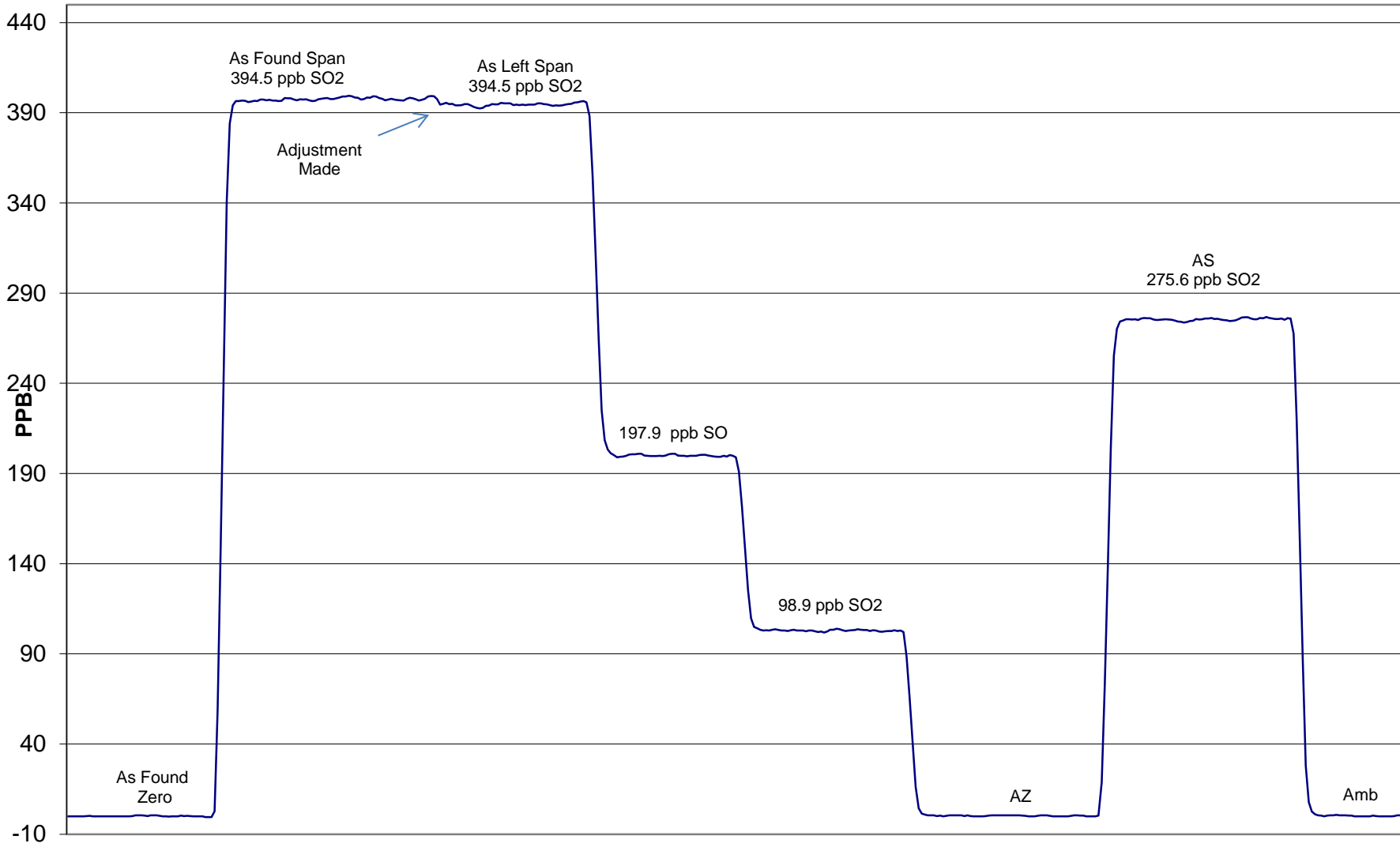
| | | | |
|---------------------|----------------|----------------------|-------------------|
| Calibration Date | March 12, 2012 | Previous Calibration | February 15, 2012 |
| Station Number | 9 | Station Location | Sunset House |
| Start Time (MST) | 10:10 | End Time (MST) | 13:50 |
| Analyzer make/model | TEI 43C | Analyzer serial # | 609716238 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.1 | N/A | Correlation Coefficient | 0.999884 |
| 394.5 | 394.8 | 0.9994 | | |
| 197.9 | 200.0 | 0.9895 | | |
| 98.9 | 103.0 | 0.9609 | Slope | 1.002264 |
| | | | Intercept | -2.008437 |



SO2 Calibration



March 12, 2012

Calibration Report

Parameter
Air Monitoring Network

NO_x-NO-NO₂
PASZA



Station Information

| | | | | | |
|---------------------|----------------|----------------------|----------------------|------------------|-------|
| Calibration Date | March 12, 2012 | Previous Calibration | February 15, 2012 | | |
| Station Number | 9 | Station Location | Sunset House | | |
| Reason: | Routine | Install | Removal Other: _____ | | |
| Start Time (MST) | 10:10 | End Time (MST) | 16:00 | | |
| Barometric Pressure | 0.907 | Atm | Station Temperature | 20.0 | Deg C |
| Calibrator | EnviroNics | | Serial Number | 3474 | |
| NO Cal Gas Conc | 52.5 | ppm | Cal Gas Expiry Date | March 28th, 2013 | |
| NOx Cal Gas Conc | 52.5 | ppm | Cal Gas Serial # | LL8575 | |

