



Air Quality Monitoring Network for January 2008

Prepared by
FOCUS
 AMBIENT AIR MONITORING

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March 6, 2008

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RE: Peace Airshed Zone Association (PASZA) – January 2008 Ambient Air Report

Enclosed is the PASZA Ambient Monitoring Network Report for the month of **January 2008**.

Continuous Monitoring: Six (6) Stations including Henry Pirker (Grande Prairie), Evergreen Park, Smoky Heights, Beaverlodge, Spirit River (portable) and Valleyview.

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 Summary" and "Continuous Monitoring" pages of the report.

The measured ambient air quality was within the Provincial and Federal objectives for the Henry Pirker, Evergreen Park, Smoky Heights, Beaverlodge, Spirit River and Valleyview stations.

During the month of January the following events were noted:

Henry Pirker Station:

- ◆ All analyzers / sensors at the Henry Pirker station had an operational uptime greater than 90%.
- ◆ TRS spans dropped on the 8th, 20th, and 27th to 31st – intermittent issue and reason under investigation.
- ◆ No THC spans January 1st to 4th – cylinder ran out.
- ◆ The O₃ spans were high due to a new lamp settling in (new lamp was installed during the December 13th calibration).
- ◆ A power bump on January 28th resulted in thirty-seven (37) hours of invalid data for the TEOM.
- ◆ The AQI for the month resulted in 653 hours of Good readings and 2 hours of Fair readings.

Evergreen Park Station:

- ◆ On January 4th the TRS analyzer had a reading of 10 ppb, but did not exceed the Alberta Objective.
- ◆ The TRS analyzer had sixty-nine (69) flagged invalid due to excessive baseline drift – a new lamp and socket were replaced on January 23rd.
- ◆ All analyzers / sensors at the Evergreen Park station had an operational uptime greater than 90%.

Smoky Heights Station:

- ◆ One (1) hour was flagged invalid for the TEOM analyzer due to flatlining – reason unknown.
- ◆ All analyzers / sensors at the Smoky Heights station had an operational uptime greater than 90%.

Beaverlodge Station:

- ◆ All analyzers / sensors at the Beaverlodge station had an operational uptime greater than 90%.

- ◆ Fifteen (15) hours were flagged invalid for the TEOM analyzer due to a power bump on January 28th.
- ◆ Four (4) hours were flagged invalid for wind speed and wind direction on January 19th due to flatlining – probably a result of the wind cups freezing.
- ◆ The AQI for the month resulted in 685 hours of Good readings.

Portable – Spirit River Station:

- ◆ Due to a series of communication errors a number of hours were flagged invalid for all sensors on January 26th, 27th and 29th: four (4) hours for TRS, five (5) hours for SO₂, relative humidity and temperature, and six (6) hours for NO₂, O₃, wind speed and wind direction.
- ◆ All analyzers / sensors at the Spirit River station had an operational uptime greater than 90%.

Valleyview Station:

- ◆ New analyzer racks were installed in the station on January 22nd – approximately twenty-four (24) hours were flagged maintenance for all analyzers and sensors due to the station upgrade.
- ◆ All analyzers / sensors at the Valleyview station had an operational uptime greater than 90%.

Passive Monitoring: 54 Stations throughout the PASZA zone:

Notes from MAXXAM noted that: the NO₂ from the Puskaskau site was damaged and therefore there is no result for the month of January. There were seven duplicate sites sampled in the month of January: Shaftsbury, Eaglesham, Flyingshot, Grande Prairie I, Clairmont Lake, Gerry Lake and Grande Prairie HP. 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 0.2 ppb to 1.5 ppb, with a mean of 0.6 ppb.
- Monthly average concentrations for NO₂ passives ranged from 1.6 ppb to 18.3 ppb, with a mean of 4.1 ppb.
- Monthly average concentrations for O₃ passives ranged from 18.7 ppb to 45.5 ppb, with a mean of 35.7 ppb.

If you have any questions, please contact the Focus office at 1-888-869-2252 (Kelly Baragar or Sharon Whiteley).

On Behalf of the,
Peace Airshed Zone Association



Michael Bisaga
PASZA Program Manager



Sharon Whiteley, B.Sc..
AQM Data Specialist

PASZA Monthly Continuous Data Summary

| Jan-2008 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 | WSPD (km/hr) | WDIR (Sector) | Conc | Day | |
| SO ₂ (ppb) | 172 | 57 | Henry Pirker | 0.4 | 0 | 0 | 3.4 | Jan-13 14:00 | 5.0 | ESE | 1.1 | Jan-30 | 100.0% |
| SO ₂ (ppb) | 172 | 57 | Evergreen Park | 0.5 | 0 | 0 | 3.0 | Jan-30 19:00 | 4.4 | NE | 1.7 | Jan-30 | 99.9% |
| SO ₂ (ppb) | 172 | 57 | Smoky Heights | 0.9 | 0 | 0 | 8.3 | Jan-28 20:00 | 5.3 | W | 2.0 | Jan-11 | 100.0% |
| SO ₂ (ppb) | 172 | 57 | Beaverlodge | 0.9 | 0 | 0 | 7.2 | Jan-15 08:00 | 2.7 | N | 2.8 | Jan-30 | 100.0% |
| SO ₂ (ppb) | 172 | 57 | Portable-Spirit River | 0.8 | 0 | 0 | 4.2 | Jan-28 22:00 | 1.7 | WSW | 2.0 | Jan-28 | 99.3% |
| SO ₂ (ppm) | 172 | 57 | Valleyview | 0.30 | 0 | 0 | 4.79 | Jan-16 18:00 | 10.2 | W | 0.70 | Jan-16 | 97.3% |
| NO (ppb) | | | Henry Pirker | 23.0 | - | - | 204.4 | Jan-04 09:00 | 4.1 | WNW | 69.3 | Jan-11 | 100.0% |
| NO ₂ (ppb) | 212 | 106 | Henry Pirker | 21.0 | 0 | 0 | 63.1 | Jan-14 13:00 | 3.9 | WNW | 33.4 | Jan-23 | 100.0% |
| NO _x (ppb) | | | Henry Pirker | 44.0 | - | - | 266.5 | Jan-14 13:00 | 3.9 | WNW | 99.2 | Jan-11 | 100.0% |
| NO (ppb) | | | Beaverlodge | 3.2 | - | - | 73.1 | Jan-08 12:00 | 1.6 | W | 23.5 | Jan-08 | 100.0% |
| NO ₂ (ppb) | 212 | 106 | Beaverlodge | 9.1 | 0 | 0 | 32.0 | Jan-12 17:00 | 2.0 | SSW | 22.7 | Jan-08 | 100.0% |
| NO _x (ppb) | | | Beaverlodge | 12.4 | - | - | 99.6 | Jan-08 12:00 | 1.6 | W | 46.4 | Jan-08 | 100.0% |
| NO (ppb) | | | Portable-Spirit River | 1.1 | - | - | 34.2 | Jan-08 07:00 | 2.0 | NW | 8.0 | Jan-12 | 99.2% |
| NO ₂ (ppb) | 212 | 106 | Portable-Spirit River | 6.6 | 0 | 0 | 51.2 | Jan-08 07:00 | 2.0 | NW | 16.4 | Jan-12 | 99.2% |
| NO _x (ppb) | | | Portable-Spirit River | 7.7 | - | - | 85.4 | Jan-08 07:00 | 2.0 | NW | 24.4 | Jan-12 | 99.2% |
| O ₃ (ppb) | 82 | | Henry Pirker | 11.7 | 0 | - | 38.2 | Jan-17 05:00 | 23.7 | WNW | 29.0 | Jan-16 | 100.0% |
| O ₃ (ppb) - 8-hr | | 65 | Henry Pirker | | | 0 | | | | | 37.1 | Jan-17 | |
| O ₃ (ppb) | 82 | | Beaverlodge | 24.5 | 0 | - | 42.6 | Jan-25 21:00 | 17.4 | WNW | 38.8 | Jan-16 | 100.0% |
| O ₃ (ppb) - 8-hr | | 65 | Beaverlodge | | | 0 | | | | | 41.7 | Jan-17 | |
| O ₃ (ppb) | 82 | | Portable-Spirit River | 23.5 | 0 | - | 41.3 | Jan-04 13:00 | 8.6 | SW | 35.1 | Jan-14 | 99.2% |
| O ₃ (ppb) - 8-hr | | 65 | Portable-Spirit River | | | 0 | | | | | 38.3 | Jan-26 | |
| CO (ppm) | 13 | | Henry Pirker | 0.36 | 0 | - | 2.8 | Jan-26 10:00 | 4.4 | SE | 0.6 | Jan-11 | 100.0% |
| CO (ppm) - 8-hr | | 5 | Henry Pirker | | | 0 | | | | | 1.0 | Jan-12 | |
| THC (ppm) | | | Henry Pirker | 2.45 | - | - | 4.1 | Jan-11 12:00 | 2.8 | WNW | 3.5 | Jan-11 | 100.0% |
| TRS (ppb) | | | Henry Pirker | 0.5 | - | - | 1.8 | Jan-13 12:00 | 5.7 | ESE | 0.8 | Jan-13 | 100.0% |
| TRS (ppb) | | | Evergreen Park | 0.8 | - | - | 10.0 | Jan-04 12:00 | 3.8 | NNW | 2.4 | Jan-04 | 90.5% |
| TRS (ppb) | | | Smoky Heights | 0.4 | - | - | 1.2 | Jan-11 16:00 | 8.0 | SSW | 0.9 | Jan-11 | 100.0% |
| TRS (ppb) | | | Portable-Spirit River | 0.5 | - | - | 1.4 | Sep-22 22:00 | 1.6 | SSE | 0.6 | Sep-22 | 100.0% |
| H ₂ S (ppb) | 10 | 3 | Valleyview | 0.1 | 0 | 0 | 1.2 | Jan-02 18:00 | 4.2 | SSW | 0.3 | Jan-24 | 97.4% |
| PM _{2.5} (µg/m ³) | | 30 ^a | Henry Pirker | 5.5 | 0 | 0 | 33.9 | Jan-14 13:00 | 3.9 | WNW | 17.1 | Jan-11 | 92.6% |
| PM _{2.5} (µg/m ³) | | 30 ^a | Evergreen Park | 6.7 | 0 | 0 | 49.9 | Jan-10 13:00 | 4.4 | SW | 20.7 | Jan-11 | 98.3% |
| PM _{2.5} (µg/m ³) | | 30 ^a | Smoky Heights | 4.6 | 0 | 0 | 65.4 | Jan-23 23:00 | 3.0 | ESE | 11.3 | Jan-11 | 99.3% |
| PM _{2.5} (µg/m ³) | | 30 ^a | Beaverlodge | 3.4 | 0 | 0 | 16.7 | Jan-08 11:00 | 2.2 | NE | 11.8 | Jan-10 | 96.6% |

PASZA Monthly Continuous Data Summary - continued

| Jan-2008 | | Peace Airshed Zone Association | | | | Maximum Recorded Values | | | | | | |
|------------------------|--|--------------------------------|-------|---|---|-------------------------|--------------|------|-----|--------------|--------|--------|
| | | | | | | 1-hr | | | | 24-hr / 8-hr | | |
| RH (%) | | Henry Pirker | 72.4 | - | - | - | - | - | - | - | - | 100.0% |
| RH (%) | | Beaverlodge | 72.9 | - | - | - | - | - | - | - | - | 100.0% |
| RH (%) | | Portable-Spirit River | 75.3 | - | - | - | - | - | - | - | - | 99.3% |
| RH (%) | | Valleyview | 76.6 | - | - | - | - | - | - | - | - | 96.9% |
| SR (W/m ²) | | Henry Pirker | 25.3 | - | - | - | - | - | - | - | - | 100.0% |
| Temp (°C) | | Henry Pirker | -13.7 | - | - | - | - | - | - | - | - | 100.0% |
| Temp (°C) | | Evergreen Park | -13.8 | - | - | - | - | - | - | - | - | 100.0% |
| Temp (°C) | | Smoky Heights | -13.6 | - | - | - | - | - | - | - | - | 100.0% |
| Temp (°C) | | Beaverlodge | -11.4 | - | - | - | - | - | - | - | - | 100.0% |
| Temp (°C) | | Portable-Spirit River | -13.3 | - | - | - | - | - | - | - | - | 99.3% |
| Temp (°C) | | Valleyview | -13.1 | - | - | - | - | - | - | - | - | 96.9% |
| WSPD v (km/hr) | | Henry Pirker | 6.2 | - | - | 26.1 | Jan-26 00:00 | 26.1 | WNW | 16.6 | Jan-16 | 100.0% |
| WSPD v (km/hr) | | Evergreen Park | 5.0 | - | - | 29.0 | Jan-16 17:00 | 29.0 | W | 17.3 | Jan-16 | 100.0% |
| WSPD v (km/hr) | | Smoky Heights | 9.8 | - | - | 36.3 | Jan-16 20:00 | 36.3 | W | 20.8 | Jan-16 | 100.0% |
| WSPD v (km/hr) | | Beaverlodge | 5.7 | - | - | 37.5 | Jan-16 20:00 | 37.5 | WNW | 18.8 | Jan-16 | 99.5% |
| WSPD v (km/hr) | | Portable-Spirit River | 5.5 | - | - | 54.3 | Jan-03 02:00 | 54.3 | SW | 17.7 | Jan-02 | 99.2% |
| WSPD v (km/hr) | | Valleyview | 5.2 | - | - | 26.2 | Jan-26 23:00 | 26.2 | N | 16.0 | Jan-27 | 96.9% |
| WSPD s (km/hr) | | Henry Pirker | 6.7 | - | - | 26.1 | Jan-26 00:00 | 26.1 | WNW | 17.2 | Jan-16 | 100.0% |
| WSPD s (km/hr) | | Evergreen Park | 5.6 | - | - | 29.2 | Jan-16 17:00 | 29.2 | W | 18.4 | Jan-16 | 100.0% |
| WSPD s (km/hr) | | Smoky Heights | 10.1 | - | - | 36.3 | Jan-16 20:00 | 36.3 | W | 21.7 | Jan-16 | 100.0% |
| WSPD s (km/hr) | | Beaverlodge | 6.1 | - | - | 37.5 | Jan-16 20:00 | 37.5 | WNW | 19.1 | Jan-16 | 99.5% |
| WSPD s (km/hr) | | Portable-Spirit River | 5.7 | - | - | 17.5 | Jan-03 02:00 | 54.4 | SW | 17.5 | Jan-02 | 99.2% |
| WSPD s (km/hr) | | Valleyview | 5.5 | - | - | 26.2 | Jan-26 23:00 | 26.2 | N | 16.1 | Jan-27 | 96.9% |
| WDIR | | Henry Pirker | WNW | - | - | - | - | - | - | - | - | 100.0% |
| WDIR | | Evergreen Park | WNW | - | - | - | - | - | - | - | - | 100.0% |
| WDIR | | Smoky Heights | S | - | - | - | - | - | - | - | - | 100.0% |
| WDIR | | Beaverlodge | NW | - | - | - | - | - | - | - | - | 99.5% |
| WDIR | | Portable-Spirit River | WSW | - | - | - | - | - | - | - | - | 99.2% |
| WDIR | | Valleyview | WNW | - | - | - | - | - | - | - | - | 96.9% |

Note: ^a the draft 24-hr Alberta Ambient Air Quality Objective

Continuous Network Equipment Summary

PASZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on January 11th (SO₂, NO_x and O₃) and January 14th (CO, THC and TRS).

| 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 | The O ₃ spans were high due to a new lamp settling in (new lamp was installed during the December 13 th calibration). |
| CO | TEI | 48C | No operational issues observed. |
| THC | TEI | 51-CLT | No THC spans January 1 st to 4 th – cylinder ran out. |
| TRS | TEI | 43C | Spans dropped on the 8 th , 20 th , and 27 th to 31 st – intermittent issue and reason under investigation. |
| PM _{2.5} | R&P | 1400AB | Eighteen (18) hours were flagged due to excessive baseline drift. A power bump on January 28 th resulted in thirty-seven (37) hours of invalid data for the TEOM. |
| RH | Met One | 083D | No operational issues observed. |
| AT | 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. |

PASZA – Evergreen Park Station

General Station Issues

Routine monthly calibrations were performed on January 15th (SO₂, TRS and PM_{2.5}). A second calibration was performed on the TRS analyzer due to trouble shooting (lamp and trigger pack) on January 16th.

| Parameter | Make | Model | Notes |
|-------------------|---------|--------|--|
| SO ₂ | TEI | 43i | No operational issues observed. |
| TRS | TEI | 43C | The TRS analyzer had sixty-nine (69) flagged invalid due to excessive baseline drift – a new lamp and socket were replaced on January 23 rd . |
| PM _{2.5} | R&P | 1400AB | Thirteen (13) hours were removed due to excessive baseline drift. |
| AT | Met One | 083D | No operational issues observed. |
| WS | Met One | 010C | No operational issues observed. |
| WD | Met One | 020C | No operational issues observed. |

PASZA – Smoky Heights Station

General Station Issues

Routine monthly calibrations were performed on January 17th (SO₂, TRS and TEOM).

| 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 | On January 28 th - one (1) hour was flagged invalid for the TEOM analyzer due to flatlining – reason unknown. Four (4) hours were removed due to excessive baseline drift. |
| AT | Met One | 083D | No operational issues observed. |
| WS | Met One | 010C | No operational issues observed. |
| WD | Met One | 020C | No operational issues observed. |

PASZA – Beaverlodge Station

General Station Issues

Routine monthly calibrations were performed on January 4th (SO₂, NO_x and 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 | Ten (10) hours were removed due to excessive baseline drift. Fifteen (15) hours were flagged invalid for the TEOM analyzer due to a power bump on January 28 th . |
| AT | n/a | n/a | No operational issues observed. |
| RH | n/a | n/a | No operational issues observed. |
| WS | Blue Sky | 857 | Four (4) hours were flagged invalid for wind speed and wind direction on January 19 th due to flatlining – probably a result of the wind cups freezing. |
| WD | Blue Sky | 857 | Four (4) hours were flagged invalid for wind speed and wind direction on January 19 th due to flatlining – probably a result of the wind cups freezing. |

PASZA – Spirit River (Portable) Station

General Station Issues

Routine monthly calibrations were performed on January 8th (SO₂ and NO_x) and January 9th (O₃ and TRS). Due to a series of communication errors a number of hours were flagged invalid for all sensors on January 26th, 27th and 29th: four (4) hours for TRS, five (5) hours for SO₂, relative humidity and temperature, and six (6) hours for NO₂, O₃, wind speed and wind direction.

| Parameter | Make | Model | Notes |
|------------------------|---------|-----------|--|
| SO ₂ | TEI | 43C | No operational issues observed other than above noted error. |
| NOx/NO/NO ₂ | TEI | 42i | No operational issues observed other than above noted error. |
| TRS | TEI | 43C | No operational issues observed other than above noted error. |
| O ₃ | TEI | 49C | No operational issues observed other than above noted error. |
| AT | Gill | Met Pak 3 | No operational issues observed other than above noted error. |
| RH | Gill | Met Pak 3 | No operational issues observed other than above noted error. |
| WS | Met One | | No operational issues observed other than above noted error. |
| WD | Met One | | No operational issues observed other than above noted error. |

PASZA – Valleyview Station

General Station Issues

Routine monthly calibrations were performed on January 22nd and 23rd (SO₂ and H₂S). New analyzer racks were installed in the station on January 22nd – approximately twenty-four (24) hours were flagged maintenance for all analyzers and sensors due to the station upgrade.

| Parameter | Make | Model | Notes |
|------------------|------|-----------|--|
| SO ₂ | TEI | 43i | No operational issues observed other than above noted maintenance. |
| H ₂ S | TEI | 43A | No operational issues observed other than above noted maintenance. |
| AT | Gill | Met Pak 3 | No operational issues observed other than above noted maintenance. |
| RH | Gill | Met Pak 3 | No operational issues observed other than above noted maintenance. |
| WS | Gill | Met Pak 3 | No operational issues observed other than above noted maintenance. |
| WD | Gill | Met Pak 3 | No operational issues observed other than above noted maintenance. |

PASZA
Henry Pirker Station
Monthly Summary Tables, Graphs and
Roses

PASZA - Henry Pirker AQI Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

Air Quality Index (AQI)

Monitoring Dates: January 1, 2008 to February 1, 2008

Alberta's Air Quality Index

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

Summary

| | |
|------------------------------------|-----|
| Number of 1-hr Good Readings: | 653 |
| Number of 1-hr Fair Readings: | 2 |
| Number of 1-hr Poor Readings: | 0 |
| Number of 1-hr Very Poor Readings: | 0 |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|
| | Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 |
| 1-Jan-08 | 7 | 6 | 7 | 6 | 6 | 7 | 6 | 4 | 7 | 8 | 9 | N | N | 11 | N | N | N | N | N | N | N | N | N | N | 5 |
| 2-Jan-08 | 5 | 6 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | N | 5 | 5 | 9 | 8 | 8 | 11 | 11 | 8 | 8 | 7 | 10 | 7 | 13 | 9 |
| 3-Jan-08 | N | 9 | 9 | 9 | 9 | 8 | 8 | 9 | 9 | N | 9 | 9 | 11 | 10 | 8 | 7 | 9 | 9 | 9 | N | 12 | 12 | 13 | 13 | 13 |
| 4-Jan-08 | 10 | 11 | 6 | 6 | 8 | 6 | 7 | 9 | N | 13 | 9 | 9 | 8 | 7 | 10 | 8 | 9 | 9 | 9 | 11 | 12 | 14 | N | 16 | |
| 5-Jan-08 | 16 | 10 | 10 | 11 | 10 | 5 | 6 | N | 8 | 7 | 6 | 7 | 6 | 6 | 9 | 9 | 6 | 6 | 6 | 5 | 7 | 7 | 6 | 5 | |
| 6-Jan-08 | 5 | 6 | 6 | 6 | 7 | 8 | N | 5 | 6 | 6 | 4 | 5 | 5 | 6 | 7 | 6 | 5 | 7 | 4 | 4 | 5 | 4 | 6 | 4 | |
| 7-Jan-08 | 4 | 4 | 4 | 4 | 4 | N | 5 | 6 | 6 | 6 | 6 | 6 | 4 | 5 | 4 | 5 | 6 | 7 | 8 | 7 | 5 | 6 | 6 | 5 | |
| 8-Jan-08 | 5 | 5 | 5 | 5 | N | 6 | 6 | 6 | 7 | 9 | 12 | 10 | 11 | 12 | 14 | 18 | 21 | 11 | 9 | 7 | 7 | 10 | 11 | 8 | |
| 9-Jan-08 | 6 | 8 | 9 | N | 8 | 8 | 8 | 8 | 6 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 10 | 12 | 11 | 6 | 5 | 6 | 5 | 5 | |
| 10-Jan-08 | 5 | 6 | N | 6 | 5 | 5 | 7 | 8 | 8 | 11 | 11 | 12 | 13 | 15 | 14 | 20 | 20 | 26 | 25 | 22 | 22 | 18 | 24 | 20 | |
| 11-Jan-08 | 19 | N | 16 | 15 | 16 | 12 | 7 | 10 | 15 | 18 | N | N | N | 15 | N | 16 | 15 | 16 | 10 | 12 | 10 | 13 | 8 | 11 | |
| 12-Jan-08 | 17 | 11 | 15 | 8 | 6 | N | 6 | 6 | 6 | 5 | 6 | 6 | 4 | 5 | 5 | 6 | 6 | 7 | 8 | 9 | 11 | 9 | 8 | 15 | |
| 13-Jan-08 | 7 | 9 | 11 | 15 | N | 9 | 9 | 10 | 8 | 12 | 8 | 10 | 12 | 17 | 15 | 8 | 6 | 8 | 6 | 8 | 7 | 6 | 7 | 6 | |
| 14-Jan-08 | 6 | 7 | 8 | N | 8 | 9 | 8 | 9 | 8 | 8 | 13 | 18 | 16 | 27 | 15 | 11 | N | N | N | 17 | 17 | 18 | 19 | 18 | |
| 15-Jan-08 | 18 | 18 | 17 | 12 | 11 | N | 9 | 12 | 13 | 12 | 10 | 9 | 9 | 11 | 11 | 6 | 9 | 7 | 7 | 9 | 10 | 11 | 13 | 14 | |
| 16-Jan-08 | 16 | 14 | 15 | 15 | N | 8 | 10 | 9 | 14 | 14 | 15 | 16 | 15 | 15 | 15 | 15 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 18 | |
| 17-Jan-08 | 18 | 18 | 19 | N | 19 | 19 | 18 | 14 | 17 | 17 | 16 | 17 | 17 | 17 | 15 | 12 | 8 | 9 | 12 | 15 | 15 | 10 | 11 | 10 | |
| 18-Jan-08 | 10 | 8 | N | 6 | 5 | 6 | 6 | 6 | 7 | 6 | 6 | 9 | 6 | 6 | 6 | 7 | 8 | 10 | 6 | 5 | 7 | 4 | 7 | 9 | |
| 19-Jan-08 | 9 | N | 12 | 14 | 13 | 12 | 13 | 13 | 12 | 12 | 12 | 12 | 12 | 12 | 13 | 12 | 9 | 6 | 8 | 9 | 10 | 8 | 8 | 6 | |
| 20-Jan-08 | N | 4 | 4 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 8 | 7 | 7 | 11 | N | 7 | 8 | 8 | 8 | 7 | 7 | 6 | 6 | N | |
| 21-Jan-08 | 6 | 5 | 8 | 8 | 7 | 5 | 6 | 8 | N | 11 | 12 | 13 | 14 | 13 | 14 | 11 | 7 | 9 | 8 | 9 | 10 | 6 | N | 12 | |
| 22-Jan-08 | 12 | 14 | 14 | 17 | 17 | 17 | 14 | 11 | 7 | 9 | 10 | 14 | 12 | 17 | 17 | 15 | 7 | 10 | 9 | 11 | 9 | N | 6 | 5 | |
| 23-Jan-08 | 7 | 8 | 6 | 8 | 7 | 8 | 8 | 10 | 11 | 16 | 10 | 6 | 6 | 7 | 7 | 7 | 8 | 10 | 10 | N | 10 | 10 | 10 | 14 | |
| 24-Jan-08 | 14 | 13 | 13 | 14 | 15 | 15 | 13 | 10 | 12 | 12 | 13 | 14 | 15 | 15 | 14 | 14 | 14 | 13 | 13 | N | 13 | 13 | 10 | 7 | |
| 25-Jan-08 | 8 | 13 | 10 | 9 | 7 | 6 | 9 | 15 | 14 | 19 | 18 | 21 | 16 | 17 | 18 | 15 | 16 | 17 | N | 12 | 7 | 9 | 13 | 7 | |
| 26-Jan-08 | 15 | 11 | 7 | 9 | 7 | 10 | 14 | 8 | 12 | 11 | 13 | 9 | 7 | 8 | 10 | 9 | 9 | N | 12 | 13 | 14 | 14 | 14 | 15 | |
| 27-Jan-08 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | N | 14 | 13 | 13 | 12 | 14 | 13 | 13 | |
| 28-Jan-08 | 12 | 11 | 10 | 10 | 9 | 6 | 7 | 6 | 9 | 9 | 7 | 9 | 8 | 9 | 10 | N | 8 | 14 | 11 | 11 | 10 | 7 | 7 | N | |
| 29-Jan-08 | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | |
| 30-Jan-08 | N | N | N | N | N | N | N | N | N | N | N | N | 8 | 8 | 9 | 9 | 8 | 7 | 7 | 8 | 8 | 7 | 7 | 6 | |
| 31-Jan-08 | 5 | 6 | 4 | 6 | 5 | N | 5 | 5 | 5 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 8 | 7 | 5 | 5 | 7 | 6 | 7 | 7 | |

PASZA - Henry Pirker Sulphur Dioxide Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

HOURLY AVERAGE TABLE

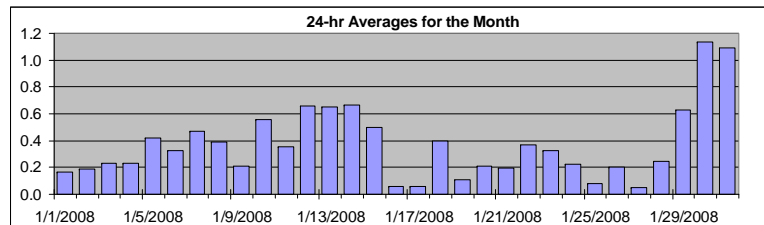
Sulphur Dioxide (SO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: Alberta Environment: 1-hr 172 ppb 24-hr 57 ppb