DACS Information

| | | | | |
|-----------|------------------|-----------------|------------|-----------|
| DACS make | CR3000 | DACS serial No. | 5407 | |
| | Parameter | NO2 | NOx | NO |
| Before | Data Slope | 0.997531 | 0.997655 | 1.003661 |
| | Data Offset | -0.041240 | -3.000822 | -3.510851 |
| After | Data Slope | 0.998250 | 0.999517 | 1.003974 |
| | Data Offset | -0.697557 | -3.182108 | -3.216075 |
| | Channel # | 5 | 3 | 4 |
| | Voltage Range | 0 - 5 VDC | 0 - 5 VDC | 0 - 5 VDC |

Analyzer Information

| | | | | |
|---------------------|---------|-------------------|------------|-------|
| Analyzer make/model | TEI 42i | Analyzer serial # | 0701120011 | |
| Test Point | before | | after | |
| Concentration range | 0 - 500 | ppb | 0 - 500 | ppb |
| NO offset | 4.8 | mV | 4.4 | mV |
| NOx bkgnd | 7.3 | mV | 4.6 | mV |
| NO coefficient | 1.171 | | 1.166 | |
| NOx coefficient | 1.003 | | 1.000 | |
| NO2 conv temp | 325.0 | Deg C | 324.7 | Deg C |
| PMT Temp | -3.1 | Deg C | -3.1 | Deg C |
| PMT Volt | -773.3 | mV | -773.3 | mV |
| R Cell Press | 150.0 | in Hg | 151.5 | in Hg |
| Sample Flow | 0.850 | ccm | 0.847 | ccm |

NOTES: Adjust zero. R Cell Press is low. Flow is still good but 100 cc lower than last cal.
Slight adjust span.

Calibration Report



Parameter **NOX-NO-NO2**
 Air Monitoring Network **PASZA**

Station Information

Calibration Date: **March 12, 2012** Station Location: **Sunset House**

Calibration Data

| | Dilution flow rate (ccm) | Source gas flow rate (ccm) | Calculated NOx conc (ppb) | Calculated NO conc (ppb) | Calculated NO2 conc (ppb) | Indicated NOx conc (ppb) | Indicated NO conc (ppb) | Indicated NO2 conc (ppb) | NOx Correction factor | NO Correction factor | |
|------|--------------------------|----------------------------|---------------------------|--------------------------|---------------------------|--------------------------|-------------------------|--------------------------|---------------------------|----------------------|--------|
| zero | 4989 | 0.00 | 0.0 | 0.0 | 0.0 | 0.7 | 0.7 | 0.2 | N/A | N/A | |
| 1 | 4989 | 39.83 | 415.8 | 415.8 | 0.0 | 417.8 | 415.9 | 0.2 | 0.9951 | 0.9997 | |
| 2 | 4989 | 19.90 | 208.6 | 208.6 | 0.0 | 213.3 | 212.6 | -0.1 | 0.9778 | 0.9812 | |
| 3 | 4989 | 9.93 | 104.3 | 104.3 | 0.0 | 109.9 | 109.4 | 0.5 | 0.9491 | 0.9533 | |
| AFZ | 4989 | 0.00 | 0.0 | 0.0 | 0.0 | -1.9 | 0.2 | -2.0 | 0.0000 | 0.0000 | |
| AFS | 4989 | 39.83 | 415.8 | 415.8 | 0.0 | 424.1 | 420.1 | 2.2 | 0.9805 | 0.9898 | |
| | | | | | | | | | Average Correction Factor | 0.9740 | 0.9781 |

As Found Concentrations: **NO_x= 423.0** **NO= 416.4** As Found Percent Change **NO_x= 1.7%** **NO= 0.1%**

GPT Calibration Data

Dilution Flow 4989 ccm Source Gas Flow 39.84 ccm

| O3 Setpoint (ppb) | Indicated NO high point (ppb) | Indicated NO drop conc (ppb) | Calculated NO2 conc (ppb) | Indicated NOx conc (ppb) | Indicated NO conc (ppb) | Indicated NO2 conc (ppb) | NOx Correction factor | NO Correction factor | NO2 Correction factor | Converter Efficiency | |
|-------------------|-------------------------------|------------------------------|---------------------------|--------------------------|-------------------------|--------------------------|---------------------------|----------------------|-----------------------|----------------------|--------|
| 0 | 0.2 | 0.2 | 0.0 | 0.7 | 0.7 | 0.2 | N/A | N/A | N/A | N/A | |
| NO point | 415.1 | 415.1 | 0.0 | 415.8 | 415.1 | -1.3 | 0.9983 | 1.0000 | N/A | N/A | |
| 300 | 415.1 | 137.7 | 277.4 | 417.9 | 137.7 | 278.6 | 0.9933 | 1.0000 | 0.9956 | 100.4% | |
| 200 | 415.1 | 224.5 | 190.5 | 417.6 | 224.5 | 190.9 | 0.9938 | 1.0000 | 0.9979 | 100.2% | |
| 100 | 415.1 | 315.9 | 99.2 | 418.9 | 315.9 | 101.1 | 0.9908 | 1.0000 | 0.9809 | 102.0% | |
| | | | | | | | Average Correction Factor | 0.9926 | 1.0000 | 0.9915 | 100.9% |

AIC Data

| Parameter | Previous calibration | | | | Current calibration | | | |
|-----------|----------------------|-------|------|-----|---------------------|-------|-----|-----|
| | NOx | NO2 | NO | | NOx | NO2 | NO | |
| Auto zero | -0.2 | -0.3 | -0.2 | ppb | 1.5 | 0.7 | 0.9 | ppb |
| Auto span | 200.0 | 197.1 | 1.6 | ppb | 103.8 | 101.6 | 1.8 | ppb |

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter NO₂

Air Monitoring Network PASZA



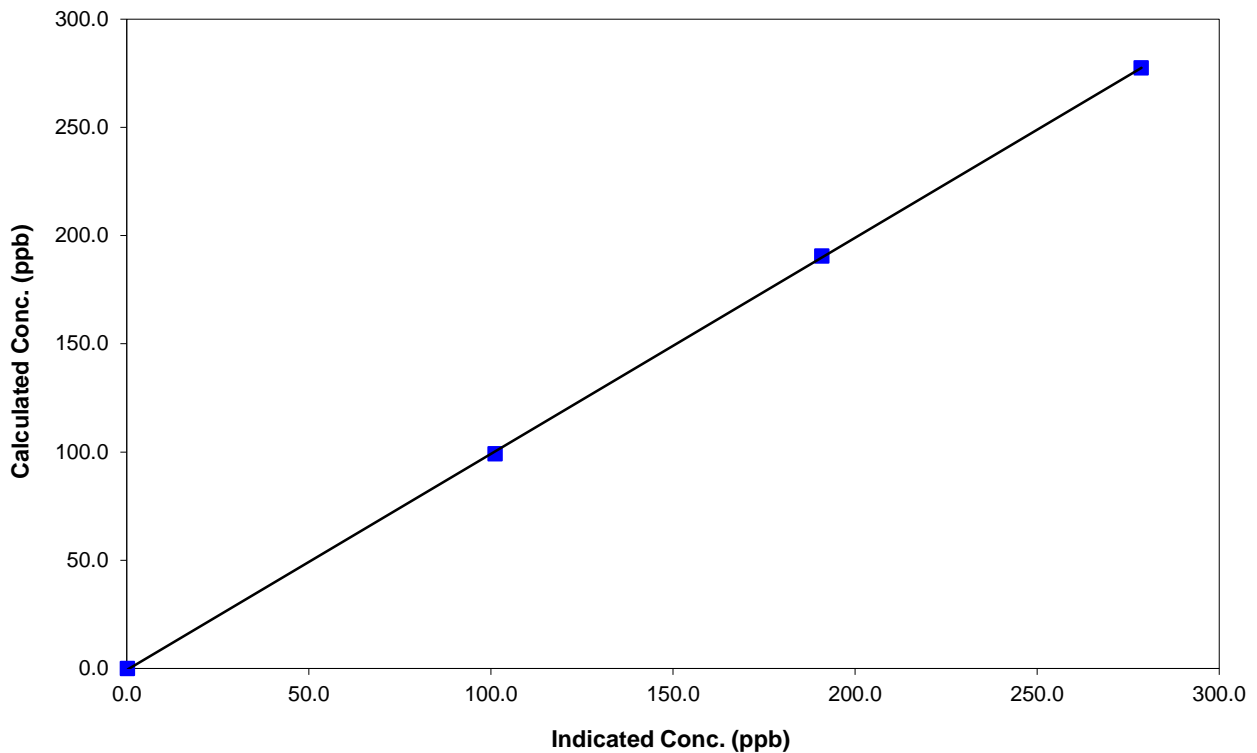
Station Information

| | | | |
|------------------|----------------|----------------------|-------------------|
| Calibration Date | March 12, 2012 | Previous Calibration | February 15, 2012 |
| Station Number | 9 | Station Location | Sunset House |
| Start Time (MST) | 10:10 | End Time (MST) | 16:00 |
| Analyzer make | TEI 42i | Analyzer serial # | 0701120011 |

Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.2 | N/A | Correlation Coefficient | 0.999959 |
| 277.4 | 278.6 | 0.9956 | | |
| 190.5 | 190.9 | 0.9979 | Slope | 0.998250 |
| 99.2 | 101.1 | 0.9809 | | |
| | | | Intercept | -0.697557 |