Summary

| | | | | |
|------------------------------|-----|-----|--------|-------------|
| Number of 1-hr Exceedances: | 0 | | | |
| Number of 24-hr Exceedances: | 0 | | | |
| Maximum 1-hr Average: | 3.4 | ppb | 13-Jan | 14:00 15:00 |
| Maximum 24-hr Average: | 1.1 | ppb | 30-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 32 hrs | Operational Time: | 710 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 2.5 | 1.5 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.4 ppb | 0.2 ppb |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum |
|------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|-----------------|---------------|
| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | | |
| 1-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0.2 | 0.5 |
| 2-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | A | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1.0 |
| 3-Jan-08 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1.5 |
| 4-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1.7 |
| 5-Jan-08 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | A | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0.4 | 2.1 |
| 6-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.0 |
| 7-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0.5 | 1.2 |
| 8-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0.4 | 1.3 |
| 9-Jan-08 | 0 | 0 | 0 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0.2 | 0.8 |
| 10-Jan-08 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1.1 |
| 11-Jan-08 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | C | C | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0.4 | 1.3 |
| 12-Jan-08 | 3 | 2 | 3 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0.7 | 3.1 |
| 13-Jan-08 | 0 | 0 | 1 | 1 | A | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 3.4 |
| 14-Jan-08 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 2.8 |
| 15-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.8 |
| 16-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.5 |
| 17-Jan-08 | 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 | 0.5 |
| 18-Jan-08 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0.4 | 1.3 |
| 19-Jan-08 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0.1 | 0.7 |
| 20-Jan-08 | A | 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 | 0.5 |
| 21-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | A | 0 | 0.2 | 0.7 |
| 22-Jan-08 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | A | 0 | 0 | 0 | 0.4 | 0.9 |
| 23-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 2 | 0.3 | 1.8 |
| 24-Jan-08 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.2 | 2.7 |
| 25-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.6 |
| 26-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1.4 |
| 27-Jan-08 | 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 | 0.3 |
| 28-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.9 |
| 29-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 0.6 | 2.0 |
| 30-Jan-08 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 1.1 | 2.1 |
| 31-Jan-08 | 0 | 0 | 2 | 1 | 1 | A | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.1 | 2.5 |
| Hourly Avg | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | | |
| Hourly Max | 3.1 | 2.4 | 2.9 | 1.5 | 2.1 | 1.2 | 1.3 | 2.5 | 1.8 | 1.7 | 1.8 | 2.2 | 2.1 | 2.8 | 3.4 | 1.5 | 1.4 | 1.7 | 2.1 | 1.9 | 1.5 | 1.8 | 1.9 | 2.0 | | |

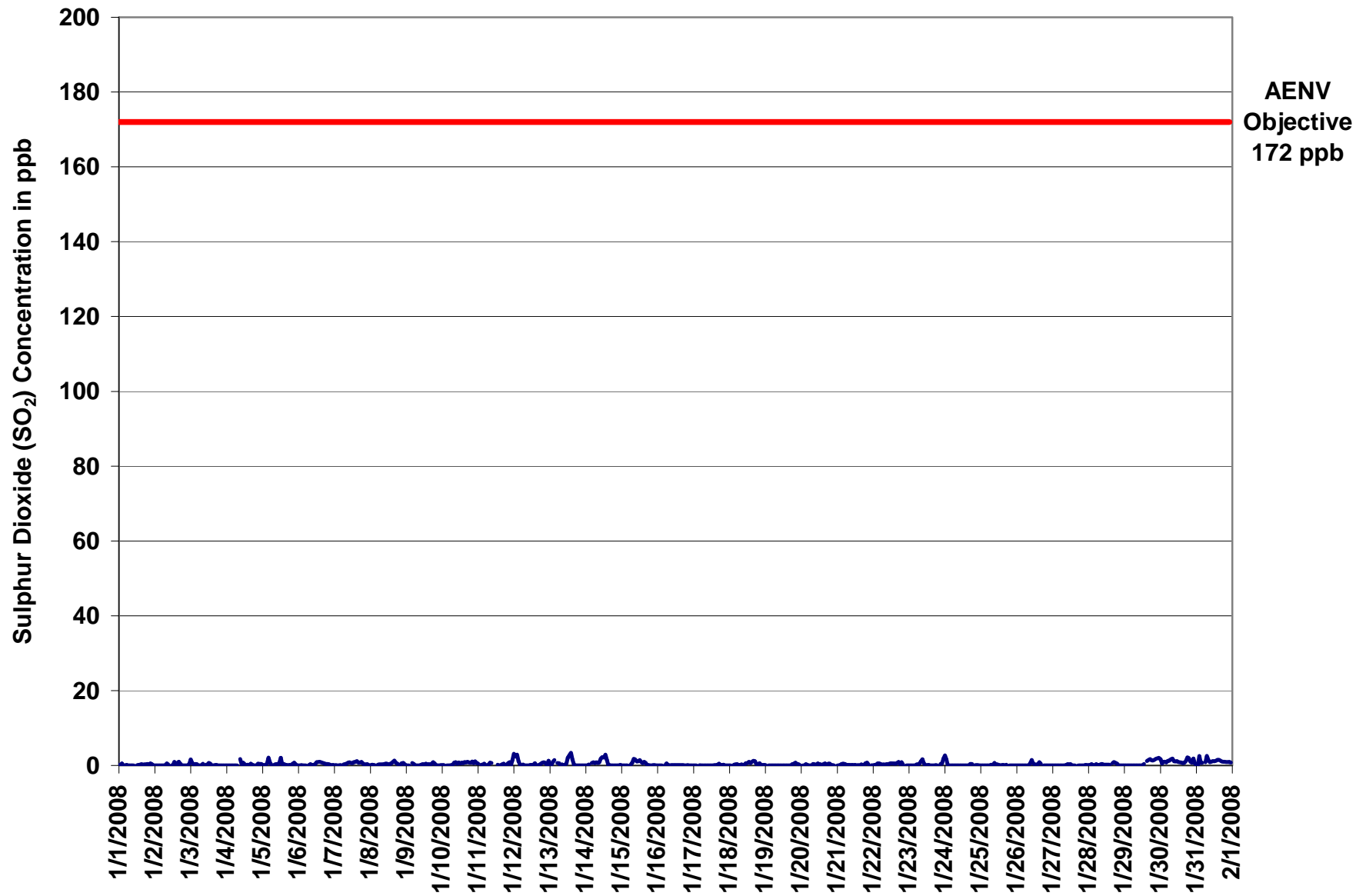


Figure 1. PASZA - Henry Pirker Sulphur Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

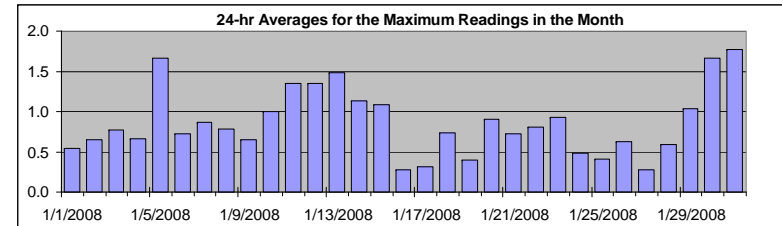
Sulphur Dioxide (SO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|------|-----|--------|-------------|
| Maximum 1-hr Value: | 20.4 | ppb | 5-Jan | 12:00 13:00 |
| Maximum 24-hr Value: | 1.8 | ppb | 31-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 32 hrs | Operational Time: | 710 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 4.3 | 2.5 | 1.1 | 0.6 | 0.3 | 0.0 | 0.0 | 0.9 ppb | 0.6 ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 1 | 1 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0.5 | 1.6 |
| 2-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | A | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 2 | 2 | 0.7 | 1.8 |
| 3-Jan-08 | 3 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 2 | A | 1 | 1 | 2 | 2 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 2.7 |
| 4-Jan-08 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | A | 3 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0.7 | 2.5 |
| 5-Jan-08 | 1 | 0 | 0 | 3 | 3 | 1 | 0 | A | 1 | 1 | 1 | 1 | 20 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1.7 | 20.4 |
| 6-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0.7 | 1.4 |
| 7-Jan-08 | 0 | 1 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0.9 | 1.3 |
| 8-Jan-08 | 0 | 1 | 0 | 0 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0.8 | 1.6 |
| 9-Jan-08 | 0 | 0 | 0 | A | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0.6 | 1.9 |
| 10-Jan-08 | 1 | 1 | A | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 1.0 | 2.0 |
| 11-Jan-08 | 1 | A | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | C | C | A | 1 | 1 | 0 | 5 | 4 | 1 | 1 | 1 | 1 | 1 | 4 | 1.3 | 4.7 |
| 12-Jan-08 | 5 | 3 | 4 | 4 | 1 | A | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1.3 | 4.8 |
| 13-Jan-08 | 1 | 1 | 2 | 3 | A | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 4 | 3 | 9 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 9.2 |
| 14-Jan-08 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.1 | 3.3 |
| 15-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 3 | 1 | 4 | 4 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1.1 | 3.6 |
| 16-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.1 |
| 17-Jan-08 | 0 | 0 | 0 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0.3 | 1.1 |
| 18-Jan-08 | 0 | 0 | A | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.6 |
| 19-Jan-08 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0.4 | 1.2 |
| 20-Jan-08 | A | 0 | 1 | 2 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 5 | 1 | 0 | 0 | 0 | A | 0.9 | 5.5 |
| 21-Jan-08 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | A | 1 | 0.7 | 1.8 |
| 22-Jan-08 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | A | 0 | 0 | 0.8 | 2.0 |
| 23-Jan-08 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 3 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | A | 1 | 1 | 3 | 0.9 | 2.8 |
| 24-Jan-08 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | A | 1 | 1 | 1 | 0 | 0.5 | 3.8 |
| 25-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0.4 | 2.2 |
| 26-Jan-08 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 2.9 |
| 27-Jan-08 | 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 |
| 28-Jan-08 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | A | 1 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0.6 | 1.5 |
| 29-Jan-08 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | A | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1.0 | 2.8 |
| 30-Jan-08 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 1 | 3 | 1 | 1.7 | 3.4 |
| 31-Jan-08 | 0 | 0 | 4 | 2 | 3 | A | 2 | 5 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.8 | 5.4 |
| Hourly Avg | 0.7 | 0.6 | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.7 | 0.9 | 0.9 | 0.8 | 0.9 | 1.7 | 1.0 | 1.1 | 0.9 | 1.1 | 1.2 | 0.9 | 0.8 | 0.7 | 0.7 | 0.8 | 0.8 | | |
| Hourly Max | 4.8 | 3.6 | 4.1 | 3.5 | 2.9 | 1.8 | 2.6 | 5.4 | 3.6 | 3.5 | 2.7 | 2.8 | 20.4 | 3.3 | 9.2 | 4.3 | 4.7 | 4.1 | 5.5 | 2.9 | 2.4 | 2.3 | 3.4 | 4.3 | | |

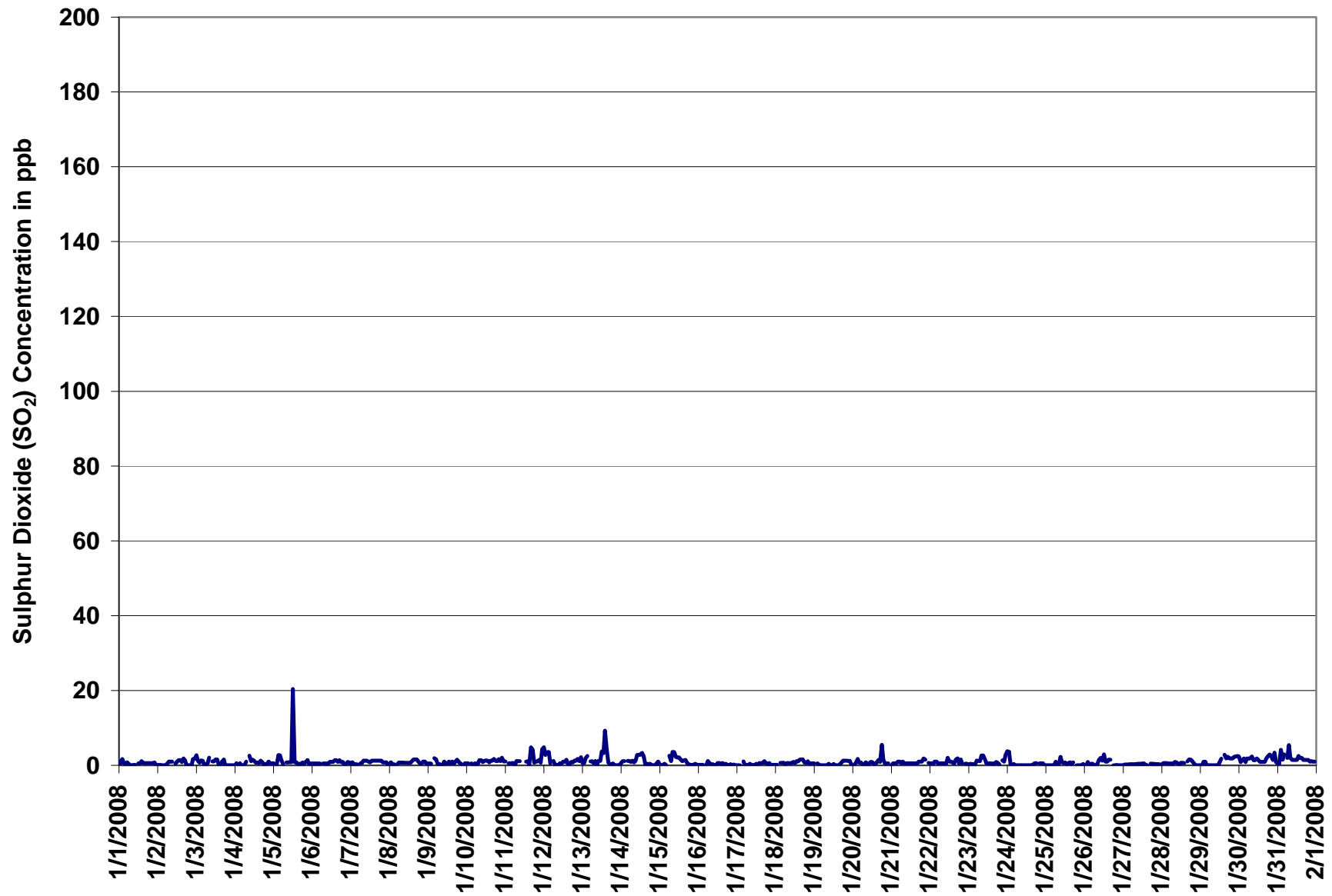
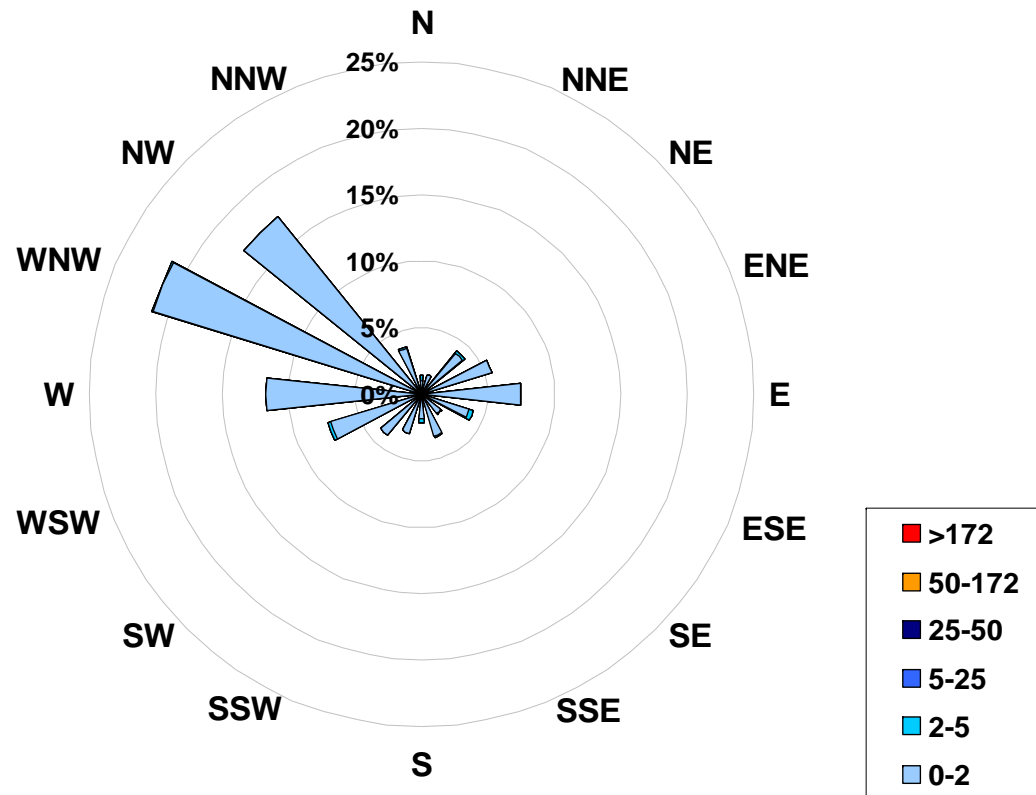


Figure 2. PASZA - Henry Pirker Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Henry Pirker Site for January 2008



Calms: 0%

| Frequency Distribution of SO ₂ in ppb | | | |
|--|----|-----|-----------------|
| Range | | | Frequency (hrs) |
| 0.0 | < | 2 | 696 |
| 2 | to | 5 | 14 |
| 5 | to | 25 | 0 |
| 25 | to | 50 | 0 |
| 50 | to | 172 | 0 |
| | > | 172 | 0 |
| Total Non-Zero Values | | | 710 |

PASZA - Henry Pirker Nitrogen Dioxide Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

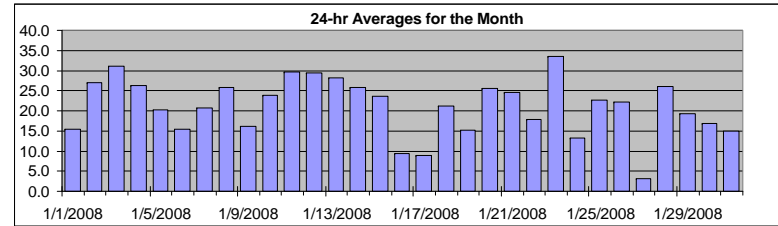
HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | | |
|------------------------------|------|-----|--------|-------------|
| Number of 1-hr Exceedances: | 0 | | | |
| Number of 24-hr Exceedances: | 0 | | | |
| Maximum 1-hr Average: | 63.1 | ppb | 14-Jan | 13:00 14:00 |
| Maximum 24-hr Average: | 33.4 | ppb | 23-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|------|------|-----|-----|----------|----------|
| AIC Time: | 32 hrs | Operational Time: | 708 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 50.5 | 40.5 | 28.7 | 20.8 | 11.1 | 3.3 | 1.2 | 21.0 ppb | 20.8 ppb |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum |
|------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|-----------------|---------------|
| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | | |
| 1-Jan-08 | 23 | 25 | 28 | 27 | 27 | 29 | 26 | 17 | 10 | 9 | 9 | A | 8 | 8 | 8 | 10 | 10 | 11 | 9 | 10 | 9 | 8 | 13 | 19 | 15.4 | 28.7 |
| 2-Jan-08 | 20 | 23 | 23 | 21 | 22 | 22 | 25 | 26 | 31 | 29 | A | 21 | 17 | 36 | 32 | 33 | 46 | 45 | 32 | 24 | 25 | 19 | 26 | 23 | 27.1 | 45.8 |
| 3-Jan-08 | 27 | 38 | 40 | 38 | 37 | 35 | 34 | 36 | 39 | A | 39 | 39 | 44 | 41 | 34 | 31 | 38 | 39 | 21 | 16 | 14 | 14 | 11 | 11 | 31.1 | 44.3 |
| 4-Jan-08 | 16 | 15 | 20 | 19 | 32 | 26 | 29 | 36 | A | 52 | 36 | 39 | 35 | 31 | 30 | 33 | 36 | 36 | 23 | 19 | 14 | 12 | 7 | 7 | 26.2 | 51.5 |
| 5-Jan-08 | 8 | 18 | 14 | 10 | 12 | 23 | 26 | A | 34 | 31 | 27 | 29 | 21 | 19 | 10 | 9 | 14 | 17 | 22 | 19 | 29 | 28 | 25 | 18 | 20.1 | 33.6 |
| 6-Jan-08 | 22 | 15 | 17 | 19 | 19 | 19 | A | 20 | 22 | 18 | 10 | 8 | 9 | 8 | 7 | 9 | 18 | 22 | 19 | 16 | 21 | 18 | 9 | 13 | 15.5 | 21.8 |
| 7-Jan-08 | 17 | 18 | 15 | 13 | 13 | A | 19 | 26 | 24 | 26 | 23 | 20 | 13 | 13 | 15 | 21 | 25 | 29 | 29 | 26 | 22 | 24 | 24 | 22 | 20.7 | 29.1 |
| 8-Jan-08 | 22 | 22 | 21 | 19 | A | 24 | 24 | 24 | 25 | 25 | 26 | 23 | 19 | 24 | 27 | 35 | 40 | 32 | 27 | 25 | 25 | 29 | 29 | 26 | 25.8 | 39.6 |
| 9-Jan-08 | 23 | 24 | 23 | A | 7 | 6 | 7 | 8 | 12 | 9 | 8 | 8 | 9 | 13 | 15 | 20 | 23 | 28 | 29 | 28 | 22 | 18 | 18 | 16 | 16.2 | 29.3 |
| 10-Jan-08 | 19 | 23 | A | 23 | 22 | 20 | 20 | 21 | 22 | 24 | 21 | 25 | 19 | 23 | 21 | 28 | 32 | 29 | 29 | 25 | 26 | 24 | 27 | 27 | 23.9 | 31.5 |
| 11-Jan-08 | 27 | A | 31 | 30 | 31 | 26 | 22 | 25 | 30 | 27 | C | C | C | C | A | 27 | 32 | 32 | 31 | 30 | 30 | 32 | 31 | 40 | 29.7 | 40.5 |
| 12-Jan-08 | 48 | 46 | 40 | 32 | 27 | A | 26 | 24 | 26 | 22 | 20 | 23 | 18 | 20 | 21 | 23 | 27 | 28 | 35 | 35 | 34 | 33 | 31 | 33 | 29.3 | 48.0 |
| 13-Jan-08 | 30 | 31 | 35 | 35 | A | 34 | 34 | 41 | 35 | 15 | 33 | 32 | 27 | 24 | 23 | 19 | 18 | 15 | 25 | 34 | 30 | 25 | 28 | 26 | 28.3 | 40.9 |
| 14-Jan-08 | 27 | 31 | 32 | A | 35 | 37 | 34 | 36 | 32 | 32 | 42 | 50 | 50 | 63 | 46 | 11 | 4 | 5 | 5 | 5 | 5 | 4 | 1 | 3 | 25.8 | 63.1 |
| 15-Jan-08 | 2 | 2 | 3 | 14 | 16 | A | 36 | 50 | 56 | 50 | 42 | 37 | 20 | 14 | 14 | 26 | 36 | 29 | 26 | 19 | 17 | 15 | 10 | 8 | 23.6 | 55.6 |
| 16-Jan-08 | 5 | 10 | 8 | 6 | A | 22 | 44 | 20 | 9 | 10 | 6 | 6 | 7 | 8 | 9 | 7 | 7 | 6 | 6 | 5 | 5 | 3 | 3 | 2 | 9.3 | 44.0 |
| 17-Jan-08 | 2 | 3 | 1 | A | 2 | 1 | 4 | 11 | 6 | 5 | 8 | 7 | 7 | 6 | 9 | 15 | 34 | 40 | 12 | 8 | 7 | 7 | 6 | 8 | 9.0 | 39.9 |
| 18-Jan-08 | 8 | 11 | A | 12 | 14 | 14 | 15 | 24 | 29 | 24 | 25 | 29 | 26 | 26 | 16 | 28 | 34 | 35 | 26 | 23 | 28 | 19 | 14 | 10 | 21.3 | 35.3 |
| 19-Jan-08 | 8 | A | 7 | 5 | 5 | 6 | 5 | 6 | 7 | 8 | 7 | 8 | 8 | 8 | 7 | 9 | 18 | 24 | 35 | 36 | 36 | 36 | 32 | 27 | 15.1 | 36.2 |
| 20-Jan-08 | A | 16 | 19 | 30 | 30 | 31 | 27 | 26 | 29 | 28 | 23 | 19 | 16 | 11 | 15 | 28 | 34 | 32 | 34 | 31 | 28 | 27 | 27 | A | 25.5 | 34.0 |
| 21-Jan-08 | 25 | 23 | 33 | 33 | 29 | 22 | 27 | 32 | 24 | 16 | 16 | 12 | 12 | 12 | 12 | 18 | 30 | 37 | 35 | 40 | 42 | 27 | A | 12 | 24.6 | 41.5 |
| 22-Jan-08 | 10 | 8 | 9 | 2 | 2 | 2 | 8 | 15 | 29 | 21 | 20 | 10 | 15 | 5 | 6 | 10 | 29 | 44 | 37 | 45 | 37 | A | 25 | 21 | 17.8 | 44.9 |
| 23-Jan-08 | 15 | 14 | 20 | 33 | 28 | 33 | 35 | 40 | 48 | 53 | 33 | 25 | 25 | 25 | 24 | 24 | 35 | 40 | 41 | 41 | A | 42 | 43 | 50 | 33.4 | 52.7 |
| 24-Jan-08 | 55 | 47 | 11 | 8 | 7 | 7 | 10 | 18 | 12 | 10 | 8 | 7 | 6 | 6 | 7 | 8 | 8 | 11 | 9 | A | 10 | 10 | 14 | 16 | 13.3 | 54.5 |
| 25-Jan-08 | 14 | 12 | 12 | 12 | 16 | 22 | 30 | 31 | 30 | 34 | 24 | 23 | 21 | 18 | 22 | 24 | 28 | 32 | A | 16 | 31 | 25 | 14 | 31 | 22.7 | 33.8 |
| 26-Jan-08 | 9 | 14 | 19 | 13 | 19 | 17 | 12 | 33 | 50 | 46 | 56 | 38 | 29 | 33 | 31 | 39 | 38 | A | 4 | 3 | 2 | 2 | 1 | 1 | 22.2 | 55.8 |
| 27-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | A | 6 | 7 | 8 | 10 | 5 | 5 | 7 | 3.2 | 9.9 |
| 28-Jan-08 | 8 | 10 | 11 | 10 | 13 | 20 | 31 | 26 | 37 | 38 | 27 | 14 | 24 | 21 | 18 | A | 22 | 51 | 44 | 45 | 40 | 31 | 29 | 25 | 25.9 | 50.6 |
| 29-Jan-08 | 23 | 21 | 18 | 17 | 16 | 18 | 21 | 30 | 34 | 24 | 16 | 14 | 22 | 15 | A | 17 | 17 | 17 | 26 | 26 | 18 | 13 | 11 | 10 | 19.3 | 34.1 |
| 30-Jan-08 | 20 | 28 | 27 | 28 | 22 | 21 | 19 | 12 | 15 | 20 | 18 | 14 | 13 | 11 | 10 | 11 | 13 | 15 | 15 | 14 | 13 | 15 | 16 | 17 | 16.9 | 28.0 |
| 31-Jan-08 | 17 | 24 | 19 | 25 | 20 | A | 21 | 23 | 18 | 12 | 12 | 9 | 8 | 7 | 8 | 10 | 10 | 12 | 17 | 19 | 13 | 13 | 11 | 12 | 14.8 | 25.0 |
| Hourly Avg | 18.4 | 19.8 | 19.1 | 19.1 | 18.7 | 20.0 | 22.4 | 24.6 | 25.8 | 24.1 | 22.0 | 20.3 | 18.3 | 18.4 | 17.2 | 19.6 | 25.2 | 26.7 | 23.6 | 23.0 | 21.5 | 19.3 | 18.1 | 18.0 | | |
| Hourly Max | 54.5 | 47.0 | 39.8 | 37.9 | 37.5 | 37.4 | 44.0 | 50.5 | 55.6 | 52.7 | 55.8 | 49.9 | 50.4 | 63.1 | 45.7 | 39.2 | 45.8 | 50.6 | 44.2 | 44.9 | 41.5 | 42.2 | 43.3 | 50.4 | | |