NO₂ Calibration Curve



Calibration Summary



Parameter NO_x

Air Monitoring Network PASZA

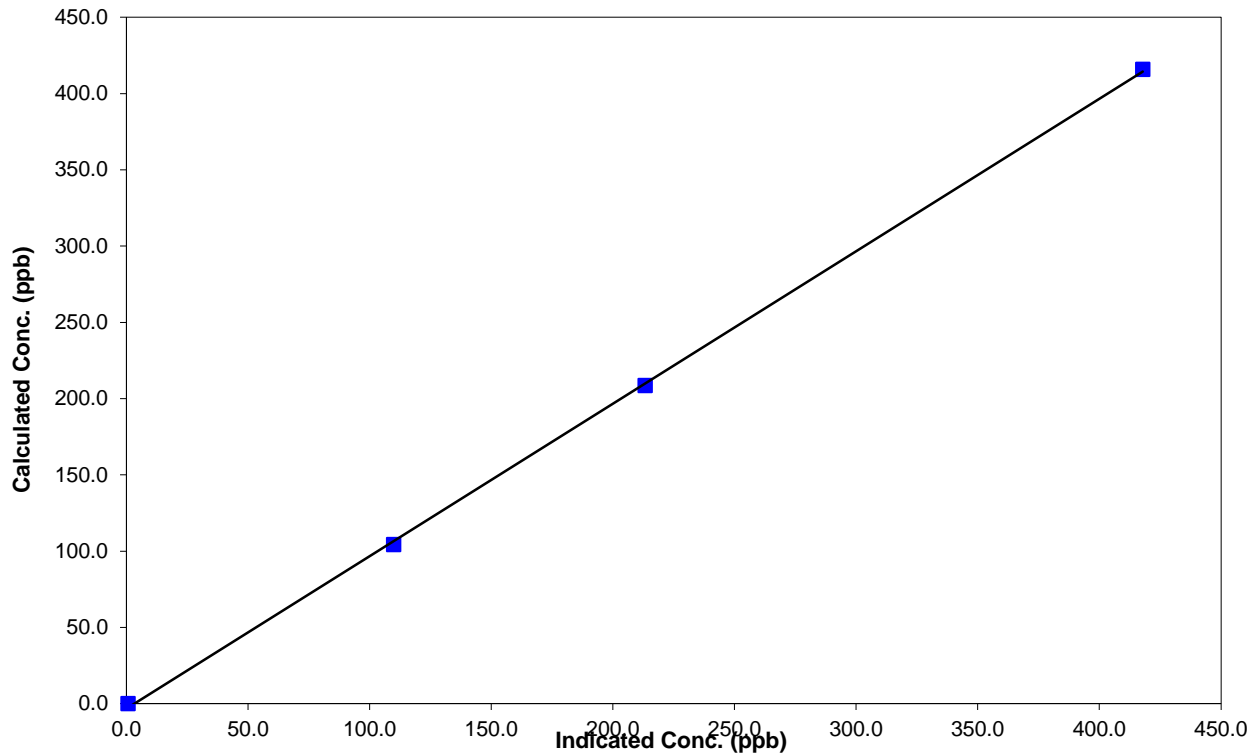
Station Information

| | | | |
|------------------|----------------|----------------------|-------------------|
| Calibration Date | March 12, 2012 | Previous Calibration | February 15, 2012 |
| Station Number | 9 | Station Location | Sunset House |
| Start Time (MST) | 10:10 | End Time (MST) | 16:00 |
| Analyzer make | TEI 42i | Analyzer serial # | 0701120011 |

Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.7 | N/A | Correlation Coefficient | 0.999836 |
| 415.8 | 417.8 | 0.9951 | | |
| 208.6 | 213.3 | 0.9778 | Slope | 0.999517 |
| 104.3 | 109.9 | 0.9491 | | |
| | | | | |
| | | | Intercept | -3.182108 |

NO_x Calibration Curve



Calibration Summary



Parameter NO

Air Monitoring Network PASZA

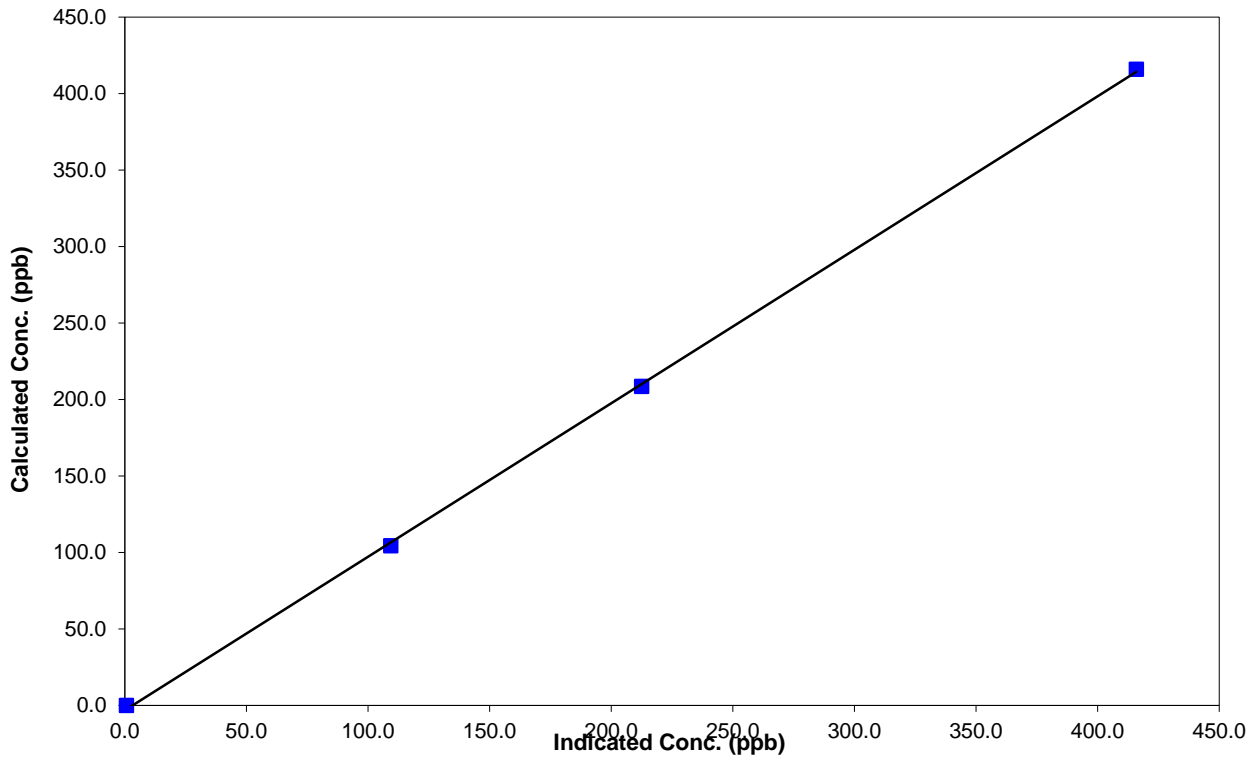
Station Information

| | | | |
|------------------|----------------|----------------------|-------------------|
| Calibration Date | March 12, 2012 | Previous Calibration | February 15, 2012 |
| Station Number | 9 | Station Location | Sunset House |
| Start Time (MST) | 10:10 | End Time (MST) | 16:00 |
| Analyzer make | TEI 42i | Analyzer serial # | 0701120011 |

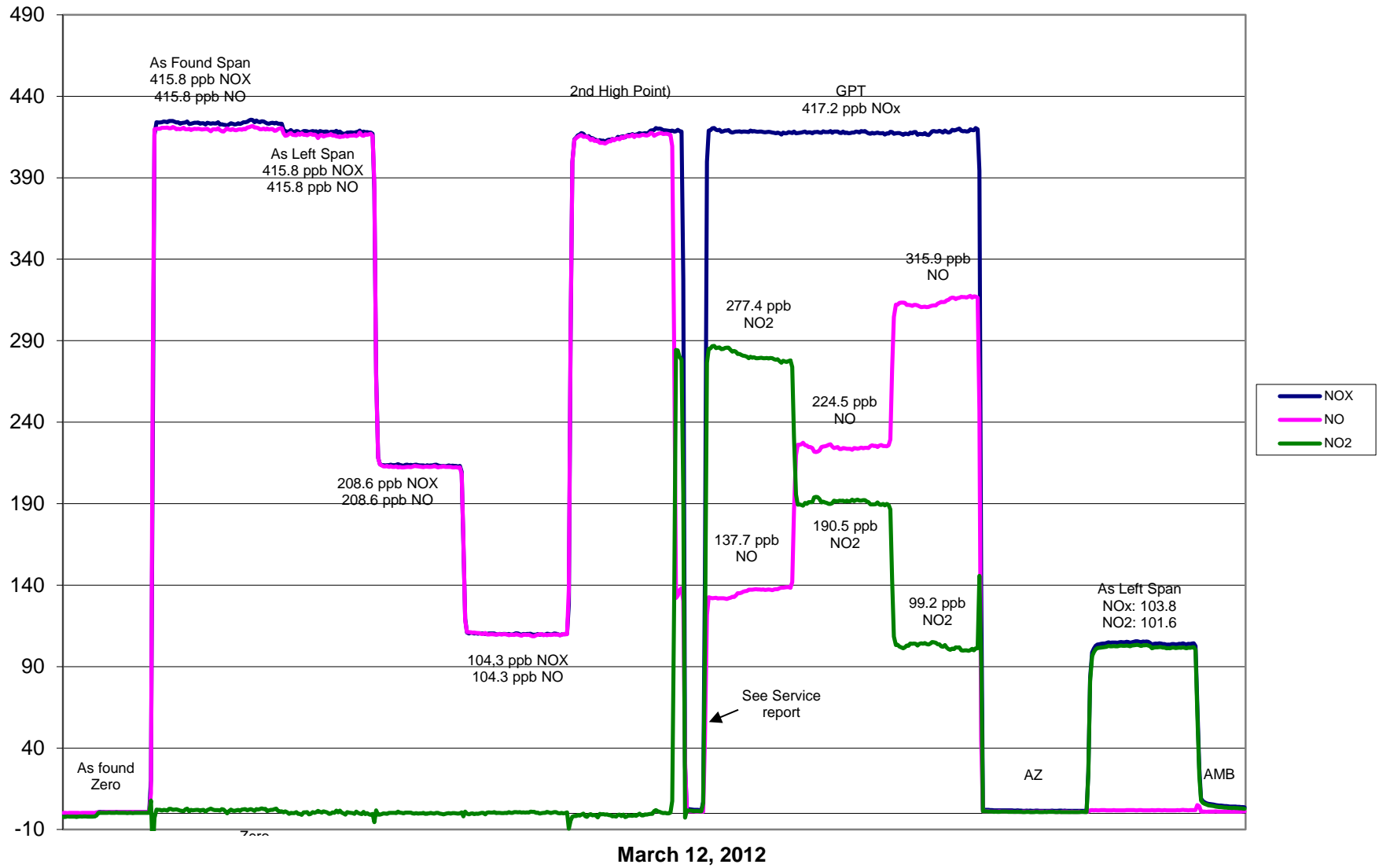
Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.7 | N/A | Correlation Coefficient | 0.999826 |
| 415.8 | 415.9 | 0.9997 | | |
| 208.6 | 212.6 | 0.9812 | Slope | 1.003974 |
| 104.3 | 109.4 | 0.9533 | | |
| | | | | |
| | | | Intercept | -3.216075 |