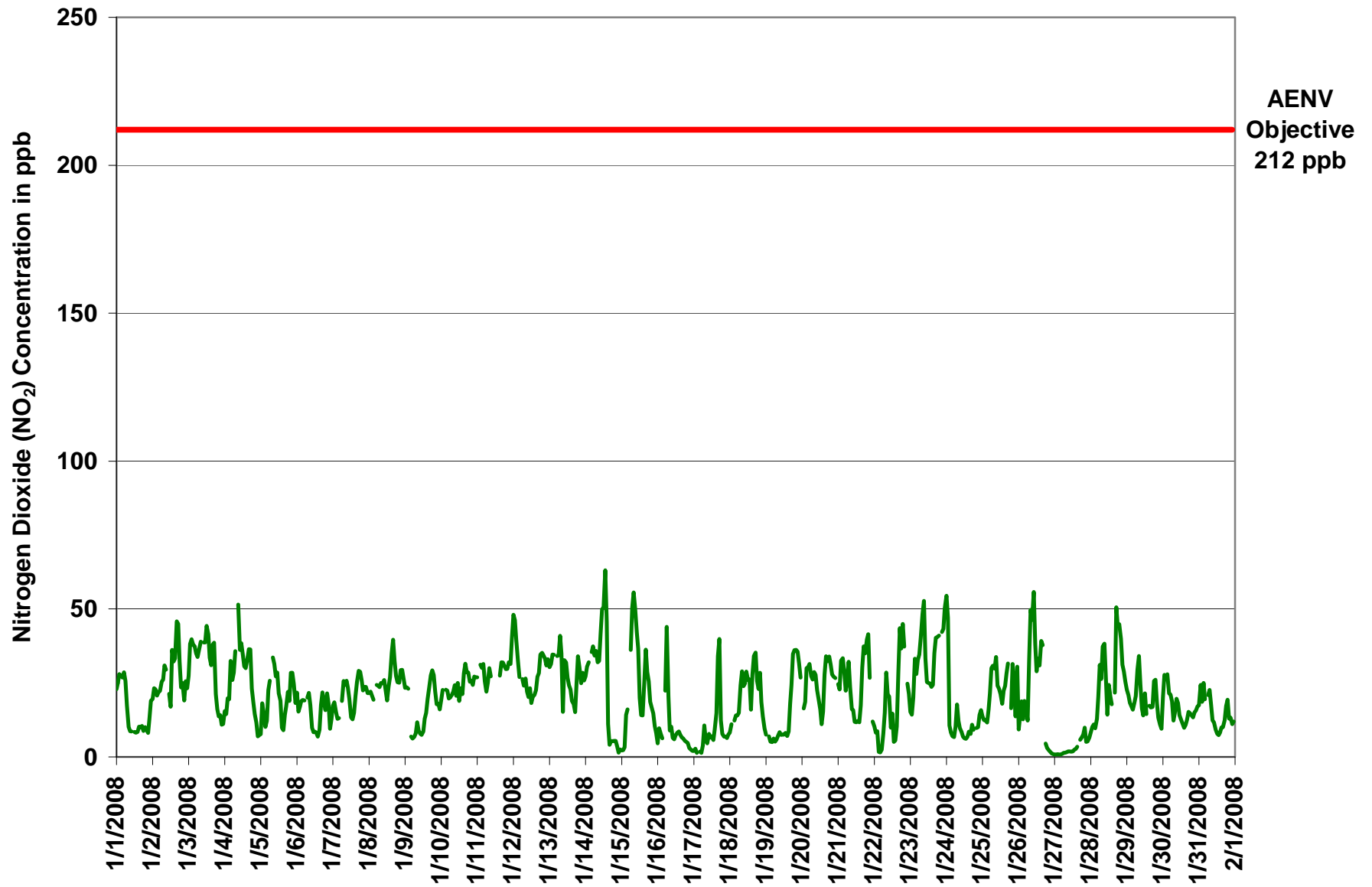


Figure 3. PASZA - Henry Pirker Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

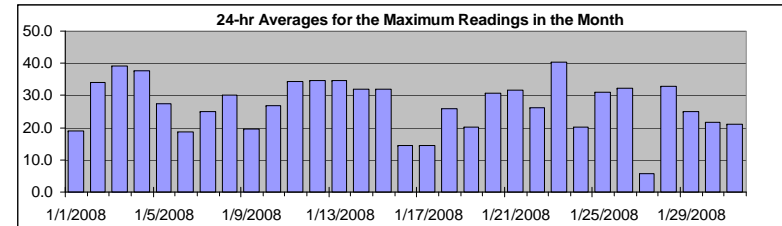
Nitrogen Dioxide (NO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-------|-----|--------|-----------|
| Maximum 1-hr Value: | 103.8 | ppb | 26-Jan | 8:00 9:00 |
| Maximum 24-hr Value: | 40.5 | ppb | 23-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|------|------|-----|-----|----------|----------|
| AIC Time: | 32 hrs | Operational Time: | 708 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 67.4 | 49.5 | 34.6 | 27.0 | 16.4 | 6.3 | 2.0 | 27.0 ppb | 27.0 ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 34 | 29 | 33 | 31 | 31 | 32 | 29 | 25 | 11 | 11 | 11 | A | 11 | 10 | 11 | 14 | 11 | 13 | 12 | 15 | 11 | 10 | 23 | 21 | 19.0 | 34.1 |
| 2-Jan-08 | 22 | 24 | 25 | 22 | 24 | 25 | 33 | 31 | 42 | 39 | A | 27 | 36 | 40 | 40 | 40 | 57 | 53 | 42 | 32 | 38 | 23 | 34 | 35 | 34.2 | 57.4 |
| 3-Jan-08 | 37 | 43 | 45 | 46 | 57 | 44 | 49 | 43 | 49 | A | 51 | 46 | 50 | 55 | 37 | 34 | 44 | 48 | 35 | 21 | 24 | 16 | 14 | 15 | 39.3 | 57.2 |
| 4-Jan-08 | 20 | 39 | 32 | 52 | 57 | 34 | 35 | 59 | A | 69 | 47 | 49 | 42 | 39 | 36 | 40 | 43 | 49 | 35 | 27 | 18 | 19 | 12 | 14 | 37.6 | 68.7 |
| 5-Jan-08 | 11 | 34 | 22 | 16 | 25 | 35 | 35 | A | 42 | 36 | 32 | 32 | 31 | 22 | 19 | 14 | 28 | 26 | 28 | 28 | 30 | 31 | 27 | 23 | 27.3 | 41.8 |
| 6-Jan-08 | 23 | 23 | 22 | 20 | 20 | 21 | A | 25 | 25 | 20 | 12 | 10 | 10 | 10 | 9 | 12 | 22 | 24 | 22 | 20 | 23 | 23 | 14 | 19 | 18.7 | 25.2 |
| 7-Jan-08 | 20 | 22 | 17 | 19 | 20 | A | 24 | 33 | 30 | 28 | 28 | 22 | 19 | 15 | 17 | 27 | 29 | 33 | 33 | 32 | 25 | 28 | 30 | 23 | 25.0 | 33.5 |
| 8-Jan-08 | 24 | 25 | 23 | 21 | A | 31 | 27 | 27 | 28 | 29 | 31 | 29 | 24 | 31 | 34 | 44 | 42 | 41 | 30 | 29 | 27 | 34 | 33 | 30 | 30.2 | 43.9 |
| 9-Jan-08 | 25 | 26 | 24 | A | 9 | 10 | 10 | 11 | 17 | 12 | 10 | 12 | 11 | 15 | 17 | 24 | 26 | 30 | 32 | 31 | 26 | 21 | 22 | 24 | 19.5 | 32.3 |
| 10-Jan-08 | 21 | 26 | A | 25 | 25 | 22 | 23 | 23 | 24 | 27 | 25 | 27 | 24 | 28 | 26 | 31 | 34 | 31 | 31 | 27 | 27 | 26 | 33 | 28 | 26.8 | 34.2 |
| 11-Jan-08 | 28 | A | 35 | 32 | 32 | 31 | 23 | 32 | 34 | 31 | C | C | C | C | A | 31 | 36 | 35 | 43 | 35 | 36 | 35 | 36 | 52 | 34.3 | 52.1 |
| 12-Jan-08 | 54 | 54 | 43 | 46 | 30 | A | 35 | 27 | 31 | 25 | 23 | 32 | 25 | 29 | 32 | 28 | 32 | 33 | 37 | 38 | 38 | 38 | 34 | 36 | 34.7 | 54.5 |
| 13-Jan-08 | 33 | 36 | 38 | 39 | A | 42 | 42 | 49 | 46 | 30 | 40 | 42 | 34 | 29 | 26 | 23 | 23 | 22 | 34 | 37 | 35 | 32 | 31 | 33 | 34.7 | 49.4 |
| 14-Jan-08 | 33 | 34 | 35 | A | 40 | 43 | 38 | 44 | 36 | 41 | 49 | 56 | 56 | 72 | 57 | 29 | 12 | 12 | 13 | 10 | 9 | 6 | 2 | 5 | 31.8 | 71.7 |
| 15-Jan-08 | 5 | 4 | 5 | 31 | 21 | A | 46 | 60 | 67 | 70 | 53 | 41 | 34 | 20 | 21 | 35 | 45 | 41 | 35 | 26 | 19 | 24 | 15 | 14 | 31.8 | 70.1 |
| 16-Jan-08 | 6 | 21 | 15 | 9 | A | 41 | 46 | 43 | 17 | 16 | 13 | 8 | 13 | 11 | 12 | 9 | 9 | 8 | 8 | 9 | 7 | 6 | 4 | 4 | 14.5 | 46.4 |
| 17-Jan-08 | 3 | 5 | 3 | A | 3 | 2 | 12 | 23 | 12 | 9 | 11 | 9 | 10 | 11 | 17 | 29 | 45 | 49 | 27 | 14 | 13 | 9 | 7 | 11 | 14.6 | 48.6 |
| 18-Jan-08 | 12 | 16 | A | 18 | 20 | 21 | 23 | 29 | 38 | 29 | 30 | 32 | 29 | 27 | 26 | 32 | 39 | 39 | 30 | 27 | 32 | 22 | 17 | 13 | 26.0 | 39.0 |
| 19-Jan-08 | 12 | A | 14 | 11 | 10 | 10 | 10 | 13 | 10 | 18 | 13 | 11 | 13 | 14 | 11 | 13 | 24 | 32 | 39 | 39 | 41 | 39 | 37 | 30 | 20.1 | 41.1 |
| 20-Jan-08 | A | 20 | 30 | 32 | 37 | 37 | 38 | 30 | 32 | 31 | 30 | 27 | 19 | 14 | 19 | 33 | 39 | 35 | 39 | 34 | 33 | 30 | 34 | A | 30.6 | 39.2 |
| 21-Jan-08 | 28 | 31 | 38 | 35 | 34 | 34 | 34 | 40 | 32 | 23 | 19 | 16 | 17 | 17 | 17 | 31 | 35 | 44 | 44 | 43 | 46 | 44 | A | 28 | 31.8 | 45.8 |
| 22-Jan-08 | 18 | 18 | 19 | 2 | 2 | 8 | 14 | 35 | 41 | 32 | 32 | 14 | 29 | 14 | 12 | 17 | 46 | 50 | 45 | 51 | 43 | A | 33 | 30 | 26.2 | 51.1 |
| 23-Jan-08 | 19 | 20 | 33 | 36 | 33 | 37 | 40 | 46 | 66 | 59 | 54 | 30 | 34 | 32 | 28 | 36 | 39 | 46 | 45 | 47 | A | 47 | 47 | 56 | 40.5 | 65.9 |
| 24-Jan-08 | 73 | 68 | 25 | 15 | 13 | 14 | 17 | 28 | 22 | 13 | 10 | 10 | 11 | 9 | 13 | 13 | 10 | 14 | 13 | A | 15 | 13 | 29 | 19 | 20.3 | 72.7 |
| 25-Jan-08 | 17 | 14 | 14 | 15 | 23 | 28 | 34 | 34 | 38 | 72 | 31 | 29 | 26 | 28 | 31 | 30 | 34 | 40 | A | 33 | 37 | 38 | 22 | 46 | 31.2 | 72.1 |
| 26-Jan-08 | 38 | 19 | 24 | 18 | 33 | 22 | 19 | 46 | 104 | 61 | 67 | 49 | 47 | 46 | 42 | 43 | 43 | A | 8 | 5 | 3 | 3 | 2 | 1 | 32.3 | 103.8 |
| 27-Jan-08 | 2 | 2 | 1 | 1 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 8 | 6 | A | 16 | 10 | 12 | 16 | 10 | 7 | 8 | 5.6 | 16.4 |
| 28-Jan-08 | 11 | 13 | 15 | 12 | 18 | 32 | 39 | 35 | 46 | 62 | 34 | 27 | 29 | 27 | 22 | A | 30 | 62 | 48 | 51 | 46 | 35 | 32 | 30 | 32.9 | 62.4 |
| 29-Jan-08 | 26 | 26 | 21 | 22 | 21 | 22 | 28 | 37 | 40 | 36 | 25 | 25 | 31 | 18 | A | 20 | 23 | 22 | 29 | 30 | 23 | 18 | 18 | 11 | 24.9 | 39.9 |
| 30-Jan-08 | 32 | 31 | 30 | 33 | 28 | 24 | 26 | 16 | 27 | 27 | 21 | 18 | 14 | 15 | 14 | 16 | 16 | 20 | 20 | 17 | 18 | 20 | 19 | 21 | 21.7 | 32.6 |
| 31-Jan-08 | 25 | 30 | 27 | 28 | 24 | A | 24 | 26 | 25 | 15 | 16 | 19 | 12 | 11 | 13 | 18 | 47 | 17 | 21 | 22 | 17 | 16 | 16 | 15 | 21.0 | 47.0 |
| Hourly Avg | 23.8 | 26.0 | 24.5 | 24.6 | 24.7 | 26.0 | 28.5 | 32.4 | 34.5 | 32.5 | 28.3 | 26.0 | 24.8 | 23.7 | 23.1 | 25.7 | 32.1 | 32.8 | 29.6 | 28.0 | 25.8 | 23.9 | 22.7 | 23.1 | | |
| Hourly Max | 72.7 | 67.5 | 44.6 | 51.7 | 57.2 | 43.8 | 48.6 | 59.6 | 103.8 | 72.1 | 66.9 | 56.2 | 56.2 | 71.7 | 57.3 | 43.9 | 57.4 | 62.4 | 48.4 | 51.3 | 46.1 | 46.8 | 46.8 | 56.3 | | |

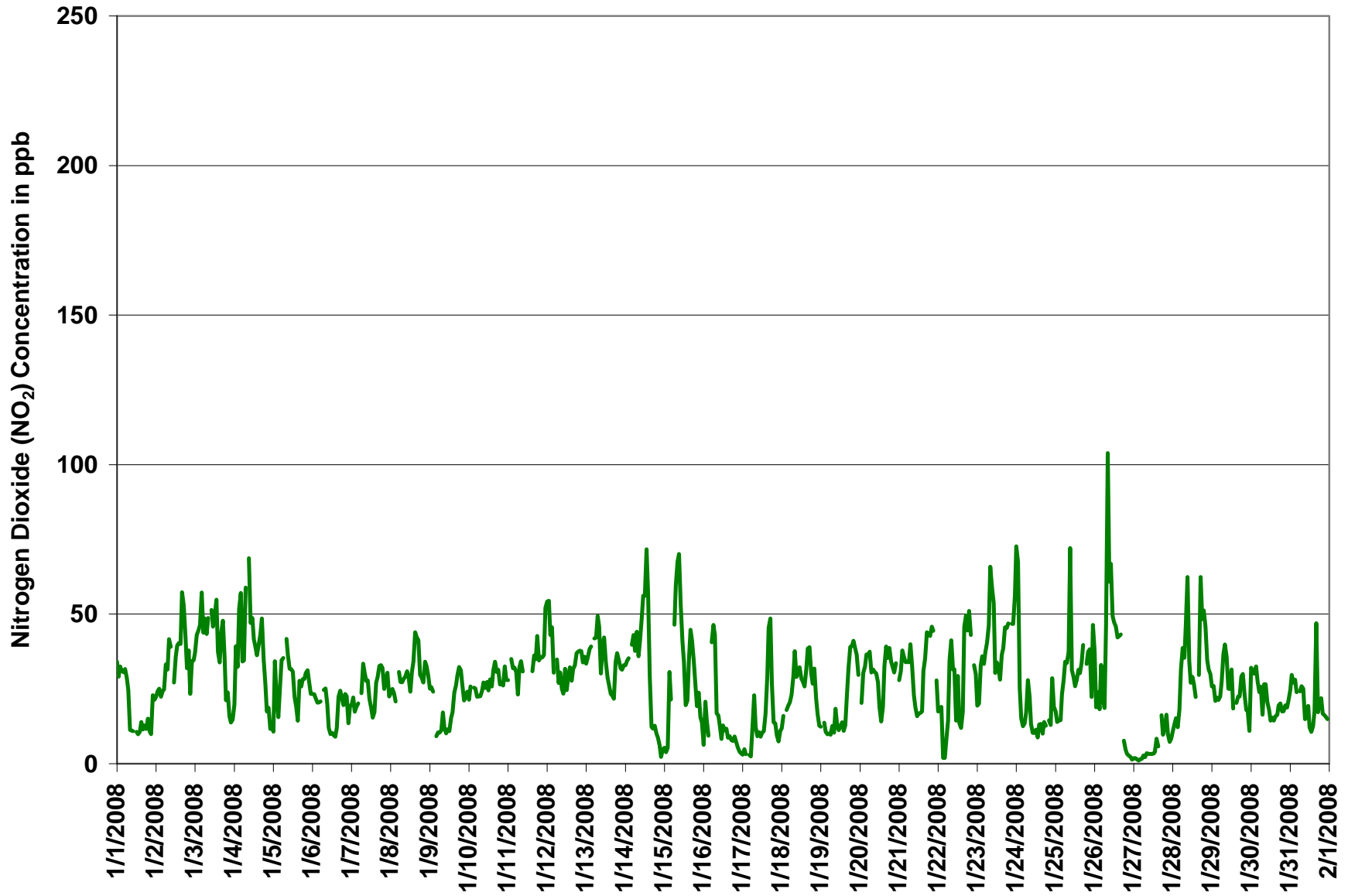
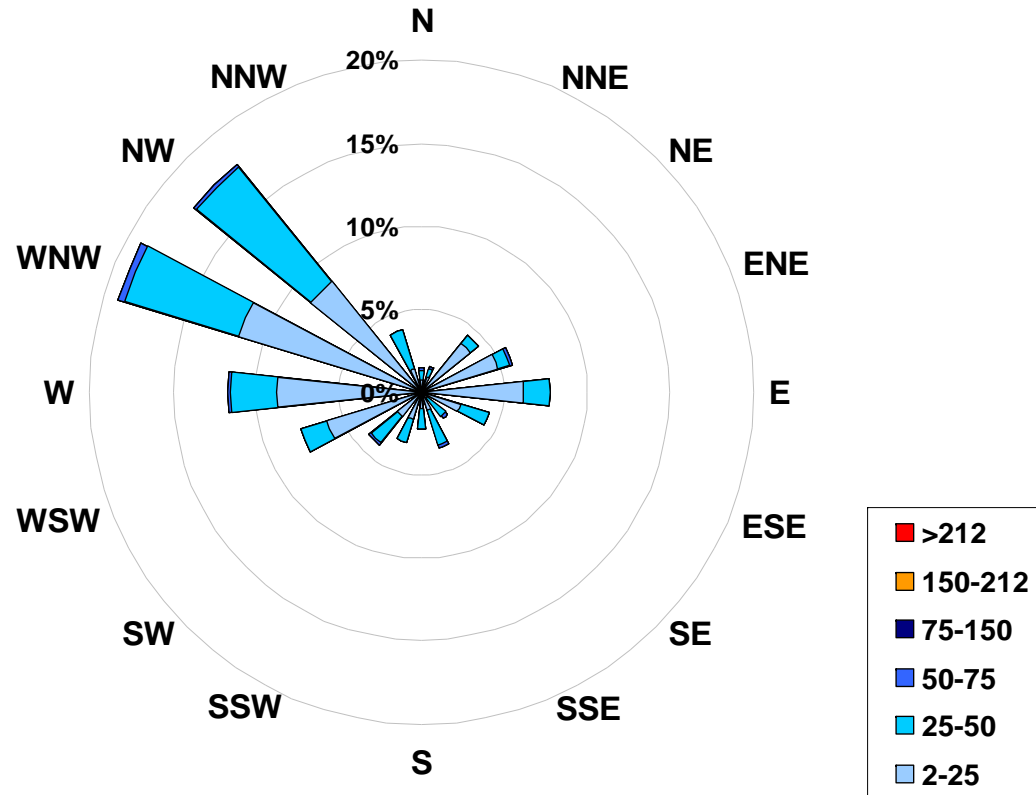


Figure 4. PASZA - Henry Pirker Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Henry Pirker Site for January 2008



Calms: 0%

| Frequency Distribution of NO ₂ in ppb Range | | | Frequency (hrs) |
|--|----|-----|-----------------|
| 2.0 | < | 25 | 483 |
| 25 | to | 50 | 110 |
| 50 | to | 75 | 56 |
| 75 | to | 150 | 50 |
| 150 | to | 212 | 9 |
| | > | 212 | 0 |
| Total Non-Zero Values | | | 708 |

PASZA - Henry Pirker Nitric Oxide Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

HOURLY AVERAGE TABLE

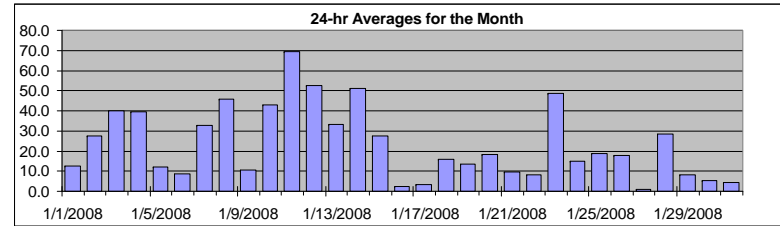
Nitric Oxide (NO)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | | |
|------------------------|-------|-----|--------|------------|
| Maximum 1-hr Average: | 204.4 | ppb | 4-Jan | 9:00 10:00 |
| Maximum 24-hr Average: | 69.3 | ppb | 11-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|----------|---------|
| AIC Time: | 32 hrs | Operational Time: | 708 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 152.0 | 90.0 | 33.2 | 6.9 | 1.4 | 0.1 | 0.0 | 23.0 ppb | 6.9 ppb |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum |
|------------|------------------------|-------|-------|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | | |
| 1-Jan-08 | 22 | 40 | 52 | 40 | 45 | 44 | 12 | 4 | 2 | 2 | 3 | A | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 3 | 12.4 | 52.3 |
| 2-Jan-08 | 2 | 4 | 5 | 3 | 7 | 8 | 30 | 50 | 90 | 78 | A | 27 | 16 | 81 | 49 | 35 | 85 | 53 | 8 | 1 | 1 | 0 | 0 | 0 | 27.5 | 90.5 |
| 3-Jan-08 | 1 | 16 | 24 | 26 | 20 | 27 | 23 | 56 | 86 | A | 95 | 91 | 122 | 111 | 50 | 31 | 69 | 64 | 2 | 0 | 0 | 0 | 0 | 0 | 39.9 | 121.8 |
| 4-Jan-08 | 0 | 0 | 0 | 1 | 11 | 8 | 20 | 74 | A | 204 | 110 | 120 | 88 | 60 | 44 | 51 | 78 | 39 | 1 | 1 | 0 | 0 | 0 | 0 | 39.6 | 204.4 |
| 5-Jan-08 | 0 | 1 | 0 | 0 | 0 | 2 | 5 | A | 44 | 31 | 23 | 30 | 18 | 11 | 5 | 2 | 3 | 3 | 4 | 5 | 26 | 40 | 19 | 4 | 12.1 | 44.4 |
| 6-Jan-08 | 4 | 3 | 2 | 3 | 5 | 5 | A | 13 | 42 | 22 | 7 | 7 | 8 | 7 | 5 | 5 | 10 | 19 | 9 | 3 | 9 | 7 | 1 | 2 | 8.6 | 42.4 |
| 7-Jan-08 | 2 | 3 | 1 | 1 | 1 | A | 7 | 30 | 28 | 64 | 55 | 45 | 24 | 19 | 20 | 31 | 35 | 68 | 106 | 85 | 35 | 40 | 41 | 13 | 32.8 | 105.8 |
| 8-Jan-08 | 13 | 16 | 12 | 6 | A | 18 | 40 | 54 | 71 | 73 | 78 | 53 | 43 | 52 | 56 | 90 | 109 | 55 | 26 | 19 | 15 | 58 | 66 | 33 | 45.9 | 108.9 |
| 9-Jan-08 | 9 | 9 | 5 | A | 1 | 1 | 1 | 1 | 2 | 3 | 5 | 6 | 12 | 13 | 18 | 19 | 27 | 59 | 40 | 9 | 3 | 2 | 2 | 2 | 10.8 | 58.7 |
| 10-Jan-08 | 2 | 12 | A | 20 | 28 | 32 | 29 | 19 | 26 | 50 | 36 | 56 | 36 | 54 | 40 | 66 | 78 | 57 | 55 | 40 | 46 | 37 | 89 | 75 | 42.8 | 88.7 |
| 11-Jan-08 | 61 | A | 53 | 49 | 66 | 40 | 21 | 49 | 101 | 76 | C | C | C | C | A | 52 | 87 | 88 | 92 | 96 | 84 | 108 | 33 | 90 | 69.3 | 108.4 |
| 12-Jan-08 | 151 | 158 | 148 | 62 | 22 | A | 46 | 23 | 23 | 19 | 22 | 32 | 27 | 32 | 26 | 16 | 15 | 10 | 37 | 63 | 70 | 70 | 53 | 80 | 52.4 | 157.8 |
| 13-Jan-08 | 63 | 64 | 93 | 102 | A | 73 | 82 | 45 | 61 | 1 | 27 | 34 | 28 | 24 | 16 | 8 | 3 | 1 | 3 | 26 | 6 | 3 | 7 | 2 | 33.4 | 102.0 |
| 14-Jan-08 | 6 | 10 | 23 | A | 47 | 66 | 64 | 90 | 59 | 68 | 135 | 165 | 141 | 203 | 93 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 51.1 | 203.3 |
| 15-Jan-08 | 0 | 0 | 0 | 1 | 1 | A | 13 | 62 | 152 | 152 | 103 | 56 | 17 | 9 | 7 | 15 | 27 | 6 | 4 | 2 | 1 | 1 | 1 | 0 | 27.4 | 152.1 |
| 16-Jan-08 | 0 | 0 | 0 | 0 | A | 3 | 29 | 5 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 2.4 | 28.9 |
| 17-Jan-08 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 3 | 4 | 21 | 32 | 1 | 1 | 1 | 1 | 1 | 1 | 3.2 | 32.0 |
| 18-Jan-08 | 0 | 0 | A | 0 | 1 | 1 | 2 | 5 | 12 | 10 | 27 | 47 | 38 | 36 | 12 | 29 | 50 | 55 | 11 | 7 | 18 | 3 | 3 | 2 | 16.0 | 54.9 |
| 19-Jan-08 | 2 | A | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 5 | 5 | 4 | 3 | 4 | 2 | 35 | 63 | 49 | 47 | 40 | 25 | 13.5 | 63.1 |
| 20-Jan-08 | A | 1 | 4 | 18 | 14 | 23 | 9 | 11 | 18 | 40 | 29 | 23 | 20 | 9 | 13 | 29 | 35 | 13 | 33 | 30 | 13 | 8 | 7 | A | 18.1 | 40.5 |
| 21-Jan-08 | 2 | 2 | 9 | 17 | 9 | 4 | 7 | 11 | 3 | 2 | 4 | 4 | 7 | 6 | 6 | 8 | 11 | 18 | 16 | 25 | 40 | 14 | A | 1 | 9.8 | 39.5 |
| 22-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 3 | 5 | 2 | 5 | 1 | 2 | 3 | 10 | 36 | 12 | 73 | 24 | A | 2 | 1 | 8.1 | 73.2 |
| 23-Jan-08 | 0 | 0 | 1 | 5 | 3 | 17 | 36 | 87 | 129 | 180 | 83 | 49 | 36 | 31 | 25 | 16 | 26 | 43 | 59 | 41 | A | 55 | 60 | 133 | 48.5 | 180.0 |
| 24-Jan-08 | 192 | 118 | 2 | 1 | 1 | 1 | 1 | 4 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | A | 1 | 1 | 0 | 0 | 15.1 | 192.3 |
| 25-Jan-08 | 0 | 0 | 0 | 0 | 1 | 1 | 14 | 24 | 35 | 82 | 36 | 33 | 35 | 25 | 32 | 25 | 33 | 43 | A | 0 | 1 | 0 | 0 | 8 | 18.7 | 82.0 |
| 26-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 25 | 60 | 147 | 43 | 24 | 31 | 20 | 34 | 19 | A | 1 | 0 | 0 | 0 | 0 | 17.7 | 146.6 |
| 27-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | A | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.9 |
| 28-Jan-08 | 1 | 1 | 1 | 0 | 1 | 3 | 14 | 9 | 39 | 63 | 32 | 17 | 38 | 28 | 20 | A | 11 | 89 | 45 | 91 | 83 | 37 | 19 | 8 | 28.3 | 91.3 |
| 29-Jan-08 | 3 | 3 | 1 | 1 | 1 | 2 | 4 | 20 | 32 | 19 | 12 | 14 | 32 | 17 | A | 13 | 8 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 8.1 | 31.9 |
| 30-Jan-08 | 3 | 5 | 3 | 5 | 3 | 2 | 2 | 0 | 1 | 7 | 15 | 13 | 13 | 11 | 10 | 8 | 7 | 5 | 4 | 3 | 2 | 2 | 2 | 2 | 5.3 | 14.5 |
| 31-Jan-08 | 3 | 6 | 4 | 6 | 2 | A | 4 | 6 | 5 | 5 | 7 | 7 | 7 | 7 | 8 | 8 | 6 | 3 | 1 | 2 | 2 | 1 | 1 | 1 | 4.5 | 8.4 |
| Hourly Avg | 18.1 | 16.3 | 15.4 | 13.2 | 10.5 | 14.2 | 17.2 | 25.3 | 36.6 | 44.0 | 38.0 | 33.9 | 28.2 | 29.8 | 20.3 | 20.3 | 28.7 | 27.9 | 21.0 | 24.0 | 18.0 | 18.0 | 15.0 | 16.3 | | |
| Hourly Max | 192.3 | 157.8 | 147.6 | 102.0 | 66.1 | 72.7 | 81.9 | 90.1 | 152.1 | 204.4 | 146.6 | 165.1 | 141.4 | 203.3 | 93.3 | 89.8 | 108.9 | 89.3 | 105.8 | 95.8 | 84.0 | 108.4 | 88.7 | 132.5 | | |