NO Calibration Curve



PASZA Sunset House NO_x Calibration



Calibration Report



Parameter 03
Air Monitoring Network PASZA

Station Information

| | | | |
|----------------------|-----------------|----------------------|-----------------------|
| Calibration Date | March 12, 2012 | Previous Calibration | February 21, 2012 |
| Station Number | 9 | Station Location | Sunset House |
| Reason: | Routine | Install | Removal remove Other: |
| Start Time (MST) | 14:08 | End Time (MST) | 17:31 |
| Barometric Pressure | 0.894 atm | Station Temperature | 15.7 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| DACS make | CR3000 | DACS serial No. | 5407 |
| DACS voltage range | 0 - 5 Volts | DACS channel # | 6 |
| | Before | | After |
| Calculated slope | 1.000962 | Calculated slope | 0.997642 |
| Calculated intercept | -0.472265 | Calculated intercept | -1.135493 |
| Analyzer make | TEI Model 49C | Analyzer serial # | 49C-0609716240 |

| | before | | after | |
|---------------------|--------|-------|--------|-------|
| Concentration range | 0-500 | ppb | 0-500 | ppb |
| Offset | -1 | ppb | 0.4 | ppb |
| Span | 1.808 | | 1.454 | |
| Cell A intensity | 69782 | Hz | 67630 | Hz |
| Cell B intensity | 98212 | Hz | 98007 | Hz |
| Pressure | 664,3 | in Hg | 664.30 | in Hg |
| CellA Flow | 0.931 | ccm | 0.931 | ccm |
| Cell B Flow | 0.714 | cmm | 0.714 | cmm |

Calibration Data

| Dilution air flow rate (cc/min) | Source gas flow rate (cc/min) | Calculated concentration (ppm) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4990 | 0.0 | 0.0 | 0.4 | N/A |
| 4990 | 300 | 277.4 | 280.0 | 0.9907 |
| 4990 | 200 | 190.5 | 189.6 | 1.0048 |
| 4990 | 100 | 99.2 | 103.0 | 0.9635 |
| 4990 | 0.0 | 0.0 | 1.5 | As found zero |
| 4990 | 300 | 277.4 | 348.2 | As found span |
| Average Correction Factor | | | | 0.9863 |

Calculated value of As Found Response: 346.6 ppm Percent Change of As Found: 24.9%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.6 | ppb | -1.0 | ppb |
| Auto span | 137.7 | ppb | 206.9 | ppb |

Notes: Cal went great, adjusted zero and high point.

Calibration Performed By: Grover Christiansen

Calibration Summary



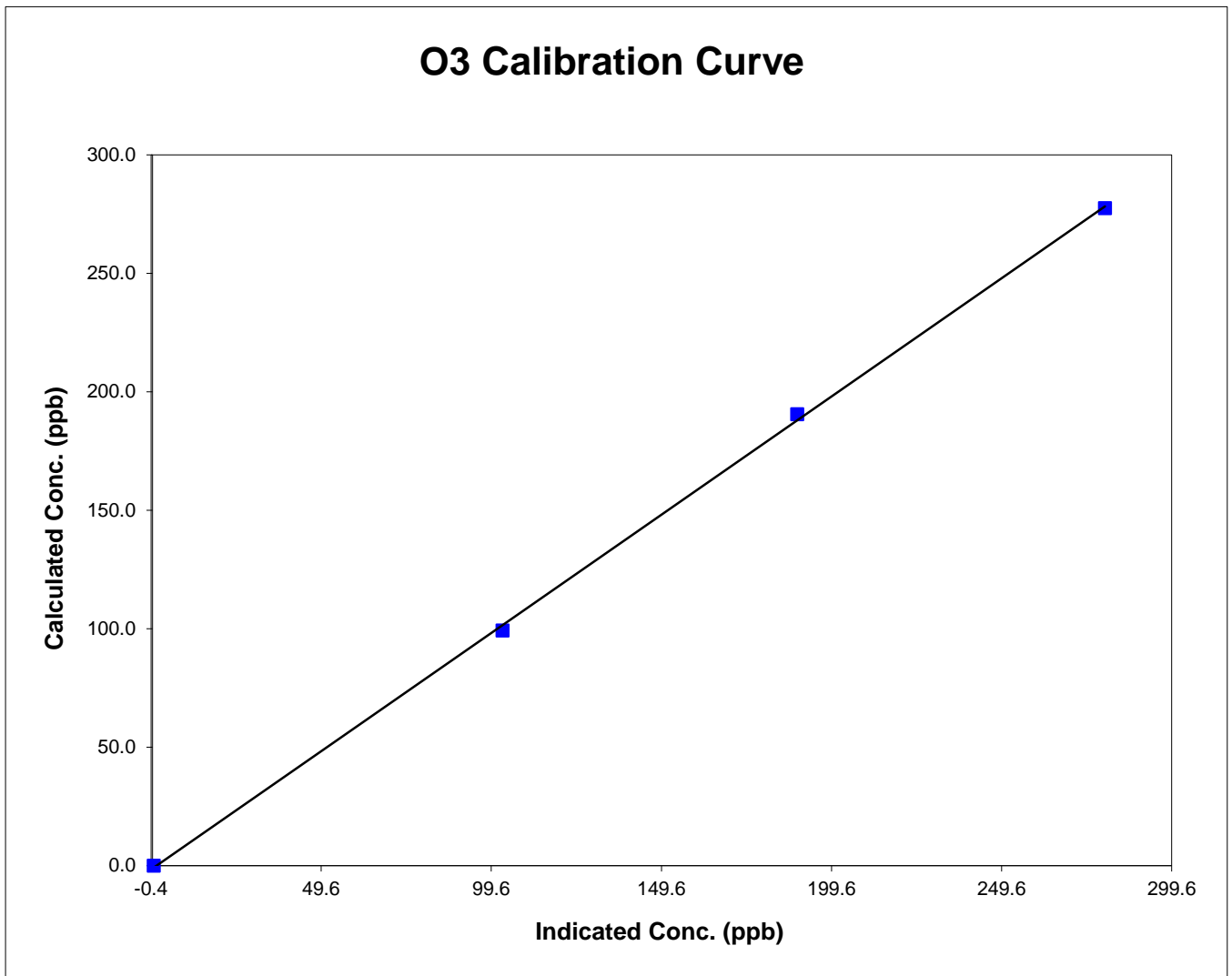
Parameter O3
 Air Monitoring Network PASZA