PASZA - Henry Pirker Oxides of Nitrogen Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

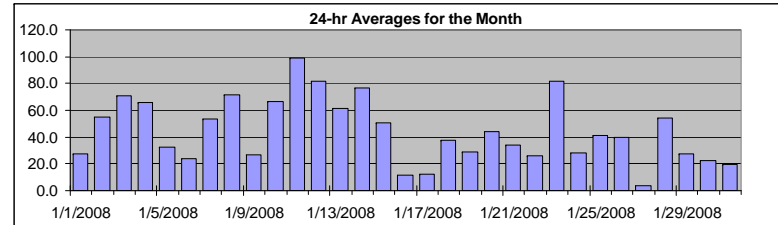
HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | | |
|------------------------|-------|-----|--------|-------------|
| Summary | | | | |
| Maximum 1-hr Average: | 266.5 | ppb | 14-Jan | 13:00 14:00 |
| Maximum 24-hr Average: | 99.2 | ppb | 11-Jan | |



| | | | |
|-------------------|--------|-------------------------|----------|
| AIC Time: | 32 hrs | Operational Time: | 708 hrs |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 100.0% |
| Percentile | 99 | 95 | 75 |
| | 202.7 | 125.9 | 62.5 |
| | | 28.0 | 13.5 |
| | | 4.3 | 1.4 |
| | | | Average |
| | | | 44.0 ppb |
| | | | Median |
| | | | 28.0 ppb |

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | | |
|------------|------------------------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|-------|--|
| | Hour Start | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | | | 0:00 | |
| 1-Jan-08 | 0:00 | 44 | 65 | 80 | 67 | 72 | 72 | 38 | 21 | 12 | 10 | 12 | A | 12 | 11 | 11 | 13 | 11 | 11 | 10 | 11 | 10 | 9 | 14 | 22 | 27.8 | 80.2 | |
| 2-Jan-08 | 1:00 | 22 | 28 | 28 | 24 | 29 | 30 | 55 | 76 | 121 | 107 | A | 49 | 33 | 117 | 82 | 69 | 130 | 98 | 40 | 24 | 26 | 19 | 26 | 23 | 54.6 | 130.4 | |
| 3-Jan-08 | 2:00 | 29 | 54 | 64 | 64 | 58 | 62 | 57 | 92 | 125 | A | 133 | 129 | 166 | 153 | 84 | 61 | 106 | 103 | 23 | 16 | 14 | 14 | 10 | 10 | 70.8 | 165.8 | |
| 4-Jan-08 | 3:00 | 15 | 15 | 20 | 20 | 43 | 34 | 48 | 110 | A | 255 | 146 | 158 | 123 | 91 | 74 | 83 | 114 | 75 | 25 | 19 | 15 | 12 | 7 | 7 | 65.6 | 255.5 | |
| 5-Jan-08 | 4:00 | 8 | 19 | 15 | 10 | 13 | 25 | 31 | A | 78 | 63 | 50 | 59 | 40 | 30 | 14 | 12 | 18 | 20 | 26 | 24 | 54 | 69 | 44 | 23 | 32.2 | 78.0 | |
| 6-Jan-08 | 5:00 | 26 | 18 | 19 | 22 | 24 | 24 | A | 33 | 64 | 39 | 16 | 15 | 16 | 15 | 11 | 14 | 28 | 41 | 27 | 19 | 31 | 25 | 10 | 14 | 24.0 | 63.9 | |
| 7-Jan-08 | 6:00 | 19 | 22 | 16 | 14 | 14 | A | 25 | 55 | 52 | 90 | 79 | 64 | 37 | 32 | 35 | 52 | 60 | 97 | 134 | 111 | 58 | 63 | 65 | 35 | 53.5 | 134.4 | |
| 8-Jan-08 | 7:00 | 34 | 38 | 33 | 26 | A | 42 | 64 | 77 | 96 | 98 | 104 | 76 | 62 | 76 | 83 | 125 | 149 | 88 | 53 | 44 | 40 | 88 | 96 | 60 | 71.8 | 148.5 | |
| 9-Jan-08 | 8:00 | 33 | 33 | 28 | A | 8 | 7 | 8 | 9 | 14 | 11 | 11 | 12 | 15 | 25 | 28 | 37 | 42 | 55 | 88 | 68 | 31 | 21 | 20 | 18 | 27.0 | 87.9 | |
| 10-Jan-08 | 9:00 | 22 | 34 | A | 43 | 51 | 52 | 49 | 40 | 48 | 74 | 57 | 81 | 55 | 77 | 62 | 94 | 110 | 85 | 84 | 65 | 72 | 62 | 116 | 102 | 66.7 | 116.0 | |
| 11-Jan-08 | 10:00 | 88 | A | 85 | 80 | 98 | 65 | 43 | 75 | 131 | 103 | C | C | C | C | A | 80 | 119 | 121 | 123 | 126 | 114 | 141 | 65 | 131 | 99.2 | 140.6 | |
| 12-Jan-08 | 11:00 | 199 | 204 | 187 | 94 | 49 | A | 73 | 48 | 50 | 41 | 42 | 55 | 45 | 53 | 47 | 39 | 42 | 38 | 72 | 98 | 104 | 103 | 84 | 113 | 81.8 | 204.3 | |
| 13-Jan-08 | 12:00 | 93 | 95 | 127 | 137 | A | 107 | 116 | 86 | 96 | 16 | 60 | 66 | 55 | 48 | 39 | 27 | 21 | 16 | 28 | 60 | 37 | 28 | 35 | 28 | 61.7 | 136.7 | |
| 14-Jan-08 | 13:00 | 33 | 40 | 55 | A | 83 | 103 | 98 | 126 | 91 | 101 | 177 | 215 | 192 | 266 | 139 | 13 | 4 | 6 | 6 | 6 | 6 | 4 | 1 | 2 | 76.8 | 266.5 | |
| 15-Jan-08 | 14:00 | 2 | 2 | 3 | 14 | 17 | A | 48 | 113 | 207 | 202 | 144 | 92 | 37 | 23 | 21 | 40 | 63 | 34 | 30 | 20 | 18 | 15 | 11 | 8 | 50.7 | 207.5 | |
| 16-Jan-08 | 15:00 | 4 | 10 | 8 | 6 | A | 25 | 73 | 25 | 10 | 11 | 8 | 8 | 10 | 10 | 11 | 8 | 7 | 7 | 6 | 5 | 5 | 3 | 3 | 2 | 11.5 | 72.6 | |
| 17-Jan-08 | 16:00 | 2 | 3 | 2 | A | 2 | 2 | 4 | 12 | 6 | 5 | 9 | 8 | 9 | 7 | 12 | 19 | 55 | 72 | 13 | 9 | 8 | 8 | 7 | 8 | 12.3 | 71.9 | |
| 18-Jan-08 | 17:00 | 9 | 11 | A | 13 | 15 | 15 | 17 | 30 | 41 | 34 | 52 | 76 | 64 | 63 | 28 | 57 | 84 | 90 | 36 | 30 | 46 | 22 | 16 | 11 | 37.3 | 90.2 | |
| 19-Jan-08 | 18:00 | 10 | A | 9 | 7 | 7 | 8 | 7 | 8 | 10 | 12 | 11 | 12 | 12 | 14 | 11 | 12 | 22 | 26 | 70 | 100 | 85 | 83 | 72 | 52 | 28.7 | 99.5 | |
| 20-Jan-08 | 19:00 | A | 18 | 23 | 48 | 44 | 55 | 36 | 38 | 46 | 68 | 51 | 42 | 36 | 20 | 28 | 56 | 69 | 46 | 67 | 61 | 40 | 35 | 33 | A | 43.7 | 69.1 | |
| 21-Jan-08 | 20:00 | 26 | 24 | 42 | 50 | 38 | 26 | 33 | 43 | 26 | 18 | 20 | 16 | 18 | 18 | 17 | 25 | 41 | 56 | 51 | 65 | 81 | 40 | A | 13 | 34.3 | 81.1 | |
| 22-Jan-08 | 21:00 | 11 | 9 | 9 | 2 | 2 | 3 | 8 | 16 | 34 | 24 | 25 | 12 | 20 | 6 | 7 | 13 | 39 | 80 | 49 | 118 | 61 | A | 27 | 22 | 25.9 | 118.2 | |
| 23-Jan-08 | 22:00 | 15 | 14 | 21 | 38 | 32 | 50 | 70 | 127 | 178 | 233 | 117 | 74 | 61 | 56 | 49 | 40 | 61 | 83 | 99 | 82 | A | 98 | 104 | 183 | 82.0 | 232.9 | |
| 24-Jan-08 | 23:00 | 247 | 165 | 12 | 10 | 8 | 8 | 12 | 21 | 14 | 11 | 11 | 10 | 9 | 9 | 10 | 11 | 10 | 12 | 10 | A | 11 | 11 | 15 | 16 | 28.4 | 247.0 | |
| 25-Jan-08 | 0:00 | 14 | 13 | 13 | 12 | 17 | 23 | 44 | 55 | 65 | 116 | 61 | 56 | 56 | 43 | 55 | 49 | 61 | 75 | A | 17 | 33 | 26 | 13 | 39 | 41.5 | 116.0 | |
| 26-Jan-08 | 1:00 | 10 | 14 | 19 | 12 | 19 | 17 | 12 | 35 | 75 | 106 | 203 | 81 | 53 | 65 | 51 | 73 | 57 | A | 5 | 4 | 3 | 2 | 1 | 1 | 39.9 | 202.7 | |
| 27-Jan-08 | 2:00 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 5 | 5 | A | 8 | 8 | 8 | 11 | 6 | 6 | 8 | 4.0 | 10.8 | |
| 28-Jan-08 | 3:00 | 9 | 11 | 12 | 10 | 14 | 24 | 45 | 35 | 77 | 101 | 59 | 31 | 63 | 49 | 38 | A | 33 | 140 | 90 | 137 | 123 | 68 | 48 | 34 | 54.5 | 140.3 | |
| 29-Jan-08 | 4:00 | 26 | 24 | 20 | 18 | 17 | 20 | 25 | 49 | 66 | 43 | 28 | 28 | 53 | 32 | A | 31 | 24 | 19 | 28 | 27 | 19 | 13 | 11 | 9 | 27.5 | 65.8 | |
| 30-Jan-08 | 5:00 | 23 | 32 | 30 | 33 | 24 | 23 | 21 | 12 | 16 | 27 | 33 | 27 | 26 | 22 | 19 | 19 | 19 | 21 | 18 | 17 | 16 | 17 | 18 | 19 | 22.2 | 33.4 | |
| 31-Jan-08 | 6:00 | 20 | 30 | 23 | 31 | 22 | A | 25 | 28 | 23 | 17 | 19 | 17 | 15 | 15 | 16 | 18 | 16 | 15 | 19 | 21 | 15 | 15 | 12 | 13 | 19.3 | 31.0 | |
| Hourly Avg | | 36.4 | 36.1 | 34.5 | 32.4 | 29.2 | 34.2 | 39.6 | 49.9 | 62.4 | 68.1 | 60.0 | 54.2 | 46.5 | 48.3 | 37.5 | 39.9 | 53.9 | 54.6 | 44.6 | 47.0 | 39.5 | 37.2 | 33.1 | 34.3 | | | |
| Hourly Max | | 247.0 | 204.3 | 187.2 | 136.7 | 97.8 | 106.9 | 116.3 | 127.3 | 207.5 | 255.5 | 202.7 | 215.1 | 191.9 | 266.5 | 138.9 | 125.0 | 148.5 | 140.3 | 134.4 | 136.5 | 123.4 | 140.6 | 116.0 | 183.1 | | | |

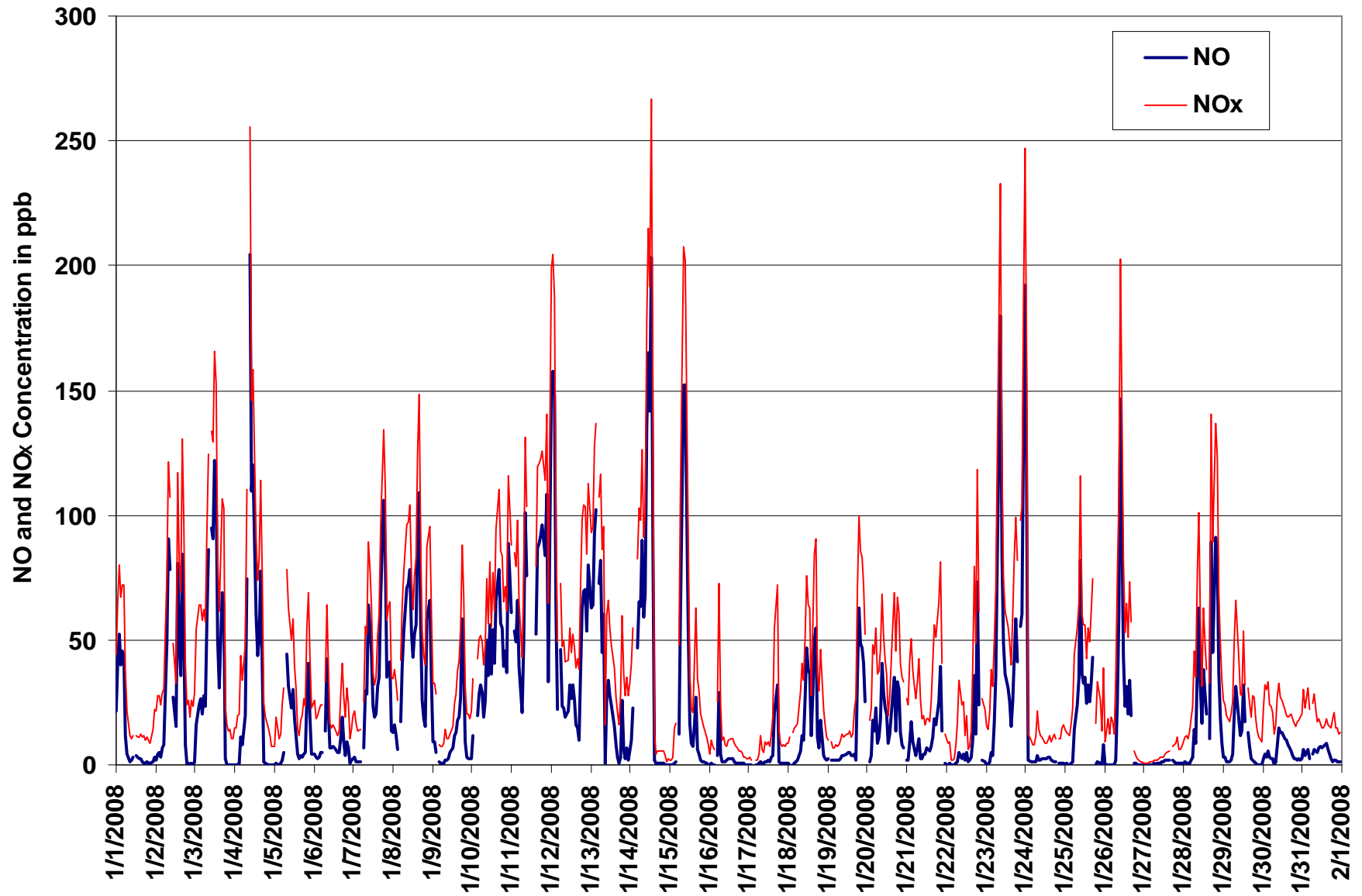


Figure 5. PASZA - Henry Pirker Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

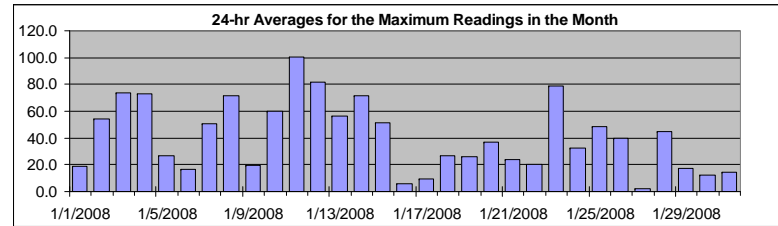
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-------|-----|--------|------------|
| Maximum 1-hr Value: | 310.6 | ppb | 25-Jan | 9:00 10:00 |
| Maximum 24-hr Value: | 100.6 | ppb | 11-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|------|-----|-----|-----|----------|----------|
| AIC Time: | 32 hrs | Operational Time: | 708 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 220.6 | 152.0 | 59.7 | 17.0 | 5.0 | 0.7 | 0.3 | 40.4 ppb | 17.0 ppb |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 49 | 56 | 58 | 51 | 61 | 65 | 16 | 11 | 3 | 6 | 6 | A | 5 | 4 | 4 | 5 | 2 | 2 | 8 | 7 | 1 | 5 | 5 | 18.8 | 64.8 | |
| 2-Jan-08 | 4 | 8 | 8 | 6 | 13 | 16 | 82 | 86 | 178 | 126 | A | 47 | 73 | 111 | 87 | 59 | 170 | 114 | 32 | 3 | 8 | 2 | 14 | 9 | 54.6 | 178.4 |
| 3-Jan-08 | 11 | 39 | 45 | 56 | 54 | 54 | 55 | 85 | 127 | A | 162 | 138 | 191 | 199 | 73 | 42 | 155 | 174 | 17 | 3 | 14 | 1 | 1 | 0 | 73.7 | 198.7 |
| 4-Jan-08 | 0 | 22 | 9 | 66 | 62 | 23 | 59 | 158 | A | 278 | 154 | 174 | 141 | 103 | 69 | 107 | 130 | 84 | 6 | 2 | 1 | 3 | 10 | 12 | 72.8 | 278.1 |
| 5-Jan-08 | 1 | 9 | 3 | 2 | 8 | 10 | 32 | A | 125 | 62 | 32 | 41 | 39 | 18 | 15 | 5 | 16 | 15 | 13 | 19 | 42 | 63 | 31 | 18 | 26.9 | 125.1 |
| 6-Jan-08 | 12 | 14 | 7 | 5 | 9 | 7 | A | 45 | 70 | 31 | 9 | 9 | 10 | 8 | 8 | 6 | 20 | 42 | 19 | 13 | 15 | 13 | 2 | 6 | 16.7 | 69.9 |
| 7-Jan-08 | 4 | 6 | 3 | 4 | 6 | A | 18 | 63 | 58 | 93 | 78 | 57 | 41 | 28 | 29 | 49 | 55 | 102 | 133 | 129 | 54 | 54 | 67 | 29 | 50.3 | 133.3 |
| 8-Jan-08 | 41 | 23 | 20 | 10 | A | 41 | 67 | 84 | 93 | 112 | 123 | 79 | 69 | 87 | 88 | 139 | 124 | 112 | 37 | 31 | 22 | 92 | 87 | 60 | 71.4 | 139.1 |
| 9-Jan-08 | 17 | 14 | 7 | A | 8 | 8 | 3 | 8 | 8 | 5 | 6 | 10 | 9 | 19 | 16 | 30 | 29 | 38 | 80 | 81 | 19 | 7 | 13 | 12 | 19.5 | 80.9 |
| 10-Jan-08 | 6 | 20 | A | 25 | 40 | 68 | 73 | 30 | 45 | 70 | 55 | 63 | 60 | 74 | 61 | 81 | 94 | 70 | 72 | 51 | 54 | 59 | 122 | 91 | 60.2 | 121.8 |
| 11-Jan-08 | 70 | A | 66 | 57 | 74 | 73 | 30 | 102 | 122 | 96 | C | C | C | C | A | 79 | 115 | 126 | 149 | 132 | 119 | 160 | 72 | 169 | 100.6 | 169.0 |
| 12-Jan-08 | 210 | 183 | 172 | 161 | 35 | A | 93 | 34 | 32 | 31 | 31 | 49 | 55 | 68 | 64 | 33 | 32 | 21 | 52 | 80 | 104 | 157 | 78 | 99 | 81.5 | 210.3 |
| 13-Jan-08 | 88 | 83 | 123 | 140 | A | 99 | 119 | 86 | 182 | 9 | 52 | 58 | 44 | 35 | 25 | 16 | 6 | 3 | 10 | 61 | 15 | 10 | 16 | 23 | 56.7 | 182.0 |
| 14-Jan-08 | 22 | 32 | 40 | A | 61 | 91 | 90 | 141 | 90 | 117 | 183 | 183 | 170 | 245 | 155 | 12 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 71.3 | 244.9 |
| 15-Jan-08 | 0 | 0 | 0 | 2 | 2 | A | 43 | 86 | 281 | 258 | 192 | 96 | 40 | 15 | 13 | 37 | 81 | 20 | 9 | 3 | 2 | 2 | 1 | 1 | 51.6 | 280.8 |
| 16-Jan-08 | 0 | 1 | 1 | 0 | A | 16 | 45 | 35 | 3 | 2 | 3 | 3 | 5 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5.7 | 44.7 |
| 17-Jan-08 | 0 | 1 | 1 | A | 1 | 1 | 2 | 3 | 1 | 1 | 2 | 3 | 4 | 3 | 8 | 19 | 67 | 77 | 5 | 1 | 4 | 2 | 1 | 1 | 9.0 | 76.6 |
| 18-Jan-08 | 1 | 1 | A | 1 | 2 | 3 | 4 | 14 | 35 | 23 | 50 | 60 | 46 | 42 | 29 | 40 | 72 | 76 | 20 | 17 | 36 | 13 | 10 | 14 | 26.4 | 76.5 |
| 19-Jan-08 | 11 | A | 12 | 10 | 5 | 8 | 8 | 12 | 9 | 13 | 12 | 11 | 12 | 12 | 11 | 10 | 8 | 7 | 85 | 86 | 82 | 64 | 60 | 47 | 25.9 | 85.9 |
| 20-Jan-08 | A | 5 | 28 | 27 | 38 | 42 | 28 | 21 | 39 | 69 | 52 | 50 | 30 | 13 | 18 | 49 | 54 | 33 | 69 | 42 | 31 | 21 | 47 | A | 36.6 | 69.4 |
| 21-Jan-08 | 5 | 5 | 32 | 23 | 18 | 17 | 15 | 21 | 9 | 4 | 6 | 5 | 11 | 9 | 9 | 17 | 17 | 57 | 49 | 46 | 91 | 82 | A | 2 | 24.0 | 91.3 |
| 22-Jan-08 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 9 | 14 | 7 | 13 | 4 | 15 | 4 | 5 | 7 | 37 | 82 | 49 | 140 | 61 | A | 9 | 6 | 20.2 | 139.6 |
| 23-Jan-08 | 0 | 2 | 5 | 13 | 14 | 31 | 74 | 130 | 195 | 221 | 188 | 71 | 59 | 50 | 38 | 40 | 47 | 95 | 91 | 93 | A | 93 | 92 | 171 | 78.8 | 220.6 |
| 24-Jan-08 | 285 | 301 | 13 | 11 | 10 | 9 | 11 | 17 | 22 | 3 | 4 | 6 | 7 | 7 | 11 | 11 | 6 | 2 | 2 | A | 2 | 2 | 3 | 1 | 32.4 | 300.6 |
| 25-Jan-08 | 1 | 1 | 1 | 1 | 3 | 4 | 30 | 32 | 141 | 311 | 97 | 56 | 52 | 54 | 66 | 50 | 63 | 93 | A | 3 | 3 | 11 | 1 | 44 | 48.5 | 310.6 |
| 26-Jan-08 | 6 | 0 | 1 | 0 | 5 | 0 | 1 | 8 | 112 | 180 | 220 | 95 | 71 | 69 | 48 | 46 | 46 | A | 2 | 2 | 1 | 1 | 1 | 0 | 39.8 | 220.3 |
| 27-Jan-08 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 5 | 5 | 4 | A | 14 | 4 | 1 | 2 | 2 | 1 | 2 | 2.4 | 14.5 |
| 28-Jan-08 | 1 | 4 | 3 | 2 | 3 | 10 | 28 | 23 | 62 | 112 | 53 | 45 | 52 | 40 | 26 | A | 18 | 131 | 69 | 129 | 113 | 50 | 38 | 16 | 44.6 | 130.6 |
| 29-Jan-08 | 6 | 13 | 3 | 3 | 7 | 8 | 11 | 41 | 61 | 41 | 20 | 38 | 70 | 24 | A | 19 | 14 | 9 | 6 | 3 | 3 | 1 | 1 | 0 | 17.4 | 69.9 |
| 30-Jan-08 | 10 | 8 | 7 | 12 | 6 | 5 | 27 | 1 | 12 | 16 | 20 | 17 | 17 | 17 | 18 | 19 | 16 | 15 | 14 | 9 | 7 | 4 | 7 | 4 | 12.0 | 26.6 |
| 31-Jan-08 | 14 | 17 | 11 | 16 | 7 | A | 7 | 11 | 17 | 15 | 12 | 21 | 15 | 18 | 16 | 21 | 84 | 7 | 3 | 6 | 7 | 4 | 5 | 4 | 14.7 | 84.2 |
| Hourly Avg | 29.3 | 29.9 | 23.4 | 25.1 | 19.8 | 26.2 | 35.7 | 46.6 | 71.6 | 77.1 | 63.3 | 51.5 | 47.2 | 46.2 | 35.2 | 35.1 | 52.7 | 54.1 | 36.7 | 39.9 | 30.7 | 32.5 | 26.5 | 28.3 | | |
| Hourly Max | 284.6 | 300.6 | 172.0 | 161.0 | 74.5 | 98.9 | 119.3 | 158.3 | 280.8 | 310.6 | 220.3 | 182.7 | 190.7 | 244.9 | 155.4 | 139.1 | 169.7 | 173.6 | 148.7 | 139.6 | 119.5 | 159.8 | 121.8 | 171.0 | | |