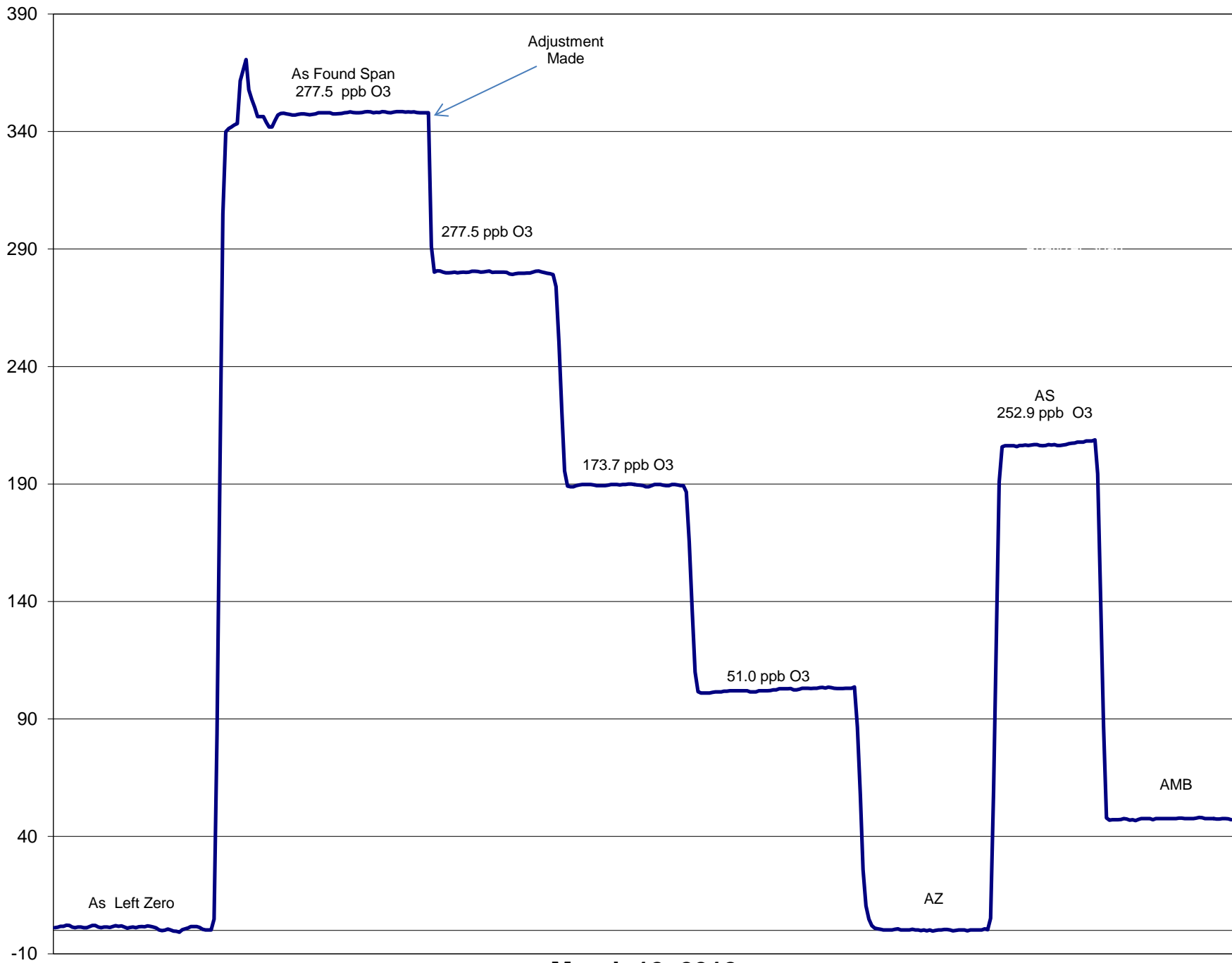
Station Information

| | | | |
|---------------------|----------------|----------------------|-------------------|
| Calibration Date | March 12, 2012 | Previous Calibration | February 21, 2012 |
| Station Number | 9 | Station Location | Sunset House |
| Start Time (MST) | 14:08 | End Time (MST) | 17:31 |
| Analyzer make/model | TEI Model 49C | Analyzer serial # | 49C-0609716240 |

Calibration Data

| Calculated concentration (ppm) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.4 | NA | | |
| 277.4 | 280.0 | 0.9907 | Correlation Coefficient | 0.999695 |
| 190.5 | 189.6 | 1.0048 | | |
| 99.2 | 103.0 | 0.9635 | Slope | 0.997642 |
| | | | | |
| | | | Intercept | -1.135493 |
| | | | | |





March 12, 2012

Calibration Summary

Parameter TRS

Air Monitoring Network PASZA



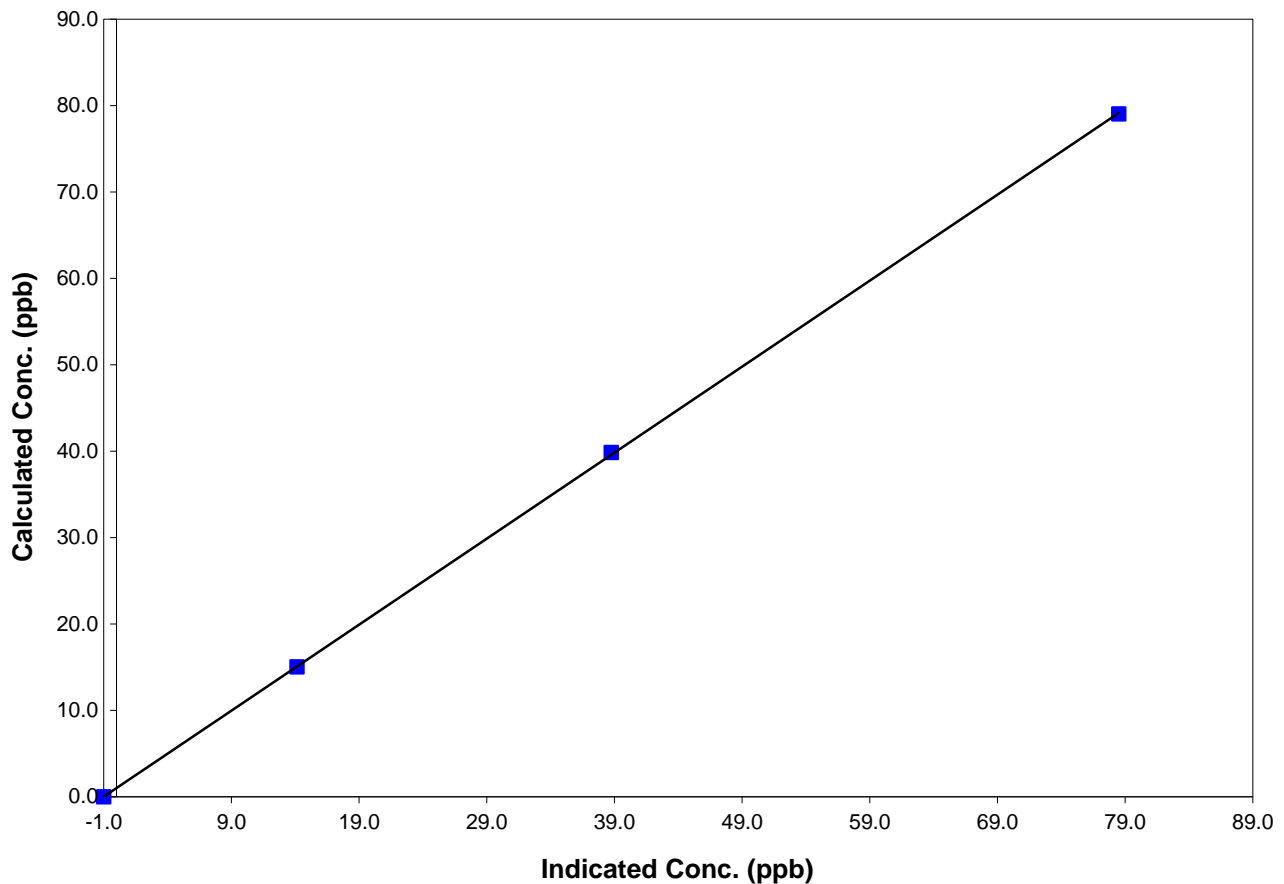
Station Information

| | | | |
|---------------------|-----------------------|----------------------|--------------------------|
| Calibration Date | <u>March 13, 2012</u> | Previous Calibration | <u>February 15, 2012</u> |
| Station Number | <u>PAZA Rover</u> | Station Location | <u>Sunset House</u> |
| Start Time (MST) | <u>6:35</u> | End Time (MST) | <u>10:10</u> |
| Analyzer make/model | <u>TEI 43C</u> | Analyzer serial # | <u>609716238</u> |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|----------|
| 0.0 | -1.0 | N/A | Correlation Coefficient | 0.999978 |
| 79.0 | 78.5 | 1.0068 | | |
| 39.8 | 38.8 | 1.0279 | | |
| 15.0 | 14.1 | 1.0620 | Slope | 0.994912 |
| | | | Intercept | 1.037080 |

TRS Calibration Curve



TRS Calibration