Station: Henry Pirker
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

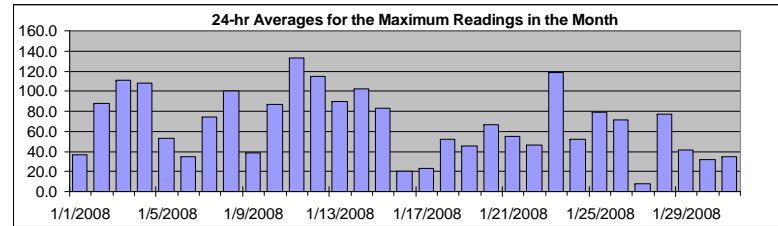
Oxides of Nitrogen (NO_x)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-------|-----|--------|------------|
| Maximum 1-hr Value: | 369.4 | ppb | 25-Jan | 9:00 10:00 |
| Maximum 24-hr Value: | 133.4 | ppb | 11-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|------|------|-----|-----|----------|----------|
| AIC Time: | 32 hrs | Operational Time: | 708 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 283.0 | 193.0 | 92.3 | 43.6 | 22.7 | 7.5 | 2.4 | 66.5 ppb | 43.6 ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 82 | 83 | 88 | 78 | 91 | 95 | 44 | 35 | 14 | 17 | 15 | A | 15 | 13 | 14 | 19 | 13 | 15 | 14 | 23 | 18 | 11 | 27 | 27 | 37.0 | 94.6 |
| 2-Jan-08 | 26 | 32 | 33 | 28 | 37 | 41 | 113 | 117 | 208 | 164 | A | 74 | 109 | 150 | 127 | 98 | 226 | 166 | 74 | 35 | 45 | 24 | 49 | 44 | 87.8 | 225.6 |
| 3-Jan-08 | 44 | 82 | 88 | 102 | 111 | 90 | 90 | 124 | 172 | A | 214 | 184 | 238 | 252 | 110 | 75 | 199 | 221 | 52 | 24 | 36 | 17 | 14 | 14 | 111.0 | 252.3 |
| 4-Jan-08 | 19 | 61 | 41 | 118 | 120 | 54 | 92 | 194 | A | 340 | 201 | 216 | 182 | 142 | 105 | 145 | 170 | 127 | 41 | 28 | 18 | 21 | 22 | 25 | 107.9 | 339.7 |
| 5-Jan-08 | 11 | 41 | 25 | 16 | 28 | 43 | 65 | A | 167 | 97 | 62 | 72 | 70 | 39 | 33 | 20 | 43 | 40 | 41 | 46 | 72 | 92 | 57 | 39 | 53.1 | 166.7 |
| 6-Jan-08 | 35 | 37 | 28 | 26 | 29 | 26 | A | 68 | 94 | 49 | 20 | 19 | 20 | 17 | 17 | 18 | 42 | 66 | 41 | 32 | 38 | 36 | 16 | 24 | 34.8 | 94.5 |
| 7-Jan-08 | 24 | 28 | 19 | 23 | 26 | A | 42 | 91 | 88 | 119 | 103 | 79 | 60 | 43 | 46 | 75 | 83 | 133 | 166 | 160 | 77 | 82 | 97 | 50 | 74.5 | 166.2 |
| 8-Jan-08 | 63 | 49 | 42 | 31 | A | 71 | 94 | 108 | 120 | 140 | 152 | 108 | 93 | 116 | 122 | 183 | 166 | 151 | 66 | 60 | 47 | 124 | 118 | 89 | 100.5 | 183.0 |
| 9-Jan-08 | 42 | 38 | 31 | A | 17 | 19 | 13 | 19 | 22 | 17 | 15 | 22 | 20 | 34 | 33 | 54 | 54 | 67 | 112 | 110 | 45 | 28 | 32 | 36 | 38.2 | 111.8 |
| 10-Jan-08 | 28 | 45 | A | 50 | 65 | 88 | 93 | 52 | 68 | 96 | 80 | 90 | 85 | 103 | 87 | 112 | 128 | 100 | 103 | 78 | 80 | 85 | 154 | 118 | 86.5 | 154.5 |
| 11-Jan-08 | 96 | A | 101 | 88 | 106 | 101 | 53 | 135 | 157 | 126 | C | C | C | C | A | 110 | 149 | 161 | 191 | 163 | 154 | 188 | 106 | 216 | 133.4 | 216.2 |
| 12-Jan-08 | 264 | 233 | 211 | 203 | 64 | A | 128 | 60 | 59 | 55 | 54 | 76 | 79 | 97 | 96 | 58 | 63 | 52 | 87 | 116 | 142 | 194 | 112 | 133 | 114.7 | 264.2 |
| 13-Jan-08 | 119 | 116 | 162 | 176 | A | 141 | 159 | 131 | 228 | 37 | 91 | 98 | 78 | 63 | 51 | 39 | 27 | 24 | 44 | 97 | 50 | 39 | 44 | 56 | 90.1 | 228.3 |
| 14-Jan-08 | 55 | 66 | 74 | A | 100 | 132 | 127 | 179 | 123 | 157 | 232 | 233 | 226 | 315 | 213 | 41 | 13 | 13 | 14 | 11 | 9 | 7 | 3 | 5 | 102.0 | 314.5 |
| 15-Jan-08 | 5 | 4 | 6 | 33 | 24 | A | 88 | 144 | 348 | 328 | 242 | 135 | 74 | 34 | 34 | 72 | 124 | 61 | 43 | 29 | 21 | 25 | 16 | 14 | 82.8 | 348.2 |
| 16-Jan-08 | 6 | 21 | 15 | 9 | A | 57 | 89 | 77 | 20 | 18 | 15 | 11 | 18 | 14 | 15 | 10 | 10 | 8 | 8 | 10 | 8 | 6 | 5 | 4 | 19.8 | 89.2 |
| 17-Jan-08 | 3 | 5 | 3 | A | 3 | 3 | 14 | 26 | 14 | 10 | 12 | 12 | 14 | 14 | 24 | 44 | 111 | 124 | 30 | 16 | 16 | 11 | 9 | 12 | 23.2 | 124.4 |
| 18-Jan-08 | 13 | 17 | A | 19 | 22 | 23 | 27 | 40 | 72 | 52 | 80 | 92 | 74 | 68 | 55 | 72 | 110 | 115 | 50 | 44 | 67 | 33 | 27 | 26 | 52.0 | 115.2 |
| 19-Jan-08 | 24 | A | 25 | 19 | 15 | 17 | 16 | 24 | 19 | 31 | 25 | 22 | 24 | 26 | 21 | 23 | 30 | 39 | 122 | 126 | 119 | 103 | 95 | 75 | 45.2 | 125.7 |
| 20-Jan-08 | A | 24 | 58 | 59 | 74 | 78 | 66 | 51 | 69 | 98 | 79 | 77 | 49 | 27 | 35 | 81 | 91 | 68 | 108 | 76 | 63 | 52 | 81 | A | 66.5 | 107.6 |
| 21-Jan-08 | 33 | 36 | 69 | 58 | 52 | 50 | 49 | 60 | 40 | 26 | 25 | 21 | 27 | 25 | 27 | 48 | 50 | 101 | 92 | 89 | 136 | 127 | A | 31 | 55.3 | 136.4 |
| 22-Jan-08 | 18 | 19 | 20 | 2 | 2 | 8 | 16 | 43 | 55 | 38 | 44 | 18 | 44 | 18 | 17 | 24 | 83 | 131 | 91 | 188 | 104 | A | 41 | 36 | 46.1 | 187.9 |
| 23-Jan-08 | 19 | 21 | 37 | 49 | 46 | 68 | 112 | 176 | 261 | 279 | 242 | 101 | 92 | 82 | 65 | 77 | 86 | 138 | 135 | 140 | A | 137 | 136 | 225 | 118.5 | 279.3 |
| 24-Jan-08 | 358 | 366 | 38 | 24 | 23 | 22 | 27 | 43 | 36 | 16 | 13 | 17 | 18 | 15 | 22 | 23 | 16 | 14 | A | 16 | 14 | 32 | 20 | | 51.7 | 366.0 |
| 25-Jan-08 | 18 | 15 | 15 | 15 | 26 | 33 | 64 | 65 | 179 | 369 | 127 | 85 | 77 | 82 | 98 | 80 | 96 | 131 | A | 36 | 40 | 50 | 23 | 88 | 78.8 | 369.4 |
| 26-Jan-08 | 44 | 18 | 25 | 18 | 37 | 22 | 20 | 53 | 215 | 241 | 283 | 144 | 116 | 115 | 91 | 88 | 90 | A | 9 | 7 | 4 | 4 | 3 | 2 | 71.7 | 283.3 |
| 27-Jan-08 | 2 | 2 | 2 | 1 | 2 | 2 | 4 | 3 | 5 | 5 | 6 | 5 | 6 | 7 | 13 | 9 | A | 31 | 12 | 13 | 18 | 11 | 9 | 10 | 7.7 | 31.0 |
| 28-Jan-08 | 12 | 17 | 17 | 13 | 21 | 42 | 67 | 59 | 107 | 168 | 87 | 72 | 81 | 67 | 49 | A | 48 | 192 | 117 | 180 | 158 | 84 | 70 | 43 | 77.0 | 191.6 |
| 29-Jan-08 | 31 | 39 | 24 | 24 | 28 | 31 | 39 | 77 | 101 | 74 | 45 | 63 | 97 | 43 | A | 39 | 36 | 26 | 35 | 33 | 26 | 19 | 18 | 11 | 41.6 | 101.3 |
| 30-Jan-08 | 42 | 39 | 37 | 44 | 34 | 28 | 39 | 17 | 39 | 42 | 40 | 35 | 31 | 32 | 32 | 33 | 30 | 30 | 34 | 24 | 23 | 23 | 23 | 25 | 32.2 | 44.2 |
| 31-Jan-08 | 38 | 46 | 37 | 44 | 31 | A | 32 | 36 | 39 | 29 | 27 | 40 | 27 | 28 | 26 | 35 | 131 | 21 | 24 | 26 | 22 | 18 | 21 | 17 | 34.6 | 130.7 |
| Hourly Avg | 52.5 | 55.2 | 47.2 | 48.9 | 44.1 | 51.3 | 62.6 | 76.9 | 104.6 | 108.0 | 90.8 | 76.6 | 71.6 | 69.4 | 57.9 | 60.1 | 84.0 | 85.7 | 65.7 | 67.3 | 55.8 | 55.5 | 48.6 | 50.5 | | |
| Hourly Max | 357.7 | 366.0 | 210.9 | 202.5 | 119.7 | 141.0 | 159.3 | 193.7 | 348.2 | 369.4 | 283.3 | 233.4 | 238.3 | 314.5 | 212.8 | 183.0 | 225.6 | 221.1 | 191.5 | 187.9 | 157.6 | 194.1 | 154.5 | 225.0 | | |

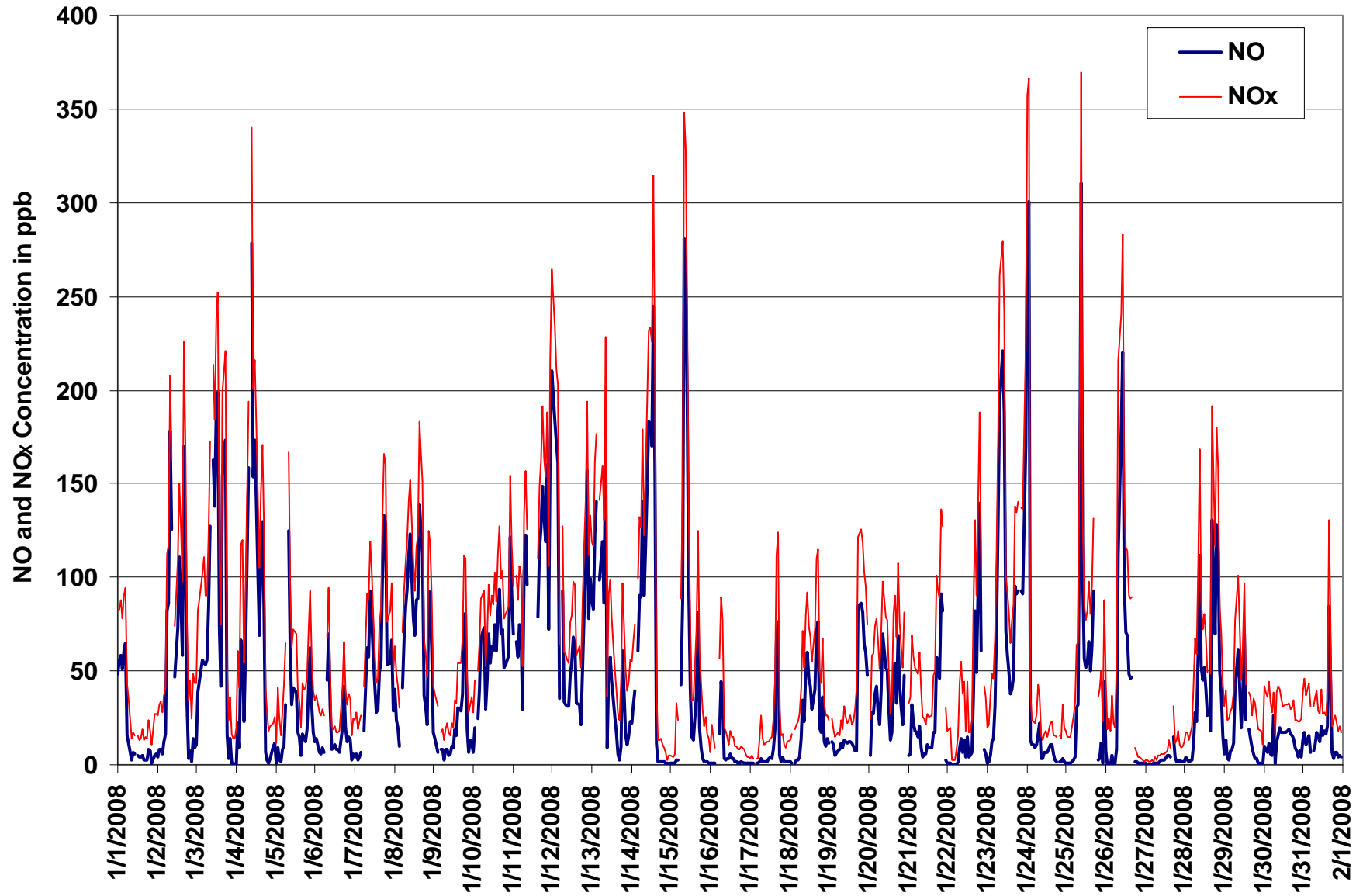


Figure 6. PASZA - Henry Pirker Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

PASZA - Henry Pirker Ozone Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

HOURLY AVERAGE TABLE

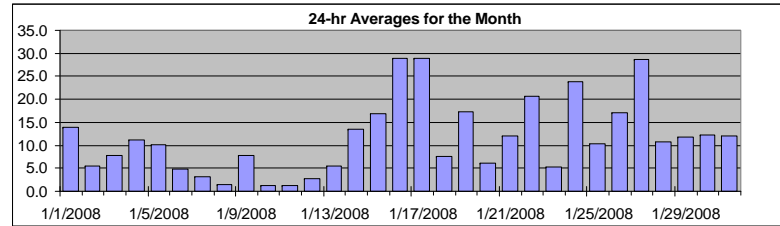
Ozone (O₃)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

Summary

| | | | |
|-----------------------------|----------|--------|-----------|
| Number of 1-hr Exceedances: | 0 | | |
| Maximum 1-hr Average: | 38.2 ppb | 17-Jan | 5:00 6:00 |
| Maximum 24-hr Average: | 29.0 ppb | 16-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|----------|---------|
| AIC Time: | 32 hrs | Operational Time: | 709 hrs | | | | | | |
| Calibration Time: | 3 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 36.2 | 32.3 | 20.5 | 8.2 | 1.5 | 0.0 | 0.0 | 11.7 ppb | 8.2 ppb |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------|------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|--|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | |
| 1-Jan-08 | 2 | 2 | 2 | 1 | 0 | 1 | 0 | 7 | 15 | 17 | 18 | A | 21 | 22 | 23 | 23 | 24 | 23 | 25 | 24 | 25 | 25 | 17 | 2 | 14.0 | 25.5 | |
| 2-Jan-08 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | A | 5 | 10 | 4 | 7 | 4 | 1 | 0 | 7 | 15 | 15 | 20 | 14 | 18 | 5.4 | 19.8 | |
| 3-Jan-08 | 15 | 3 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | A | 1 | 2 | 3 | 3 | 5 | 3 | 1 | 2 | 17 | 22 | 24 | 23 | 27 | 26 | 7.8 | 26.7 | |
| 4-Jan-08 | 21 | 21 | 12 | 13 | 1 | 3 | 1 | 0 | 0 | A | 1 | 3 | 4 | 6 | 6 | 3 | 1 | 5 | 18 | 22 | 24 | 27 | 33 | 33 | 11.3 | 33.3 | |
| 5-Jan-08 | 32 | 20 | 20 | 23 | 21 | 9 | 7 | A | 0 | 0 | 5 | 5 | 12 | 13 | 19 | 17 | 12 | 9 | 4 | 6 | 0 | 0 | 0 | 3 | 10.2 | 31.7 | |
| 6-Jan-08 | 0 | 5 | 2 | 0 | 0 | 0 | A | 0 | 0 | 0 | 7 | 10 | 11 | 12 | 13 | 11 | 4 | 0 | 3 | 6 | 1 | 4 | 12 | 9 | 4.8 | 13.4 | |
| 7-Jan-08 | 5 | 3 | 5 | 7 | 8 | A | 3 | 0 | 0 | 0 | 2 | 5 | 9 | 10 | 9 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.1 | 10.1 | |
| 8-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 2 | 6 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1.4 | 5.8 | |
| 9-Jan-08 | 0 | 0 | 0 | A | 16 | 17 | 16 | 15 | 12 | 14 | 15 | 14 | 14 | 11 | 10 | 6 | 3 | 0 | 1 | 1 | 2 | 5 | 4 | 6 | 7.9 | 16.6 | |
| 10-Jan-08 | 3 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 5 | 4 | 4 | 3 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1.4 | 4.5 | |
| 11-Jan-08 | 1 | A | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 2 | 4 | 5 | 5 | C | C | C | A | 0 | 0 | 0 | 1 | 0 | 1 | 1.2 | 5.2 | |
| 12-Jan-08 | 2 | 1 | 1 | 0 | 0 | A | 0 | 0 | 0 | 1 | 5 | 7 | 9 | 9 | 10 | 7 | 3 | 2 | 0 | 1 | 1 | 0 | 0 | 2 | 2.7 | 10.3 | |
| 13-Jan-08 | 0 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 24 | 8 | 6 | 7 | 9 | 9 | 12 | 13 | 16 | 7 | 0 | 3 | 5 | 1 | 3 | 5.5 | 24.0 | |
| 14-Jan-08 | 2 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 3 | 2 | 22 | 32 | 35 | 35 | 34 | 34 | 35 | 37 | 36 | 13.6 | 37.0 | |
| 15-Jan-08 | 36 | 35 | 34 | 24 | 22 | A | 3 | 0 | 0 | 0 | 3 | 7 | 18 | 23 | 23 | 13 | 5 | 12 | 14 | 19 | 20 | 22 | 26 | 28 | 16.8 | 35.9 | |
| 16-Jan-08 | 31 | 27 | 29 | 30 | A | 16 | 0 | 18 | 28 | 27 | 31 | 31 | 30 | 30 | 30 | 31 | 32 | 33 | 33 | 34 | 35 | 36 | 37 | 37 | 29.0 | 36.8 | |
| 17-Jan-08 | 37 | 36 | 38 | A | 37 | 38 | 36 | 29 | 33 | 35 | 32 | 33 | 33 | 34 | 31 | 25 | 6 | 2 | 25 | 30 | 29 | 21 | 21 | 21 | 28.8 | 38.2 | |
| 18-Jan-08 | 21 | 17 | A | 13 | 10 | 11 | 12 | 3 | 1 | 4 | 5 | 5 | 7 | 6 | 11 | 4 | 1 | 0 | 1 | 2 | 0 | 7 | 13 | 19 | 7.5 | 20.6 | |
| 19-Jan-08 | 19 | A | 23 | 27 | 26 | 24 | 26 | 25 | 24 | 24 | 24 | 24 | 24 | 24 | 25 | 24 | 16 | 10 | 3 | 1 | 1 | 2 | 1 | 0 | 17.3 | 27.3 | |
| 20-Jan-08 | A | 8 | 8 | 1 | 2 | 1 | 5 | 4 | 2 | 2 | 9 | 13 | 15 | 22 | 19 | 11 | 5 | 2 | 1 | 1 | 2 | 2 | 3 | A | 6.2 | 21.7 | |
| 21-Jan-08 | 5 | 6 | 0 | 0 | 3 | 7 | 4 | 4 | 16 | 22 | 23 | 27 | 27 | 27 | 27 | 22 | 11 | 4 | 5 | 1 | 1 | 11 | A | 23 | 11.9 | 27.2 | |
| 22-Jan-08 | 25 | 28 | 28 | 35 | 35 | 33 | 28 | 23 | 12 | 18 | 19 | 28 | 25 | 33 | 34 | 29 | 14 | 2 | 5 | 0 | 1 | A | 8 | 10 | 20.6 | 34.7 | |
| 23-Jan-08 | 15 | 16 | 12 | 1 | 3 | 0 | 0 | 0 | 1 | 2 | 3 | 7 | 11 | 14 | 14 | 14 | 5 | 0 | 0 | 0 | A | 0 | 0 | 1 | 5.3 | 16.1 | |
| 24-Jan-08 | 1 | 4 | 25 | 28 | 29 | 29 | 26 | 19 | 24 | 25 | 26 | 28 | 30 | 30 | 28 | 28 | 29 | 25 | 27 | A | 26 | 25 | 20 | 13 | 23.8 | 30.5 | |
| 25-Jan-08 | 15 | 17 | 18 | 18 | 15 | 10 | 2 | 1 | 0 | 2 | 5 | 8 | 9 | 11 | 8 | 6 | 2 | 1 | A | 25 | 12 | 18 | 26 | 10 | 10.4 | 26.4 | |
| 26-Jan-08 | 31 | 23 | 13 | 19 | 15 | 21 | 28 | 10 | 2 | 3 | 3 | 9 | 15 | 12 | 13 | 7 | 5 | A | 24 | 26 | 27 | 28 | 29 | 29 | 17.0 | 31.0 | |
| 27-Jan-08 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 29 | 30 | 30 | 30 | 30 | 30 | 29 | A | 28 | 27 | 26 | 23 | 27 | 27 | 25 | 28.6 | 29.9 | |
| 28-Jan-08 | 24 | 22 | 20 | 21 | 17 | 11 | 4 | 7 | 1 | 4 | 12 | 19 | 16 | 19 | 19 | A | 15 | 5 | 2 | 2 | 1 | 1 | 1 | 3 | 10.7 | 23.6 | |
| 29-Jan-08 | 5 | 7 | 9 | 10 | 11 | 9 | 7 | 2 | 2 | 10 | 16 | 18 | 15 | 19 | A | 17 | 16 | 15 | 8 | 7 | 13 | 17 | 19 | 20 | 11.8 | 19.9 | |
| 30-Jan-08 | 11 | 4 | 5 | 4 | 8 | 8 | 9 | 14 | 12 | 9 | 12 | 15 | 16 | 16 | 18 | 18 | 16 | 14 | 14 | 16 | 16 | 14 | 13 | 12 | 12.3 | 18.3 | |
| 31-Jan-08 | 11 | 6 | 9 | 2 | 6 | A | 7 | 6 | 9 | 13 | 15 | 17 | 18 | 19 | 18 | 17 | 17 | 14 | 10 | 8 | 13 | 13 | 15 | 14 | 12.0 | 18.8 | |
| Hourly Avg | 13.3 | 11.8 | 12.0 | 11.0 | 11.3 | 10.3 | 8.5 | 7.3 | 7.5 | 9.7 | 11.2 | 13.1 | 14.7 | 15.6 | 16.1 | 14.3 | 10.1 | 9.0 | 10.6 | 11.0 | 11.7 | 13.1 | 13.6 | 13.5 | | | |
| Hourly Max | 36.9 | 36.2 | 37.5 | 34.6 | 37.3 | 38.2 | 35.6 | 29.7 | 33.4 | 34.6 | 32.3 | 33.5 | 33.3 | 33.8 | 33.5 | 30.7 | 32.2 | 35.0 | 35.4 | 34.1 | 34.7 | 36.2 | 37.0 | 36.8 | | | |

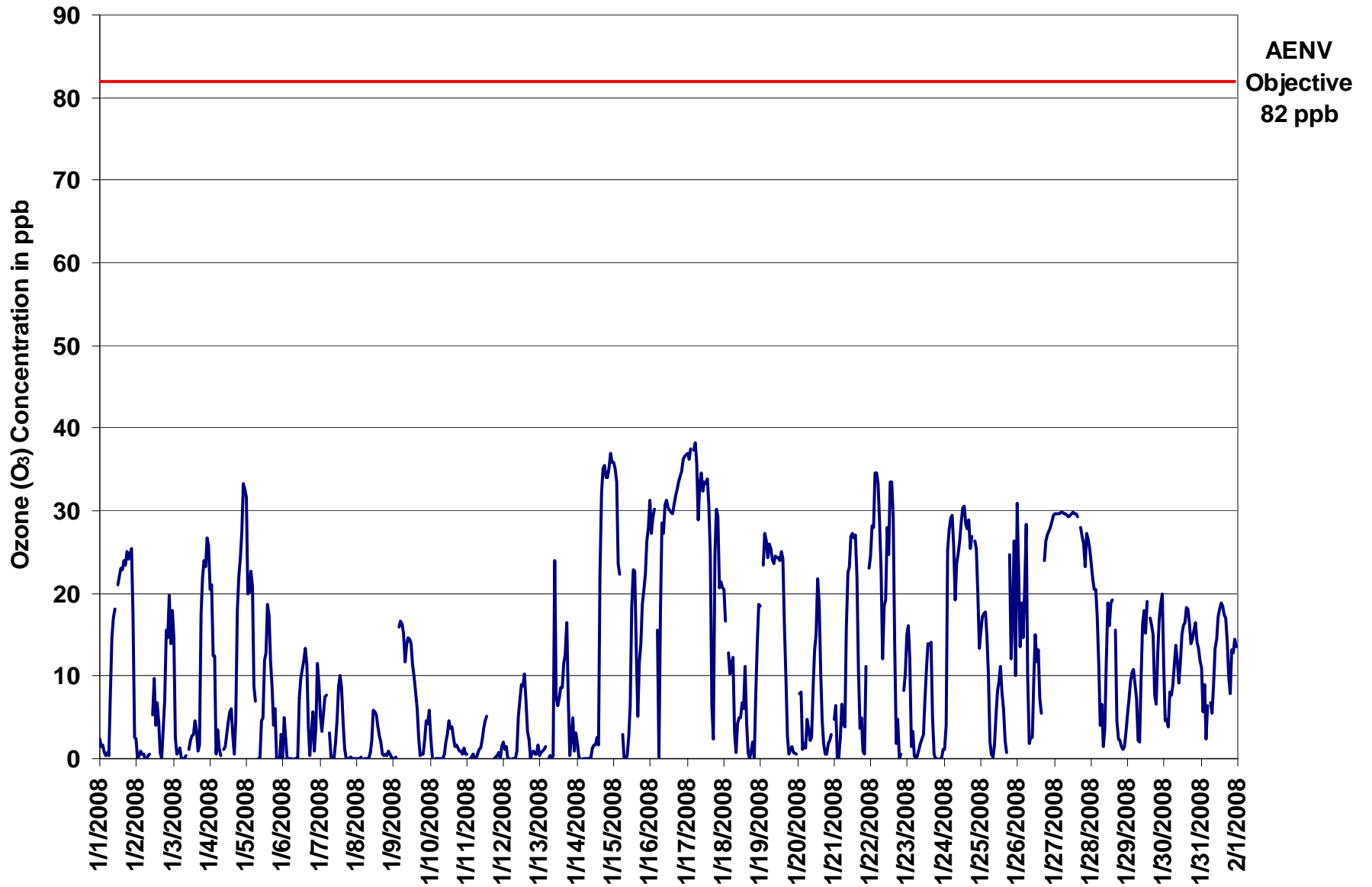


Figure 7. PASZA - Henry Pirker Ozone 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

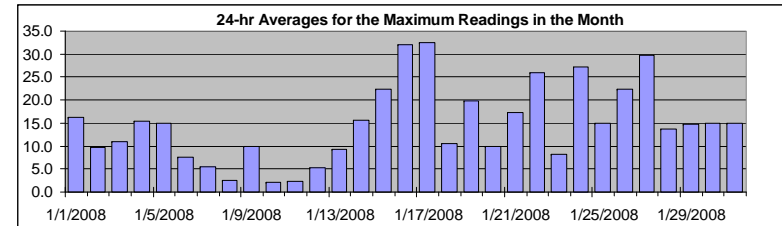
Ozone (O₃)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|------|-----|--------|-----------|
| Maximum 1-hr Value: | 39.3 | ppb | 17-Jan | 5:00 6:00 |
| Maximum 24-hr Value: | 32.5 | ppb | 17-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|------|-----|-----|-----|----------|----------|
| AIC Time: | 32 hrs | Operational Time: | 709 hrs | | | | | | |
| Calibration Time: | 3 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 37.9 | 35.0 | 25.4 | 13.2 | 3.6 | 0.5 | 0.0 | 14.9 ppb | 13.2 ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 4 | 4 | 3 | 2 | 1 | 2 | 1 | 15 | 16 | 18 | 20 | A | 23 | 24 | 24 | 25 | 26 | 26 | 27 | 27 | 26 | 27 | 26 | 5 | 16.2 | 27.3 |
| 2-Jan-08 | 5 | 1 | 3 | 3 | 4 | 1 | 0 | 1 | 1 | 1 | A | 12 | 14 | 6 | 13 | 13 | 2 | 1 | 17 | 24 | 27 | 25 | 24 | 5 | 9.7 | 27.3 |
| 3-Jan-08 | 25 | 8 | 1 | 3 | 7 | 2 | 0 | 1 | 2 | A | 2 | 3 | 4 | 4 | 7 | 9 | 3 | 12 | 24 | 27 | 27 | 26 | 29 | 28 | 11.0 | 28.9 |
| 4-Jan-08 | 24 | 27 | 18 | 20 | 7 | 12 | 9 | 3 | A | 3 | 3 | 4 | 7 | 8 | 10 | 5 | 3 | 14 | 23 | 25 | 27 | 32 | 35 | 36 | 15.4 | 35.9 |
| 5-Jan-08 | 34 | 34 | 26 | 25 | 25 | 18 | 18 | A | 0 | 2 | 12 | 7 | 16 | 17 | 21 | 21 | 18 | 13 | 10 | 14 | 0 | 0 | 4 | 8 | 15.0 | 33.7 |
| 6-Jan-08 | 1 | 10 | 8 | 2 | 1 | 0 | A | 0 | 0 | 5 | 9 | 12 | 12 | 13 | 15 | 13 | 9 | 2 | 10 | 8 | 5 | 13 | 14 | 14 | 7.7 | 14.7 |
| 7-Jan-08 | 8 | 7 | 8 | 11 | 12 | A | 7 | 4 | 3 | 1 | 4 | 6 | 11 | 14 | 11 | 8 | 3 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 5.4 | 13.5 |
| 8-Jan-08 | 0 | 1 | 0 | 1 | A | 0 | 0 | 1 | 0 | 2 | 4 | 9 | 8 | 8 | 6 | 3 | 3 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 2.6 | 8.9 |
| 9-Jan-08 | 1 | 1 | 2 | A | 17 | 18 | 18 | 18 | 14 | 16 | 17 | 16 | 16 | 13 | 12 | 8 | 5 | 1 | 2 | 3 | 6 | 8 | 10 | 9 | 10.0 | 18.4 |
| 10-Jan-08 | 6 | 2 | A | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 4 | 6 | 5 | 4 | 3 | 2 | 2 | 2 | 2 | 1 | 3 | 1 | 1 | 2.2 | 5.8 |
| 11-Jan-08 | 2 | A | 0 | 1 | 1 | 1 | 0 | 2 | 2 | 2 | 3 | 5 | 6 | 6 | C | C | C | A | 1 | 1 | 3 | 1 | 1 | 6 | 2.3 | 6.4 |
| 12-Jan-08 | 6 | 3 | 2 | 5 | 0 | A | 0 | 0 | 0 | 3 | 8 | 10 | 11 | 19 | 20 | 10 | 6 | 6 | 0 | 2 | 2 | 2 | 3 | 4 | 5.3 | 20.4 |
| 13-Jan-08 | 1 | 1 | 2 | 4 | A | 1 | 2 | 1 | 9 | 31 | 20 | 10 | 10 | 11 | 10 | 17 | 16 | 19 | 18 | 7 | 7 | 9 | 4 | 7 | 9.3 | 31.0 |
| 14-Jan-08 | 5 | 3 | 1 | A | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 3 | 2 | 3 | 8 | 29 | 36 | 37 | 38 | 38 | 35 | 37 | 38 | 37 | 15.6 | 38.4 |
| 15-Jan-08 | 37 | 36 | 35 | 33 | 28 | A | 20 | 0 | 1 | 4 | 13 | 10 | 26 | 26 | 28 | 19 | 11 | 22 | 24 | 25 | 24 | 26 | 30 | 33 | 22.3 | 36.9 |
| 16-Jan-08 | 33 | 34 | 33 | 33 | A | 26 | 2 | 28 | 33 | 30 | 33 | 33 | 33 | 32 | 31 | 32 | 34 | 35 | 35 | 36 | 37 | 37 | 38 | 38 | 32.0 | 37.8 |
| 17-Jan-08 | 38 | 37 | 39 | A | 39 | 39 | 38 | 37 | 36 | 38 | 35 | 35 | 37 | 36 | 34 | 33 | 19 | 11 | 29 | 34 | 35 | 23 | 23 | 22 | 32.5 | 39.3 |
| 18-Jan-08 | 22 | 20 | A | 16 | 14 | 16 | 16 | 7 | 4 | 8 | 7 | 7 | 8 | 7 | 15 | 9 | 3 | 1 | 3 | 4 | 4 | 11 | 18 | 21 | 10.5 | 22.3 |
| 19-Jan-08 | 21 | A | 27 | 29 | 29 | 27 | 27 | 27 | 26 | 26 | 25 | 25 | 27 | 27 | 27 | 24 | 15 | 12 | 2 | 3 | 4 | 1 | 1 | 1 | 19.9 | 29.0 |
| 20-Jan-08 | A | 11 | 14 | 4 | 5 | 4 | 7 | 10 | 7 | 8 | 15 | 16 | 20 | 24 | 22 | 17 | 8 | 5 | 2 | 2 | 4 | 5 | 7 | A | 9.9 | 23.8 |
| 21-Jan-08 | 8 | 11 | 0 | 3 | 9 | 10 | 10 | 8 | 24 | 27 | 27 | 30 | 31 | 30 | 31 | 27 | 16 | 14 | 12 | 6 | 7 | 27 | A | 28 | 17.3 | 31.3 |
| 22-Jan-08 | 32 | 33 | 36 | 35 | 35 | 35 | 32 | 32 | 23 | 25 | 28 | 31 | 35 | 37 | 36 | 34 | 29 | 5 | 10 | 1 | 4 | A | 15 | 17 | 26.0 | 36.7 |
| 23-Jan-08 | 17 | 19 | 19 | 4 | 7 | 3 | 2 | 2 | 3 | 6 | 5 | 12 | 15 | 19 | 19 | 19 | 12 | 3 | 1 | 1 | A | 2 | 0 | 2 | 8.2 | 19.3 |
| 24-Jan-08 | 2 | 24 | 29 | 29 | 31 | 31 | 30 | 24 | 27 | 27 | 28 | 30 | 32 | 33 | 30 | 30 | 31 | 29 | 30 | A | 29 | 29 | 26 | 16 | 27.2 | 32.5 |
| 25-Jan-08 | 18 | 19 | 19 | 21 | 20 | 18 | 6 | 3 | 1 | 3 | 9 | 9 | 14 | 15 | 11 | 9 | 4 | 1 | A | 31 | 19 | 30 | 32 | 33 | 15.0 | 32.6 |
| 26-Jan-08 | 39 | 34 | 18 | 22 | 23 | 29 | 32 | 26 | 7 | 15 | 5 | 17 | 22 | 19 | 17 | 11 | 8 | A | 26 | 28 | 28 | 29 | 30 | 30 | 22.4 | 39.1 |
| 27-Jan-08 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 31 | 31 | 30 | 31 | 31 | A | 30 | 29 | 28 | 27 | 29 | 28 | 28 | 29.8 | 30.8 |
| 28-Jan-08 | 25 | 24 | 22 | 23 | 21 | 17 | 10 | 11 | 2 | 6 | 19 | 22 | 19 | 21 | 21 | A | 19 | 13 | 3 | 3 | 2 | 2 | 3 | 6 | 13.8 | 25.1 |
| 29-Jan-08 | 7 | 10 | 11 | 14 | 14 | 12 | 12 | 3 | 3 | 15 | 20 | 21 | 18 | 22 | A | 19 | 20 | 20 | 13 | 10 | 15 | 20 | 21 | 21 | 14.8 | 21.7 |
| 30-Jan-08 | 20 | 6 | 7 | 5 | 11 | 10 | 14 | 16 | 14 | 12 | 13 | 17 | 18 | 17 | 20 | 20 | 18 | 16 | 16 | 18 | 18 | 17 | 15 | 17 | 14.9 | 20.3 |
| 31-Jan-08 | 18 | 11 | 14 | 5 | 10 | A | 10 | 9 | 14 | 16 | 17 | 19 | 20 | 20 | 20 | 20 | 19 | 18 | 13 | 12 | 15 | 16 | 16 | 16 | 15.0 | 19.7 |
| Hourly Avg | 16.3 | 15.9 | 14.8 | 13.7 | 14.3 | 13.5 | 11.9 | 10.6 | 10.1 | 12.7 | 14.6 | 15.6 | 17.7 | 18.1 | 19.1 | 18.0 | 14.1 | 12.9 | 14.4 | 14.0 | 14.7 | 16.4 | 16.5 | 17.0 | | |
| Hourly Max | 39.1 | 36.8 | 38.6 | 35.2 | 39.3 | 39.3 | 38.2 | 36.7 | 36.3 | 37.9 | 35.3 | 34.8 | 36.9 | 36.7 | 36.2 | 33.7 | 36.4 | 37.4 | 38.4 | 37.9 | 36.8 | 37.4 | 37.6 | 37.8 | | |

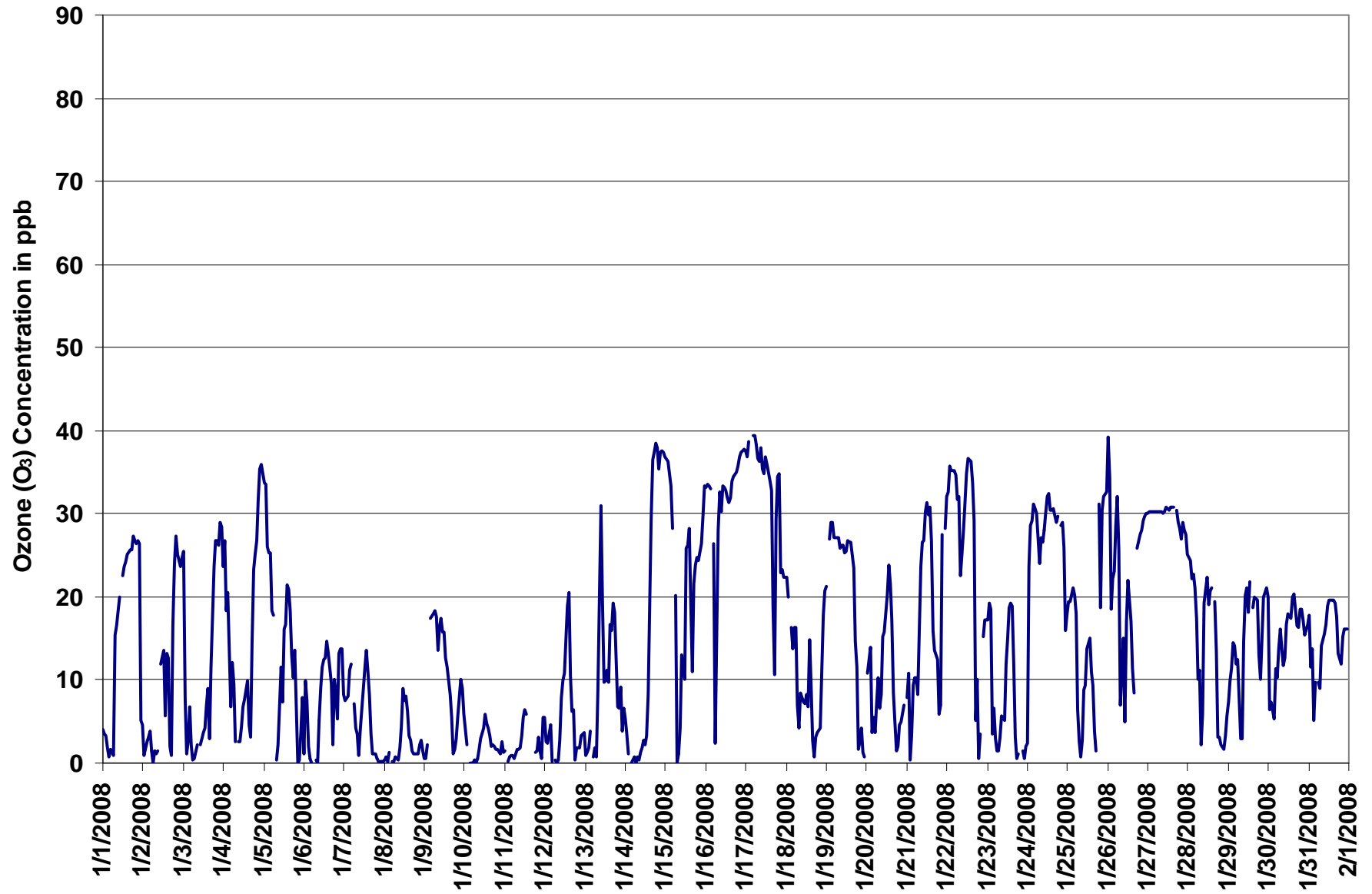
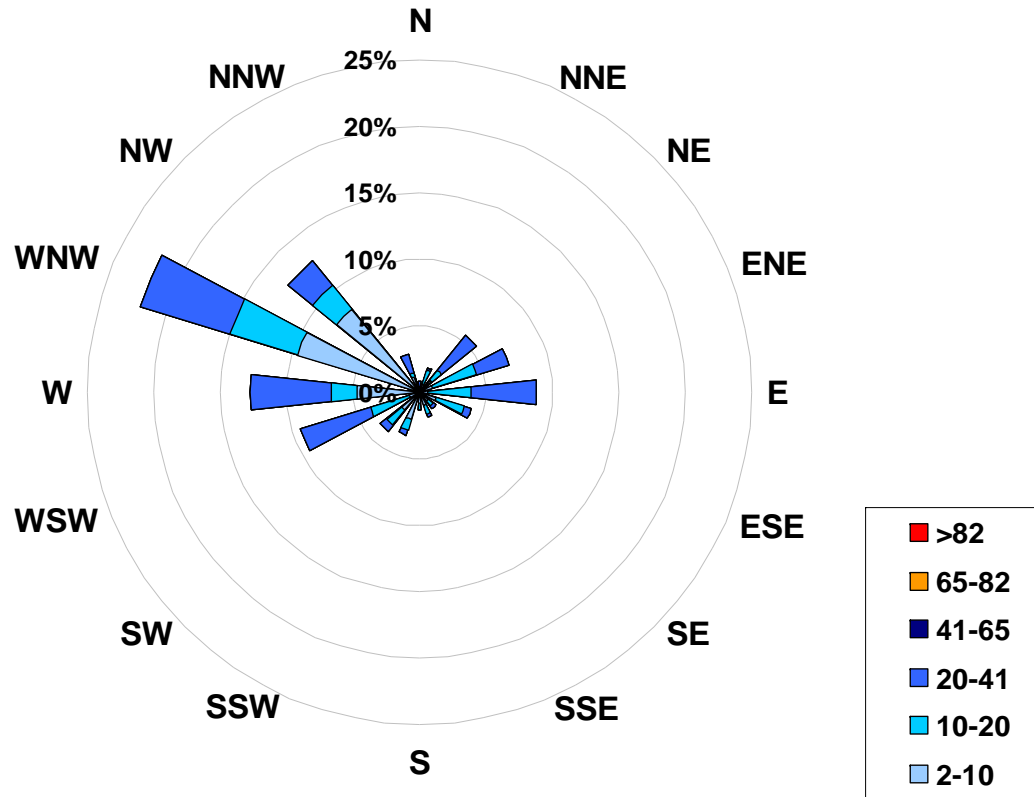


Figure 8. PASZA - Henry Pirker Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Ozone (in ppb) Located at the Henry Pirker Site for January 2008



Calms: 0%

| Frequency Distribution of O ₃ in ppb | | | |
|---|-------|-----------------|-----|
| Range | | Frequency (hrs) | |
| 2.0 | < 10 | 381 | |
| 10 | to 20 | 146 | |
| 20 | to 41 | 182 | |
| 41 | to 65 | 0 | |
| 65 | to 82 | 0 | |
| | > 82 | 0 | |
| Total Non-Zero Values | | | 709 |

PASZA - Henry Pirker Ozone Eight Hour Average Summary

Station: Henry Pirker
 Station Owner: PASZA

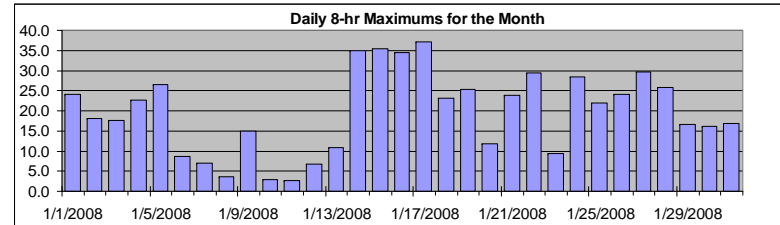
EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O₃)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | |
|-----------------------------|----------|--------|-----------|
| Number of 8-hr Exceedances: | 0 | | |
| Maximum 8-hr Average: | 37.1 ppb | 17-Jan | 5:00 6:00 |



| | | | | | | | |
|------------|------|------|------|-----|-----|-----|-----|
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 |
| | 35.3 | 29.6 | 18.7 | 8.9 | 3.3 | 0.5 | 0.0 |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|------------------|
| 1-Jan-08 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 5 | 7 | 8 | 11 | 14 | 18 | 20 | 21 | 22 | 23 | 23 | 24 | 24 | 23 | 21 | 24.1 |
| 2-Jan-08 | 18 | 15 | 12 | 9 | 6 | 3 | 1 | 1 | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 4 | 4 | 4 | 5 | 6 | 7 | 9 | 9 | 11 | 18.2 |
| 3-Jan-08 | 13 | 13 | 12 | 11 | 9 | 6 | 5 | 2 | 1 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 5 | 7 | 10 | 12 | 15 | 18 | 17.7 |
| 4-Jan-08 | 20 | 23 | 22 | 21 | 18 | 15 | 12 | 9 | 7 | 5 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 6 | 8 | 10 | 13 | 17 | 20 | 22.6 |
| 5-Jan-08 | 24 | 26 | 26 | 27 | 26 | 24 | 20 | 19 | 14 | 11 | 9 | 7 | 5 | 6 | 8 | 9 | 10 | 11 | 11 | 11 | 10 | 8 | 6 | 4 | 26.5 |
| 6-Jan-08 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 2 | 4 | 6 | 7 | 8 | 9 | 9 | 8 | 8 | 6 | 5 | 5 | 5 | 8.6 |
| 7-Jan-08 | 5 | 5 | 6 | 6 | 7 | 7 | 6 | 5 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 3 | 2 | 1 | 0 | 7.1 |
| 8-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 1 | 3.6 |
| 9-Jan-08 | 0 | 0 | 0 | 0 | 3 | 5 | 7 | 9 | 11 | 13 | 15 | 15 | 15 | 14 | 13 | 12 | 11 | 9 | 7 | 6 | 4 | 3 | 3 | 3 | 14.9 |
| 10-Jan-08 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 2.9 |
| 11-Jan-08 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | N | N | N | N | N | N | N | N | N | 2.7 |
| 12-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 6 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 6.7 |
| 13-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 5 | 6 | 6 | 7 | 8 | 9 | 11 | 10 | 10 | 9 | 8 | 8 | 7 | 6 | 10.8 |
| 14-Jan-08 | 5 | 3 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 4 | 8 | 12 | 17 | 21 | 25 | 29 | 33 | 35 | 34.8 |
| 15-Jan-08 | 35 | 35 | 35 | 34 | 32 | 32 | 27 | 22 | 17 | 12 | 7 | 5 | 4 | 7 | 9 | 11 | 11 | 13 | 14 | 16 | 16 | 16 | 16 | 18 | 35.3 |
| 16-Jan-08 | 22 | 24 | 25 | 27 | 28 | 27 | 23 | 22 | 21 | 21 | 22 | 22 | 23 | 25 | 28 | 30 | 30 | 31 | 31 | 32 | 32 | 33 | 34 | 35 | 34.6 |
| 17-Jan-08 | 35 | 36 | 36 | 36 | 37 | 37 | 37 | 36 | 35 | 35 | 34 | 34 | 34 | 33 | 33 | 32 | 29 | 25 | 24 | 23 | 23 | 21 | 20 | 19 | 37.1 |
| 18-Jan-08 | 21 | 23 | 23 | 20 | 18 | 16 | 15 | 12 | 10 | 8 | 7 | 6 | 6 | 5 | 5 | 5 | 5 | 4 | 4 | 3 | 3 | 4 | 5 | 5 | 23.0 |
| 19-Jan-08 | 8 | 9 | 12 | 16 | 19 | 22 | 24 | 24 | 25 | 25 | 25 | 25 | 25 | 25 | 24 | 24 | 23 | 22 | 19 | 16 | 13 | 10 | 7 | 4 | 25.3 |
| 20-Jan-08 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 5 | 6 | 9 | 11 | 12 | 12 | 12 | 11 | 9 | 8 | 5 | 3 | 2 | 11.9 |
| 21-Jan-08 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 5 | 7 | 10 | 13 | 16 | 19 | 22 | 24 | 23 | 21 | 19 | 15 | 12 | 10 | 8 | 8 | 23.9 |
| 22-Jan-08 | 10 | 13 | 17 | 21 | 26 | 29 | 29 | 29 | 28 | 27 | 25 | 23 | 23 | 24 | 25 | 25 | 23 | 21 | 18 | 15 | 12 | 8 | 6 | 6 | 29.5 |
| 23-Jan-08 | 6 | 8 | 9 | 9 | 9 | 8 | 7 | 6 | 4 | 3 | 1 | 2 | 3 | 5 | 7 | 8 | 9 | 9 | 8 | 7 | 7 | 5 | 3 | 1 | 9.4 |
| 24-Jan-08 | 0 | 1 | 4 | 8 | 11 | 15 | 18 | 20 | 23 | 26 | 26 | 26 | 26 | 26 | 26 | 28 | 28 | 28 | 28 | 28 | 28 | 27 | 26 | 24 | 28.4 |
| 25-Jan-08 | 22 | 21 | 19 | 19 | 18 | 16 | 14 | 12 | 10 | 8 | 7 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 9 | 9 | 10 | 13 | 13 | 21.8 |
| 26-Jan-08 | 17 | 21 | 20 | 19 | 19 | 20 | 20 | 20 | 16 | 14 | 12 | 11 | 11 | 10 | 8 | 8 | 8 | 9 | 12 | 15 | 16 | 19 | 21 | 24 | 24.1 |
| 27-Jan-08 | 28 | 28 | 29 | 29 | 29 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 29 | 29 | 28 | 28 | 27 | 27 | 26 | 29.7 |
| 28-Jan-08 | 26 | 25 | 24 | 24 | 23 | 21 | 18 | 16 | 13 | 11 | 9 | 9 | 9 | 10 | 12 | 13 | 15 | 15 | 14 | 11 | 9 | 7 | 4 | 4 | 25.9 |
| 29-Jan-08 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 7 | 8 | 8 | 9 | 10 | 11 | 12 | 14 | 16 | 17 | 15 | 14 | 13 | 13 | 14 | 14 | 16.6 |
| 30-Jan-08 | 14 | 12 | 12 | 12 | 11 | 10 | 9 | 8 | 8 | 8 | 9 | 11 | 12 | 13 | 14 | 15 | 15 | 16 | 16 | 16 | 16 | 16 | 15 | 14 | 16.2 |
| 31-Jan-08 | 14 | 13 | 12 | 10 | 9 | 8 | 8 | 7 | 6 | 7 | 8 | 10 | 12 | 13 | 14 | 16 | 17 | 17 | 16 | 15 | 15 | 14 | 13 | 13 | 17.0 |

Hourly Max 35.3 35.6 36.1 36.4 36.8 37.1 36.9 35.8 35.3 35.1 34.3 34.2 33.7 33.2 32.5 32.0 30.2 30.9 31.2 31.6 32.1 32.9 33.8 34.8

PASZA - Henry Pirker Carbon Monoxide Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

HOURLY AVERAGE TABLE

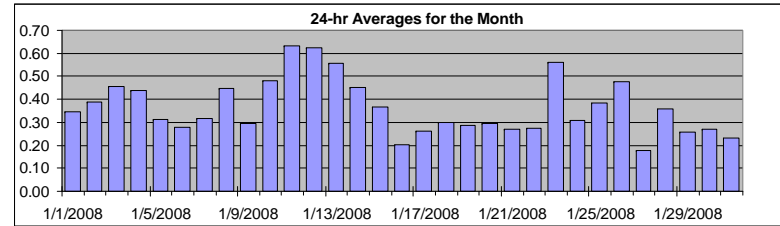
Carbon Monoxide (CO)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | | |
|-----------------------------|-----|-----|--------|-------------|
| Number of 1-hr Exceedances: | 0 | | | |
| Maximum 1-hr Average: | 2.8 | ppm | 26-Jan | 10:00 11:00 |
| Maximum 24-hr Value: | 0.6 | ppm | 11-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 32 hrs | Operational Time: | 709 hrs | | | | | | |
| Calibration Time: | 3 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 1.4 | 0.8 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 | 0.4 ppm | 0.3 ppm |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum |
|------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|-----------------|---------------|
| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | | |
| 1-Jan-08 | 0.5 | 0.6 | 0.6 | 0.5 | 0.7 | 0.6 | 0.4 | 0.3 | 0.3 | 0.3 | A | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.35 | 0.67 |
| 2-Jan-08 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.5 | 0.7 | 0.6 | A | 0.3 | 0.3 | 0.6 | 0.5 | 0.4 | 0.8 | 0.7 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.39 | 0.77 |
| 3-Jan-08 | 0.5 | 0.5 | 0.5 | 0.6 | 0.4 | 0.4 | 0.3 | 0.5 | 0.7 | A | 0.6 | 0.5 | 0.7 | 0.7 | 0.5 | 0.4 | 0.5 | 0.7 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.46 | 0.75 |
| 4-Jan-08 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.9 | A | 1.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.44 | 1.76 |
| 5-Jan-08 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | A | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.3 | 0.31 | 0.52 |
| 6-Jan-08 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | A | 0.3 | 0.5 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 | 0.28 | 0.46 |
| 7-Jan-08 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | A | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.5 | 0.6 | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 | 0.32 | 0.55 |
| 8-Jan-08 | 0.3 | 0.2 | 0.3 | 0.3 | A | 0.3 | 0.4 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.8 | 0.8 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.45 | 0.81 |
| 9-Jan-08 | 0.3 | 0.3 | 0.3 | A | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.30 | 0.54 |
| 10-Jan-08 | 0.2 | 0.3 | A | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.5 | 0.4 | 0.6 | 0.7 | 0.8 | 0.7 | 0.6 | 0.7 | 0.6 | 0.8 | 0.6 | 0.48 | 0.85 |
| 11-Jan-08 | 0.5 | A | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.7 | 0.6 | 0.6 | 0.7 | 1.0 | 0.6 | 0.6 | 0.5 | 0.7 | 0.7 | 0.6 | 0.6 | 0.8 | 0.9 | 0.5 | 1.0 | 0.63 | 1.05 |
| 12-Jan-08 | 1.3 | 1.3 | 1.5 | 0.6 | 0.4 | A | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 0.9 | 0.8 | 0.7 | 1.0 | 0.62 | 1.46 |
| 13-Jan-08 | 0.7 | 0.7 | 0.9 | 1.0 | A | 0.8 | 0.7 | 0.6 | 0.6 | 0.2 | 0.6 | 0.8 | 0.6 | 0.5 | 0.6 | 0.5 | 0.4 | 0.3 | 0.4 | 0.6 | 0.3 | 0.3 | 0.3 | 0.3 | 0.55 | 1.04 |
| 14-Jan-08 | 0.3 | 0.3 | 0.4 | A | 0.5 | 0.7 | 0.7 | 0.9 | 0.8 | 1.0 | 1.5 | C | C | C | 0.6 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.45 | 1.50 |
| 15-Jan-08 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | A | 0.3 | 0.9 | 1.3 | 1.0 | 0.6 | 0.6 | 0.3 | 0.2 | 0.2 | 0.3 | 0.5 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.37 | 1.29 |
| 16-Jan-08 | 0.2 | 0.2 | 0.2 | 0.2 | A | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.20 | 0.39 |
| 17-Jan-08 | 0.2 | 0.2 | 0.2 | A | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.4 | 0.5 | 0.9 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.26 | 0.91 |
| 18-Jan-08 | 0.2 | 0.2 | A | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.4 | 0.5 | 0.6 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.30 | 0.60 |
| 19-Jan-08 | 0.2 | A | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.3 | 0.29 | 0.51 |
| 20-Jan-08 | A | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | 0.4 | 0.5 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | A | 0.29 | 0.49 |
| 21-Jan-08 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.4 | A | 0.2 | 0.27 | 0.50 |
| 22-Jan-08 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.7 | 0.5 | 0.6 | 0.3 | A | 0.2 | 0.2 | 0.28 | 0.70 |
| 23-Jan-08 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 1.0 | 1.4 | 1.5 | 0.5 | 0.3 | 0.5 | 0.4 | 0.3 | 0.3 | 0.4 | 0.6 | 0.5 | 0.5 | A | 0.7 | 0.7 | 1.4 | 0.56 | 1.50 |
| 24-Jan-08 | 1.5 | 0.8 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | A | 0.2 | 0.2 | 0.2 | 0.2 | 0.31 | 1.52 |
| 25-Jan-08 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.6 | 0.6 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | A | 0.2 | 0.3 | 0.3 | 0.2 | 0.5 | 0.38 | 0.60 |
| 26-Jan-08 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.6 | 1.1 | 2.8 | 0.8 | 0.6 | 0.6 | 0.6 | 0.7 | 0.5 | A | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.48 | 2.76 |
| 27-Jan-08 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | A | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.18 | 0.19 |
| 28-Jan-08 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.5 | 0.4 | 0.3 | 0.2 | 0.4 | 0.3 | 0.3 | A | 0.3 | 0.7 | 0.6 | 0.6 | 0.6 | 0.4 | 0.3 | 0.2 | 0.36 | 0.72 |
| 29-Jan-08 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | A | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.26 | 0.39 |
| 30-Jan-08 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.27 | 0.32 |
| 31-Jan-08 | 0.2 | 0.3 | 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 | A | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.23 | 0.34 |
| Hourly Avg | 0.35 | 0.33 | 0.33 | 0.30 | 0.27 | 0.29 | 0.32 | 0.40 | 0.48 | 0.48 | 0.47 | 0.37 | 0.36 | 0.34 | 0.34 | 0.35 | 0.42 | 0.47 | 0.37 | 0.37 | 0.34 | 0.33 | 0.31 | 0.35 | | |
| Hourly Max | 1.52 | 1.30 | 1.46 | 1.04 | 0.67 | 0.79 | 0.72 | 1.01 | 1.42 | 1.76 | 2.76 | 0.79 | 1.05 | 0.66 | 0.63 | 0.81 | 0.77 | 0.91 | 0.71 | 0.80 | 0.89 | 0.92 | 0.85 | 1.44 | | |

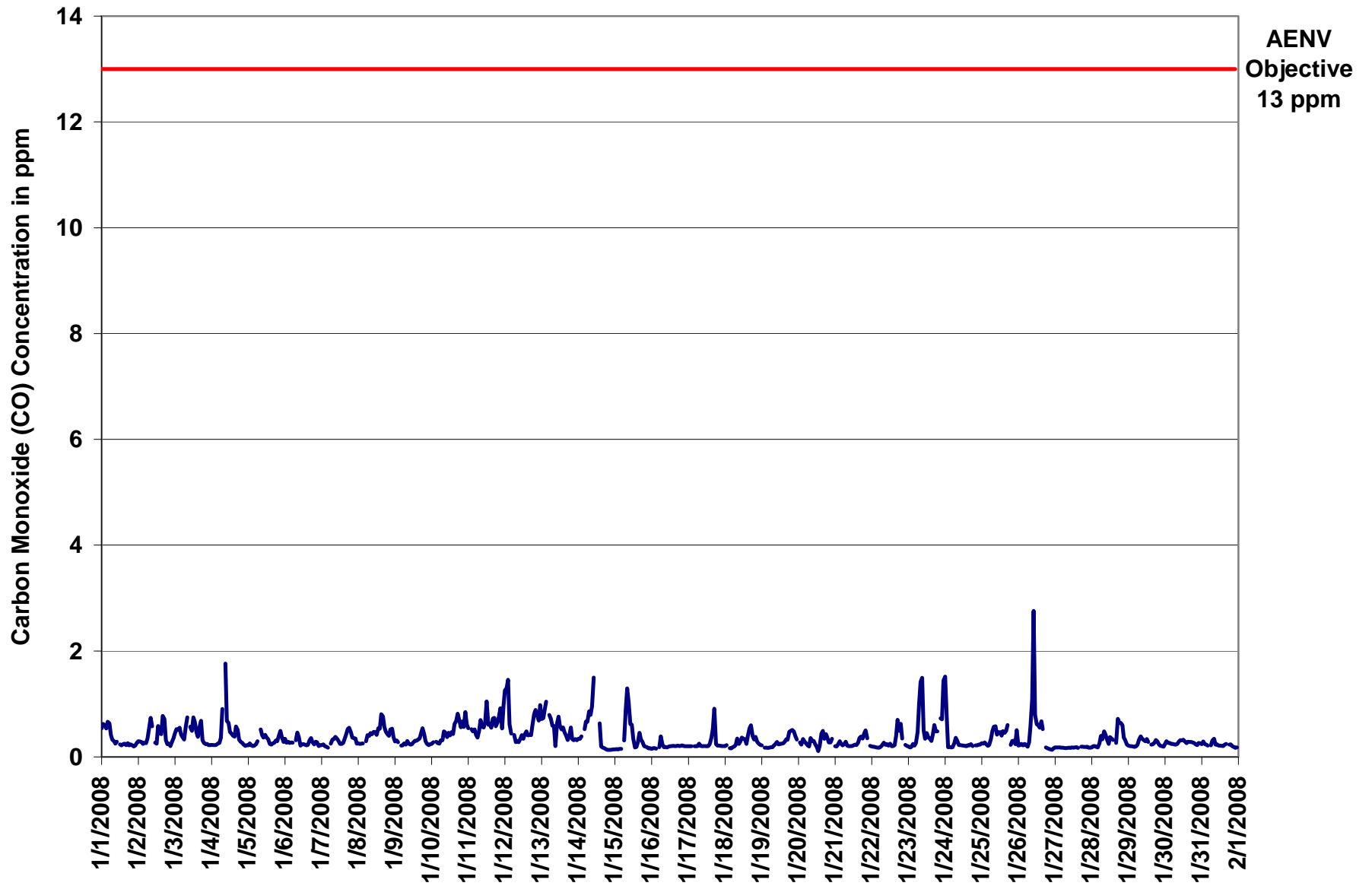


Figure 9. PASZA - Henry Pirker Carbon Monoxide 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

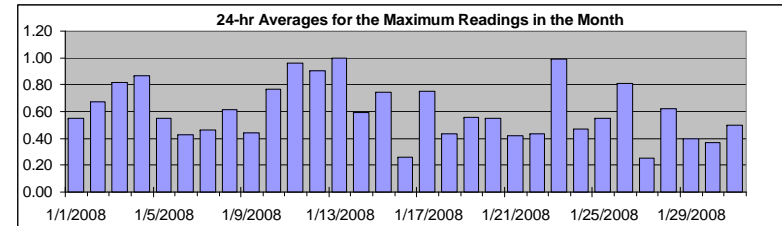
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Carbon Monoxide (CO)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|------|-----|--------|-------------|
| Maximum 1-hr Value: | 10.5 | ppm | 17-Jan | 17:00 18:00 |
| Maximum 24-hr Value: | 1.0 | ppm | 13-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 32 hrs | Operational Time: | 709 hrs | | | | | | |
| Calibration Time: | 3 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 2.7 | 1.5 | 0.7 | 0.4 | 0.3 | 0.2 | 0.2 | 0.6 ppm | 0.4 ppm |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 24-hour Average | Daily Maximum |
|------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|
| 1-Jan-08 | 1.1 | 1.1 | 0.9 | 0.7 | 0.7 | 0.8 | 0.5 | 0.4 | 0.4 | 0.4 | 1.0 | A | 0.6 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.4 | 0.5 | 0.3 | 0.2 | 0.2 | 0.3 | 0.55 | 1.11 |
| 2-Jan-08 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.9 | 0.8 | 0.9 | 1.4 | 1.2 | A | 0.3 | 0.5 | 0.7 | 0.6 | 0.9 | 1.2 | 1.0 | 0.5 | 0.4 | 0.4 | 0.2 | 0.5 | 1.0 | 0.67 | 1.38 |
| 3-Jan-08 | 0.5 | 0.7 | 0.7 | 1.0 | 0.5 | 0.6 | 1.0 | 1.4 | 1.7 | A | 1.2 | 0.9 | 1.3 | 0.9 | 1.0 | 0.5 | 1.2 | 1.4 | 0.4 | 0.5 | 0.3 | 0.4 | 0.3 | 0.3 | 0.82 | 1.72 |
| 4-Jan-08 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 1.3 | 4.3 | A | 3.7 | 1.3 | 1.0 | 0.7 | 0.6 | 0.5 | 0.7 | 1.2 | 0.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.87 | 4.31 |
| 5-Jan-08 | 0.3 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.9 | A | 1.3 | 1.7 | 0.5 | 0.5 | 0.6 | 0.6 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.5 | 0.6 | 1.0 | 0.6 | 0.4 | 0.55 | 1.70 |
| 6-Jan-08 | 0.7 | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | A | 0.5 | 0.8 | 1.0 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.6 | 0.7 | 0.5 | 0.3 | 0.4 | 0.4 | 0.2 | 0.3 | 0.43 | 0.95 |
| 7-Jan-08 | 0.3 | 0.4 | 0.2 | 0.2 | 0.2 | A | 0.6 | 0.5 | 0.5 | 0.5 | 0.7 | 0.4 | 0.4 | 0.4 | 0.3 | 0.5 | 0.9 | 1.0 | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.3 | 0.46 | 0.97 |
| 8-Jan-08 | 0.3 | 0.3 | 0.3 | 0.5 | A | 0.4 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 | 1.4 | 0.9 | 0.8 | 0.8 | 0.6 | 0.5 | 0.9 | 0.6 | 0.5 | 0.62 | 1.42 |
| 9-Jan-08 | 0.3 | 0.4 | 0.3 | A | 0.3 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.9 | 0.4 | 0.4 | 0.4 | 0.6 | 0.7 | 0.6 | 0.4 | 0.3 | 0.4 | 0.9 | 0.44 | 0.91 |
| 10-Jan-08 | 0.3 | 0.4 | A | 0.4 | 0.4 | 0.3 | 0.5 | 0.5 | 2.0 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 0.8 | 1.1 | 1.0 | 0.7 | 2.8 | 0.7 | 1.2 | 0.7 | 0.77 | 2.80 |
| 11-Jan-08 | 0.6 | A | 0.6 | 0.6 | 0.6 | 0.6 | 0.4 | 0.7 | 0.8 | 0.8 | 1.1 | 1.0 | 1.7 | 0.8 | 1.1 | 0.8 | 1.2 | 1.2 | 0.8 | 1.3 | 1.3 | 1.7 | 1.2 | 1.6 | 0.96 | 1.71 |
| 12-Jan-08 | 1.6 | 1.5 | 1.7 | 1.4 | 0.9 | A | 0.9 | 0.4 | 0.4 | 0.4 | 0.6 | 0.5 | 0.6 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.8 | 1.1 | 1.2 | 1.5 | 1.0 | 1.3 | 0.91 | 1.73 |
| 13-Jan-08 | 1.0 | 0.9 | 1.1 | 1.3 | A | 1.1 | 0.9 | 1.6 | 0.7 | 0.3 | 1.8 | 5.1 | 0.7 | 0.6 | 0.7 | 0.6 | 0.6 | 0.4 | 0.5 | 1.2 | 0.4 | 0.6 | 0.4 | 0.4 | 1.00 | 5.12 |
| 14-Jan-08 | 0.5 | 0.5 | 0.4 | A | 0.6 | 1.0 | 0.9 | 1.2 | 0.9 | 1.4 | 1.8 | C | C | C | 0.9 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.59 | 1.82 |
| 15-Jan-08 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | A | 0.8 | 1.4 | 2.1 | 2.7 | 1.3 | 1.8 | 1.9 | 0.3 | 0.3 | 0.7 | 1.0 | 0.5 | 0.4 | 0.4 | 0.2 | 0.3 | 0.2 | 0.2 | 0.75 | 2.71 |
| 16-Jan-08 | 0.2 | 0.2 | 0.2 | 0.2 | A | 0.3 | 0.6 | 0.5 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.26 | 0.64 |
| 17-Jan-08 | 0.2 | 0.2 | 0.2 | A | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.7 | 0.9 | 10.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.75 | 10.50 |
| 18-Jan-08 | 0.3 | 0.3 | A | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.3 | 0.6 | 0.7 | 1.1 | 0.7 | 0.5 | 0.6 | 0.3 | 0.3 | 0.4 | 0.43 | 1.09 |
| 19-Jan-08 | 0.4 | A | 0.3 | 0.3 | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 0.4 | 0.5 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 0.4 | 0.6 | 1.8 | 1.6 | 0.8 | 0.6 | 0.5 | 0.55 | 1.83 |
| 20-Jan-08 | A | 0.6 | 0.3 | 0.4 | 0.5 | 0.3 | 0.4 | 0.2 | 0.8 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | 0.3 | 0.6 | 0.8 | 0.5 | 0.7 | 0.5 | 0.4 | 0.4 | 2.4 | A | 0.55 | 2.40 |
| 21-Jan-08 | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.5 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.7 | 0.8 | 0.8 | 1.2 | 0.8 | A | 0.3 | 0.42 | 1.18 |
| 22-Jan-08 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 | 1.5 | 0.9 | 1.3 | 0.5 | A | 0.3 | 0.3 | 0.43 | 1.48 |
| 23-Jan-08 | 0.2 | 0.2 | 0.2 | 0.4 | 0.2 | 0.4 | 0.9 | 3.0 | 2.4 | 2.3 | 1.4 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.6 | 1.0 | 0.9 | 0.8 | A | 1.6 | 0.9 | 2.6 | 0.99 | 2.99 |
| 24-Jan-08 | 1.7 | 1.5 | 0.2 | 0.3 | 0.2 | 0.3 | 0.6 | 0.9 | 0.6 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | A | 0.3 | 0.3 | 0.5 | 0.3 | 0.47 | 1.72 |
| 25-Jan-08 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.9 | 0.8 | 0.7 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 | 0.6 | 0.9 | 1.0 | A | 0.4 | 0.4 | 0.4 | 0.3 | 1.2 | 0.55 | 1.23 |
| 26-Jan-08 | 0.5 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.2 | 0.3 | 1.6 | 2.4 | 4.7 | 1.3 | 1.7 | 0.8 | 0.8 | 0.8 | 0.8 | A | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.81 | 4.69 |
| 27-Jan-08 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.5 | 0.2 | A | 0.8 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.25 | 0.75 |
| 28-Jan-08 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 2.1 | 1.3 | 1.1 | 1.0 | 0.6 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | A | 0.4 | 1.1 | 0.9 | 0.8 | 0.8 | 0.5 | 0.4 | 0.3 | 0.62 | 2.12 |
| 29-Jan-08 | 0.3 | 0.3 | 0.3 | 0.4 | 0.2 | 0.3 | 0.4 | 0.8 | 0.6 | 0.4 | 1.1 | 0.4 | 0.4 | 0.3 | A | 0.3 | 0.3 | 0.8 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.40 | 1.05 |
| 30-Jan-08 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.3 | 0.3 | 0.4 | 0.4 | 0.37 | 0.56 |
| 31-Jan-08 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | A | 0.3 | 1.6 | 2.0 | 0.4 | 0.5 | 0.3 | 0.4 | 0.3 | 0.5 | 0.4 | 1.1 | A | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.50 | 2.04 |
| Hourly Avg | 0.45 | 0.45 | 0.40 | 0.41 | 0.33 | 0.49 | 0.58 | 0.87 | 0.88 | 0.85 | 0.84 | 0.70 | 0.60 | 0.48 | 0.51 | 0.55 | 0.70 | 1.07 | 0.55 | 0.61 | 0.57 | 0.53 | 0.51 | 0.54 | | |
| Hourly Max | 1.72 | 1.50 | 1.73 | 1.43 | 0.87 | 2.12 | 1.34 | 4.31 | 2.38 | 3.75 | 4.69 | 5.12 | 1.90 | 0.94 | 1.07 | 1.42 | 1.24 | 10.50 | 1.02 | 1.83 | 2.80 | 1.71 | 2.40 | 2.64 | | |

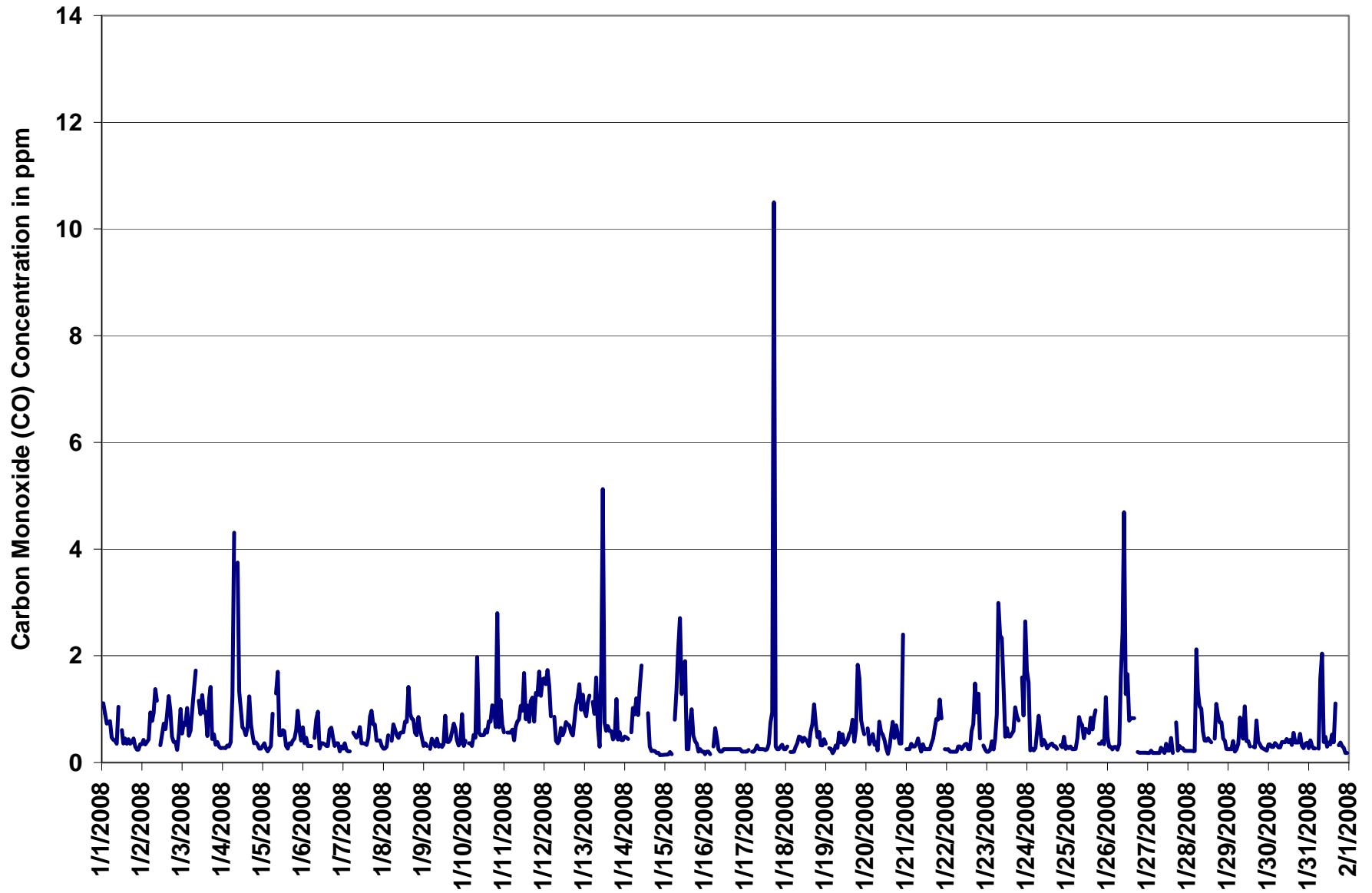
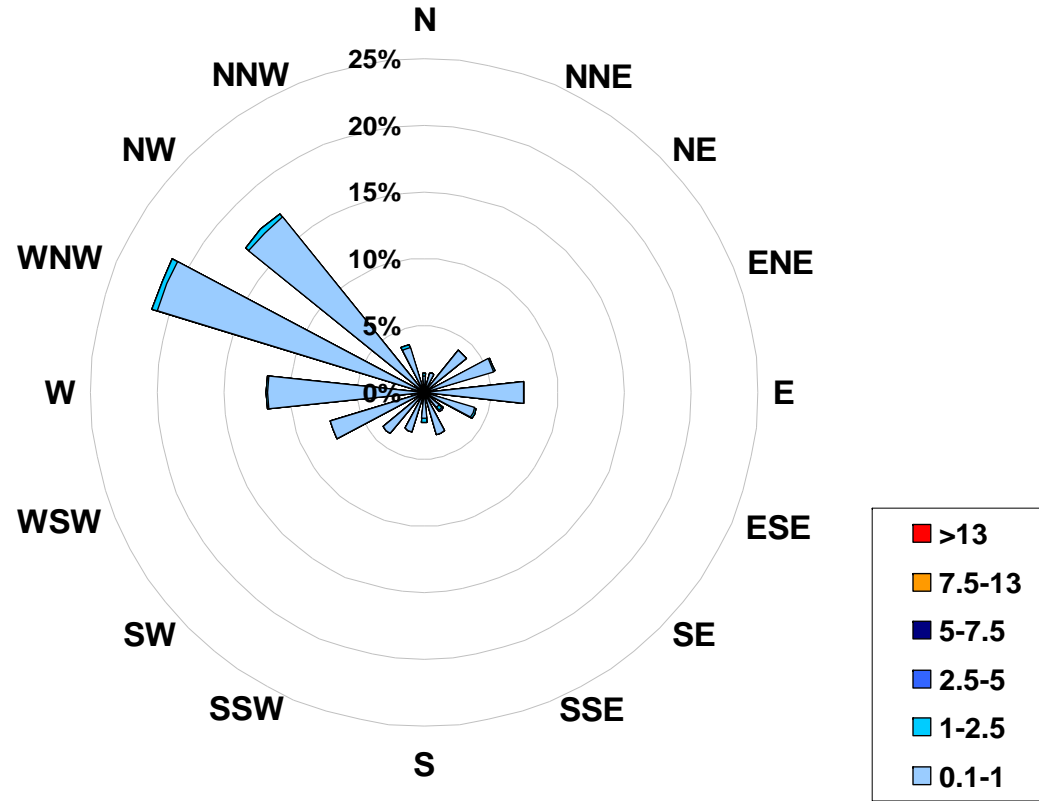


Figure 10. PASZA - Henry Pirker Carbon Monoxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Carbon Monoxide (in ppm) Located at the Henry Pirker Site for January 2008



Calms: 0%

| Frequency Distribution of CO in ppm | | | Frequency (hrs) |
|-------------------------------------|----|-----|-----------------|
| Range | | | |
| 0.1 | < | 1 | 693 |
| 1 | to | 2.5 | 15 |
| 2.5 | to | 5 | 1 |
| 5 | to | 7.5 | 0 |
| 7.5 | to | 13 | 0 |
| | > | 13 | 0 |
| Total Non-Zero Values | | | 709 |

PASZA - Henry Pirker Carbon Monoxide Eight Hour Average Summary

Station: Henry Pirker
 Station Owner: PASZA

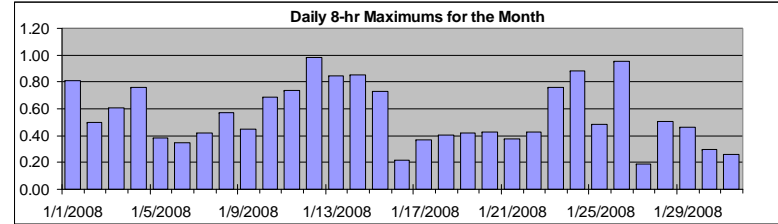
EIGHT HOUR RUNNING AVERAGE TABLE

Carbon Monoxide (CO)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | |
|-----------------------------|--------------------------|
| Number of 8-hr Exceedances: | 0 |
| Maximum 8-hr Average: | 1.0 ppm 12-Jan 2:00 3:00 |



| | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 |
| | 0.9 | 0.7 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 |

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum | | | | |
|------------|------------------------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|-------|-------|------|------|
| | Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | | 22:00 | 23:00 | 0:00 | |
| 1-Jan-08 | 0:00 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 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 | 0.81 |
| 2-Jan-08 | 0:00 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.50 |
| 3-Jan-08 | 0:00 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.60 | |
| 4-Jan-08 | 0:00 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.6 | 0.7 | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.76 |
| 5-Jan-08 | 0:00 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.39 |
| 6-Jan-08 | 0:00 | 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 | 0.3 | 0.35 |
| 7-Jan-08 | 0:00 | 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 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.42 |
| 8-Jan-08 | 0:00 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.57 | |
| 9-Jan-08 | 0:00 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.45 | |
| 10-Jan-08 | 0:00 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.68 |
| 11-Jan-08 | 0:00 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.74 | |
| 12-Jan-08 | 0:00 | 0.8 | 0.9 | 1.0 | 1.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.98 | |
| 13-Jan-08 | 0:00 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.84 | |
| 14-Jan-08 | 0:00 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.7 | 0.9 | 0.9 | N | N | N | N | N | N | N | N | N | N | 0.2 | 0.2 | 0.2 | 0.1 | 0.85 |
| 15-Jan-08 | 0:00 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.73 | |
| 16-Jan-08 | 0:00 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.22 | |
| 17-Jan-08 | 0:00 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 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 | 0.4 | 0.4 | 0.4 | 0.3 | 0.37 | |
| 18-Jan-08 | 0:00 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.40 | |
| 19-Jan-08 | 0:00 | 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 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.42 | |
| 20-Jan-08 | 0:00 | 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 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.43 | |
| 21-Jan-08 | 0:00 | 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 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.38 | |
| 22-Jan-08 | 0:00 | 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 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.43 | |
| 23-Jan-08 | 0:00 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.7 | 0.7 | 0.7 | 0.8 | 0.7 | 0.7 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.76 | |
| 24-Jan-08 | 0:00 | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.88 | |
| 25-Jan-08 | 0:00 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.48 | |
| 26-Jan-08 | 0:00 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.4 | 0.7 | 0.8 | 0.8 | 0.9 | 0.9 | 1.0 | 1.0 | 0.9 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.96 | |
| 27-Jan-08 | 0:00 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.19 | |
| 28-Jan-08 | 0:00 | 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 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.51 | |
| 29-Jan-08 | 0:00 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.47 | |
| 30-Jan-08 | 0:00 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.29 | |
| 31-Jan-08 | 0:00 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.26 | |
| Hourly Max | | 0.85 | 0.88 | 0.98 | 0.98 | 0.94 | 0.94 | 0.92 | 0.82 | 0.77 | 0.69 | 0.85 | 0.85 | 0.82 | 0.86 | 0.91 | 0.96 | 0.95 | 0.93 | 0.69 | 0.69 | 0.65 | 0.69 | 0.68 | 0.74 | | | |

PASZA - Henry Pirker Total Hydrocarbons Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

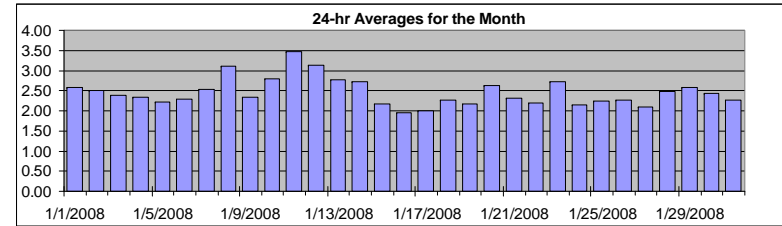
HOURLY AVERAGE TABLE

Total Hydrocarbons (THC)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | | |
|-----------------------|-----|-----|--------|-------------|
| Maximum 1-hr Average: | 4.1 | ppm | 11-Jan | 12:00 13:00 |
| Maximum 24-hr Value: | 3.5 | ppm | 11-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 32 hrs | Operational Time: | 710 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 3.7 | 3.4 | 2.6 | 2.3 | 2.1 | 2.0 | 1.9 | 2.5 ppm | 2.3 ppm |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|-----------------|---------------|------|
| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | | | |
| 1-Jan-08 | 3.7 | 3.7 | 3.6 | 3.5 | 3.6 | 3.4 | 3.1 | 2.6 | 2.3 | 2.2 | 2.2 | A | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.4 | 2.57 | 3.68 | | |
| 2-Jan-08 | 2.7 | 2.5 | 2.5 | 2.5 | 2.6 | 2.5 | 2.5 | 2.6 | 2.8 | 2.7 | A | 2.7 | 2.8 | 3.0 | 2.6 | 2.5 | 2.6 | 2.5 | 2.2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.50 | 3.04 | | |
| 3-Jan-08 | 2.3 | 2.5 | 2.5 | 2.6 | 2.5 | 2.4 | 2.3 | 2.4 | 2.6 | A | 2.7 | 2.6 | 2.7 | 2.7 | 2.6 | 2.6 | 2.6 | 2.4 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.39 | 2.73 | | |
| 4-Jan-08 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.3 | 2.4 | 2.6 | A | 3.0 | 2.6 | 2.5 | 2.6 | 2.6 | 2.7 | 2.7 | 2.4 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 2.34 | 2.97 | | | |
| 5-Jan-08 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | A | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.3 | 2.22 | 2.49 | | |
| 6-Jan-08 | 2.4 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | A | 2.5 | 2.6 | 2.6 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.1 | 2.1 | 2.30 | 2.62 | |
| 7-Jan-08 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | A | 2.2 | 2.3 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.8 | 2.8 | 2.9 | 3.0 | 3.0 | 3.1 | 2.54 | 3.07 | |
| 8-Jan-08 | 3.2 | 3.3 | 3.3 | 3.3 | A | 3.5 | 3.5 | 3.5 | 3.6 | 3.5 | 3.5 | 3.5 | 3.4 | 3.2 | 3.2 | 3.3 | 3.1 | 2.7 | 2.5 | 2.4 | 2.5 | 2.6 | 2.7 | 2.6 | 3.12 | 3.58 | |
| 9-Jan-08 | 2.6 | 2.5 | 2.5 | A | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.34 | 2.55 | |
| 10-Jan-08 | 2.4 | 2.5 | A | 2.4 | 2.5 | 2.4 | 2.7 | 2.8 | 3.1 | 2.9 | 2.6 | 2.8 | 2.7 | 2.9 | 2.8 | 2.9 | 2.9 | 2.8 | 2.9 | 3.0 | 3.0 | 3.0 | 3.3 | 3.2 | 2.80 | 3.33 | |
| 11-Jan-08 | 3.1 | A | 3.1 | 3.1 | 3.4 | 3.4 | 3.6 | 3.6 | 3.4 | 3.4 | 3.4 | 3.8 | 4.1 | 3.4 | 3.4 | 3.3 | 3.6 | 3.6 | 3.5 | 3.6 | 3.8 | 3.9 | 3.1 | 3.2 | 3.47 | 4.12 | |
| 12-Jan-08 | 3.5 | 3.5 | 3.9 | 3.2 | 3.1 | A | 3.1 | 3.0 | 3.0 | 3.2 | 3.0 | 3.4 | 3.2 | 3.3 | 2.8 | 2.7 | 2.8 | 2.7 | 2.7 | 2.9 | 3.0 | 3.2 | 3.3 | 3.5 | 3.13 | 3.86 | |
| 13-Jan-08 | 3.3 | 3.5 | 3.7 | 3.6 | A | 3.3 | 3.4 | 2.8 | 3.0 | 2.1 | 2.6 | 2.9 | 2.8 | 2.8 | 2.6 | 2.6 | 2.3 | 2.3 | 2.3 | 2.5 | 2.3 | 2.4 | 2.6 | 2.5 | 2.78 | 3.71 | |
| 14-Jan-08 | 2.6 | 2.6 | 3.6 | A | 3.8 | 3.6 | 3.0 | 2.9 | 2.6 | 2.7 | 3.1 | 3.2 | 3.4 | 3.6 | C | C | A | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.72 | 3.77 | |
| 15-Jan-08 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | A | 2.2 | 2.4 | 2.5 | 2.5 | 2.3 | 2.4 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 2.17 | 2.53 | |
| 16-Jan-08 | 2.0 | 2.0 | 2.0 | 2.0 | A | 2.1 | 2.2 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 1.95 | 2.24 | | |
| 17-Jan-08 | 1.9 | 1.9 | 1.9 | A | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.2 | 2.4 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.01 | 2.38 | | |
| 18-Jan-08 | 2.1 | 2.1 | A | 2.2 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.4 | 2.5 | 2.5 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.1 | 2.1 | 2.27 | 2.48 | |
| 19-Jan-08 | 2.1 | A | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.16 | 2.40 | |
| 20-Jan-08 | A | 2.5 | 2.5 | 2.6 | 2.6 | 2.6 | 2.5 | 2.4 | 2.8 | 2.8 | 2.8 | 2.7 | 2.7 | 2.4 | 2.4 | 2.5 | 2.5 | 2.5 | 2.6 | 2.9 | 2.8 | 2.8 | 2.9 | A | 2.63 | 2.91 | |
| 21-Jan-08 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.7 | 2.5 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 2.2 | 2.3 | 2.1 | A | 2.1 | 2.31 | 2.85 | |
| 22-Jan-08 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.4 | 2.2 | 2.3 | 2.3 | A | 2.2 | 2.2 | 2.18 | 2.39 | |
| 23-Jan-08 | 2.3 | 2.3 | 2.5 | 2.6 | 2.6 | 2.6 | 2.7 | 2.8 | 2.9 | 3.1 | 2.8 | 2.9 | 2.9 | 2.8 | 2.7 | 2.6 | 2.7 | 2.8 | 2.7 | 2.5 | A | 2.7 | 2.7 | 3.2 | 2.72 | 3.23 | |
| 24-Jan-08 | 3.3 | 2.8 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.1 | 2.0 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | A | 2.0 | 2.0 | 2.1 | 2.2 | 2.13 | 3.34 | |
| 25-Jan-08 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | A | 2.0 | 2.0 | 2.0 | 1.9 | 2.2 | 2.25 | 2.47 |
| 26-Jan-08 | 1.9 | 2.2 | 2.6 | 2.3 | 2.3 | 2.2 | 2.0 | 2.0 | 2.2 | 2.5 | 3.3 | 2.6 | 2.5 | 2.4 | 2.3 | 2.4 | 2.4 | A | 2.1 | 2.0 | 2.1 | 2.0 | 2.1 | 2.1 | 2.27 | 3.30 | |
| 27-Jan-08 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | A | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.10 | 2.17 | |
| 28-Jan-08 | 2.2 | 2.3 | 2.3 | 2.4 | 2.5 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.4 | 2.5 | 2.5 | 2.3 | 2.3 | A | 2.2 | 2.6 | 2.5 | 2.5 | 2.6 | 2.8 | 2.9 | 3.0 | 2.48 | 2.95 | |
| 29-Jan-08 | 2.9 | 2.8 | 2.8 | 2.8 | 2.9 | 3.0 | 3.1 | 3.1 | 3.0 | 2.5 | 2.3 | 2.3 | 2.5 | 2.4 | A | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.58 | 3.12 | |
| 30-Jan-08 | 2.4 | 2.5 | 2.6 | 2.5 | 2.6 | 2.6 | 2.6 | 2.5 | 2.5 | 2.5 | 2.6 | 2.6 | 2.6 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.44 | 2.60 | |
| 31-Jan-08 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | A | 2.4 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 | 2.2 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.27 | 2.43 | |
| Hourly Avg | 2.48 | 2.48 | 2.55 | 2.50 | 2.50 | 2.54 | 2.52 | 2.51 | 2.52 | 2.50 | 2.51 | 2.55 | 2.54 | 2.49 | 2.40 | 2.40 | 2.43 | 2.39 | 2.31 | 2.33 | 2.34 | 2.37 | 2.37 | 2.39 | | | |
| Hourly Max | 3.67 | 3.68 | 3.86 | 3.56 | 3.77 | 3.57 | 3.60 | 3.59 | 3.58 | 3.50 | 3.52 | 3.81 | 4.12 | 3.63 | 3.37 | 3.32 | 3.60 | 3.57 | 3.47 | 3.55 | 3.82 | 3.92 | 3.33 | 3.50 | | | |

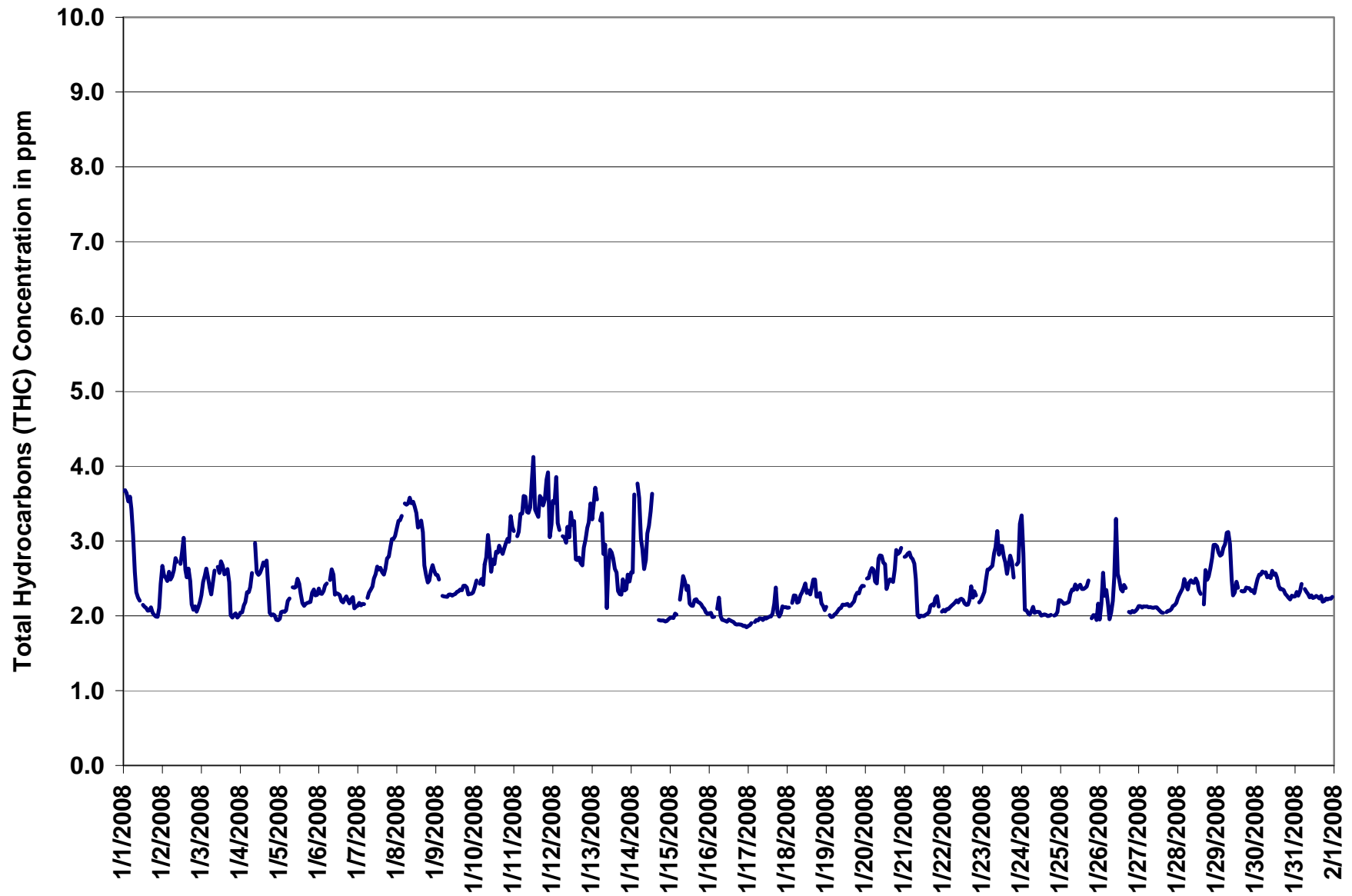


Figure 11. PASZA - Henry Pirker Total Hydrocarbons 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

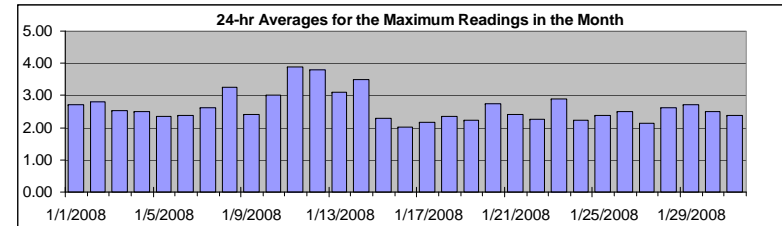
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Total Hydrocarbons (THC)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-----|-----|--------|-----------|
| Maximum 1-hr Value: | 8.5 | ppm | 14-Jan | 4:00 5:00 |
| Maximum 24-hr Value: | 3.9 | ppm | 11-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 32 hrs | Operational Time: | 710 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 5.0 | 3.8 | 2.9 | 2.5 | 2.2 | 2.0 | 1.9 | 2.6 ppm | 2.5 ppm |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 3.8 | 4.2 | 3.7 | 3.7 | 3.7 | 3.1 | 3.0 | 2.4 | 2.3 | 2.4 | A | 2.2 | 2.2 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.4 | 2.5 | 2.70 | 4.18 | |
| 2-Jan-08 | 4.8 | 2.6 | 2.7 | 2.5 | 2.7 | 2.7 | 2.7 | 3.0 | 2.9 | A | A | 2.9 | 3.1 | 3.3 | 2.9 | 2.7 | 2.9 | 2.3 | 2.2 | 2.4 | 2.1 | 2.2 | 2.3 | 2.79 | 4.84 | |
| 3-Jan-08 | 2.5 | 2.5 | 2.8 | 2.7 | 2.6 | 2.6 | 2.5 | 2.6 | 2.9 | A | 3.1 | 2.7 | 2.9 | 2.8 | 2.6 | 2.6 | 2.8 | 2.8 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.54 | 3.07 |
| 4-Jan-08 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 3.3 | A | 3.5 | 2.8 | 2.7 | 2.7 | 2.7 | 2.8 | 2.8 | 2.9 | 2.7 | 2.2 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.50 | 3.46 |
| 5-Jan-08 | 2.0 | 2.2 | 2.1 | 2.1 | 2.1 | 2.6 | 2.6 | A | 2.6 | 2.5 | 2.5 | 2.6 | 2.9 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 2.5 | 2.3 | 2.4 | 2.35 | 2.85 | |
| 6-Jan-08 | 2.5 | 2.4 | 2.5 | 2.4 | 2.5 | 2.5 | A | 2.7 | 2.7 | 2.7 | 2.3 | 2.3 | 2.4 | 2.3 | 2.2 | 2.2 | 2.3 | 2.4 | 2.2 | 2.2 | 2.3 | 2.4 | 2.2 | 2.1 | 2.38 | 2.73 |
| 7-Jan-08 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | A | 2.4 | 2.4 | 2.4 | 2.5 | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 2.6 | 2.7 | 2.8 | 2.8 | 2.9 | 3.0 | 3.1 | 3.1 | 3.1 | 2.61 | 3.15 |
| 8-Jan-08 | 3.2 | 3.4 | 3.3 | 3.4 | A | 3.6 | 3.6 | 3.6 | 3.7 | 3.6 | 3.6 | 3.8 | 3.4 | 3.3 | 3.3 | 3.5 | 3.3 | 3.1 | 2.6 | 2.5 | 2.5 | 2.8 | 2.8 | 2.7 | 3.25 | 3.82 |
| 9-Jan-08 | 2.6 | 2.6 | 2.6 | A | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.6 | 2.5 | 2.3 | 2.4 | 2.4 | 2.6 | 2.42 | 2.65 |
| 10-Jan-08 | 2.6 | 3.0 | A | 2.9 | 3.2 | 2.5 | 2.9 | 2.9 | 3.4 | 3.2 | 2.7 | 2.9 | 2.8 | 3.0 | 2.9 | 3.0 | 3.0 | 2.9 | 2.9 | 3.0 | 3.3 | 3.0 | 3.8 | 3.4 | 3.01 | 3.82 |
| 11-Jan-08 | 3.3 | A | 3.1 | 3.3 | 4.0 | 3.7 | 3.8 | 3.8 | 3.5 | 3.9 | 3.9 | 5.0 | 4.9 | 3.7 | 3.5 | 3.4 | 4.4 | 3.9 | 3.7 | 4.2 | 5.1 | 3.4 | 3.9 | 3.88 | 5.14 | |
| 12-Jan-08 | 4.0 | 3.7 | 5.7 | 6.2 | 4.1 | A | 3.8 | 3.3 | 3.1 | 3.3 | 3.2 | 5.7 | 3.5 | 3.7 | 3.6 | 3.0 | 2.9 | 3.0 | 2.8 | 3.5 | 3.2 | 3.7 | 4.3 | 4.2 | 3.80 | 6.19 |
| 13-Jan-08 | 3.5 | 3.8 | 4.1 | 3.8 | A | 3.4 | 4.1 | 3.7 | 3.1 | 2.3 | 2.9 | 3.9 | 3.0 | 2.9 | 2.7 | 2.7 | 2.5 | 2.4 | 2.4 | 3.4 | 2.7 | 2.9 | 2.9 | 2.6 | 3.11 | 4.10 |
| 14-Jan-08 | 3.0 | 2.8 | 6.8 | A | 8.5 | 7.5 | 3.3 | 3.4 | 2.9 | 3.1 | 3.4 | 3.8 | 3.8 | 4.0 | C | C | A | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 3.50 | 8.49 |
| 15-Jan-08 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | A | 2.3 | 2.5 | 2.8 | 3.1 | 2.5 | 2.6 | 2.5 | 2.2 | 2.2 | 2.3 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.30 | 3.09 |
| 16-Jan-08 | 2.1 | 2.2 | 2.0 | 2.0 | A | 2.3 | 2.3 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.00 | 2.34 |
| 17-Jan-08 | 1.9 | 1.9 | 1.9 | A | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.3 | 2.5 | 4.5 | 2.1 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.17 | 4.49 |
| 18-Jan-08 | 2.1 | 2.2 | A | 2.3 | 2.3 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.5 | 2.4 | 2.4 | 2.3 | 2.4 | 2.7 | 2.7 | 2.3 | 2.3 | 2.4 | 2.2 | 2.2 | 2.1 | 2.34 | 2.71 |
| 19-Jan-08 | 2.2 | A | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.2 | 2.3 | 2.2 | 2.4 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.23 | 2.52 |
| 20-Jan-08 | A | 2.6 | 2.6 | 2.7 | 2.9 | 2.7 | 2.7 | 2.6 | 2.9 | 2.9 | 2.8 | 2.8 | 2.8 | 2.5 | 2.5 | 2.6 | 2.5 | 2.5 | 2.8 | 2.9 | 2.9 | 2.9 | 3.3 | A | 2.75 | 3.31 |
| 21-Jan-08 | 2.8 | 2.9 | 2.9 | 2.9 | 2.9 | 3.0 | 2.8 | 2.8 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | A | 2.1 | 2.41 | 2.96 |
| 22-Jan-08 | 2.1 | 2.1 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.6 | 2.3 | 2.4 | 2.3 | A | 2.2 | 2.2 | 2.25 | 2.58 |
| 23-Jan-08 | 2.3 | 2.3 | 2.6 | 2.7 | 2.7 | 2.7 | 2.8 | 3.1 | 3.1 | 3.6 | 3.1 | 3.0 | 3.1 | 2.9 | 2.9 | 2.7 | 2.8 | 3.0 | 2.8 | 2.6 | A | 3.0 | 2.9 | 3.5 | 2.88 | 3.61 |
| 24-Jan-08 | 3.5 | 3.4 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 | 2.2 | 2.2 | A | 2.0 | 2.0 | 2.2 | 2.3 | 2.23 | 3.51 |
| 25-Jan-08 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.7 | 2.5 | 2.5 | 2.4 | 2.6 | 2.8 | 2.5 | 2.5 | 2.4 | 2.5 | 2.6 | A | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.38 | 2.81 |
| 26-Jan-08 | 2.2 | 2.4 | 3.2 | 2.4 | 2.6 | 2.6 | 2.0 | 2.1 | 2.4 | 3.1 | 4.2 | 2.8 | 2.7 | 2.5 | 2.5 | 2.5 | 2.6 | A | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.50 | 4.23 |
| 27-Jan-08 | 2.2 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | A | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.15 | 2.23 |
| 28-Jan-08 | 2.3 | 2.3 | 2.4 | 2.5 | 2.7 | 3.0 | 2.6 | 2.6 | 2.6 | 2.5 | 2.6 | 2.6 | 2.6 | 2.4 | 2.3 | A | 2.3 | 2.8 | 2.7 | 2.7 | 2.7 | 2.9 | 3.2 | 3.2 | 2.63 | 3.19 |
| 29-Jan-08 | 3.0 | 3.0 | 2.9 | 2.9 | 3.0 | 3.1 | 3.2 | 3.3 | 3.2 | 2.9 | 2.6 | 2.5 | 2.5 | 2.4 | A | 2.4 | 2.3 | 2.6 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.71 | 3.29 |
| 30-Jan-08 | 2.6 | 2.5 | 2.6 | 2.6 | 2.6 | 2.7 | 2.6 | 2.6 | 2.6 | 2.6 | 2.7 | 2.6 | 2.6 | 2.6 | 2.6 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.51 | 2.74 |
| 31-Jan-08 | 2.3 | 2.4 | 2.3 | 2.4 | 2.6 | A | 2.4 | 2.5 | 3.0 | 2.4 | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.3 | 2.5 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.37 | 2.96 |
| Hourly Avg | 2.67 | 2.63 | 2.83 | 2.70 | 2.83 | 2.84 | 2.69 | 2.72 | 2.68 | 2.69 | 2.68 | 2.80 | 2.70 | 2.60 | 2.51 | 2.48 | 2.61 | 2.62 | 2.41 | 2.45 | 2.43 | 2.52 | 2.52 | 2.53 | | |
| Hourly Max | 4.84 | 4.18 | 6.78 | 6.19 | 8.49 | 7.50 | 4.09 | 3.84 | 3.65 | 3.92 | 4.23 | 5.71 | 4.91 | 3.97 | 3.58 | 3.46 | 4.45 | 4.49 | 3.66 | 3.69 | 4.16 | 5.14 | 4.30 | 4.17 | | |

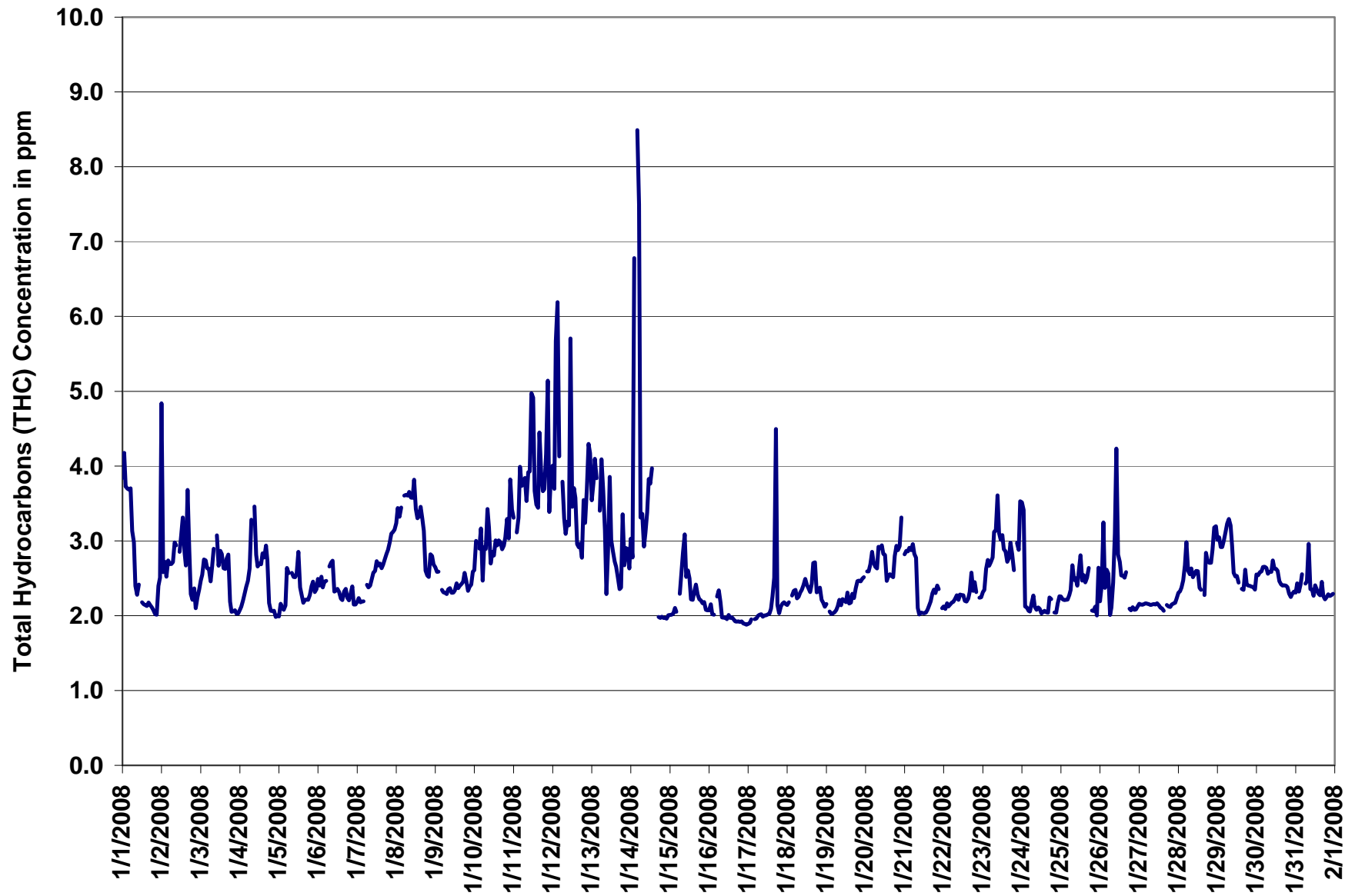
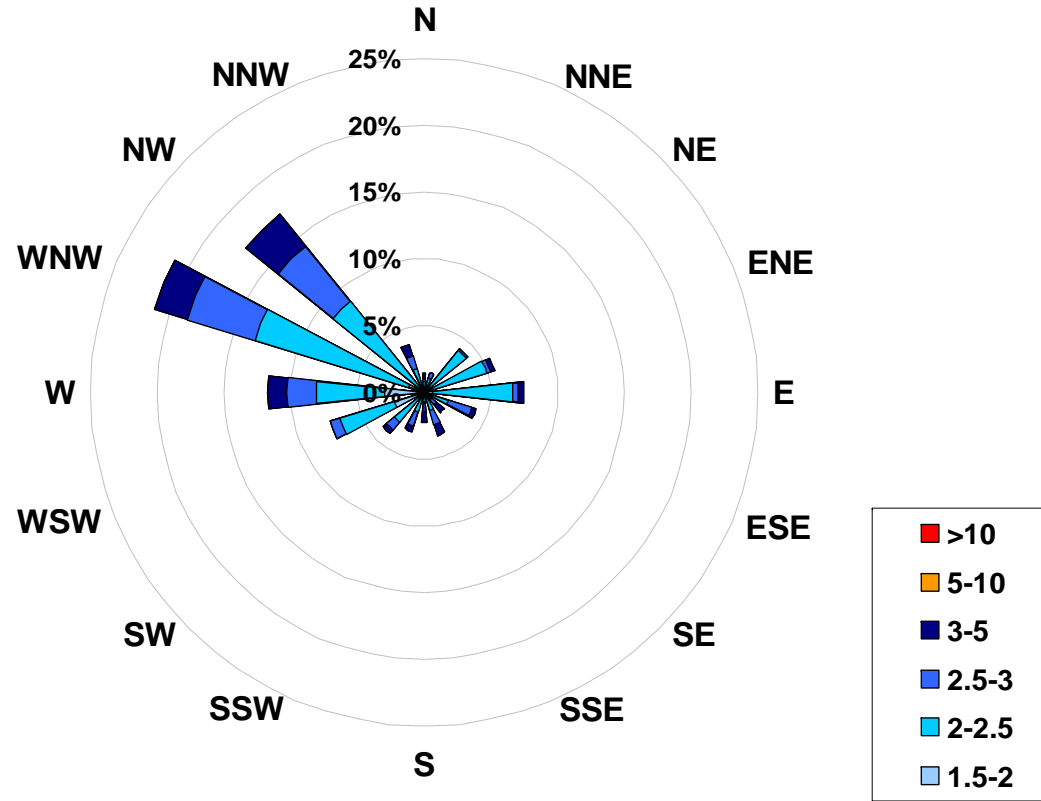


Figure 12. PASZA - Henry Pirker Total Hydrocarbons Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Hydrocarbons (in ppm)
Located at the Henry Pirker Site for January 2008**



Calms: 0%

| Frequency Distribution of THC in ppm | | | Frequency (hrs) |
|--------------------------------------|----|-----|-----------------|
| Range | | | |
| 1.5 | < | 2 | 62 |
| 2 | to | 2.5 | 401 |
| 2.5 | to | 3 | 157 |
| 3 | to | 5 | 90 |
| 5 | to | 10 | 0 |
| | > | 10 | 0 |
| Total Non-Zero Values | | | 710 |

PASZA - Henry Pirker Total Reduced Sulphur Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

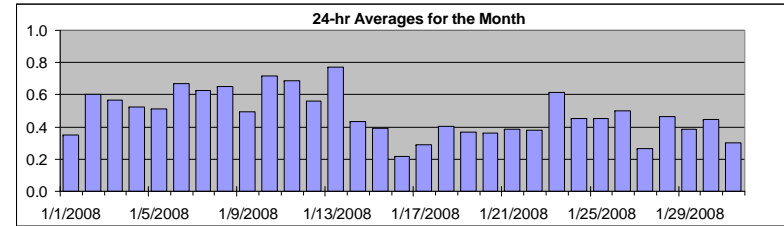
HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | | |
|-----------------------|-----|-----|--------|-------------|
| Maximum 1-hr Average: | 1.8 | ppb | 13-Jan | 12:00 13:00 |
| Maximum 24-hr Value: | 0.8 | ppb | 13-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 31 hrs | Operational Time: | 708 hrs | | | | | | |
| Calibration Time: | 5 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 1.3 | 0.9 | 0.6 | 0.4 | 0.3 | 0.2 | 0.1 | 0.5 ppb | 0.4 ppb |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|-----|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | | | |
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | |
| 1-Jan-08 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.6 |
| 2-Jan-08 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 1.0 |
| 3-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.9 |
| 4-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | A | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.7 |
| 5-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0.5 | 0.8 |
| 6-Jan-08 | 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 | 0.7 | 0.9 |
| 7-Jan-08 | 1 | 0 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.8 |
| 8-Jan-08 | 0 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1.0 |
| 9-Jan-08 | 1 | 1 | 1 | A | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0.5 | 0.7 |
| 10-Jan-08 | 0 | 0 | A | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.4 |
| 11-Jan-08 | 1 | A | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0.7 | 1.1 |
| 12-Jan-08 | 1 | 1 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1.0 |
| 13-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 1.8 |
| 14-Jan-08 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 0 | C | C | C | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.5 |
| 15-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.1 |
| 16-Jan-08 | 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 | 0.2 | 0.4 |
| 17-Jan-08 | 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 | 0.5 |
| 18-Jan-08 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.7 |
| 19-Jan-08 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0.4 | 0.6 |
| 20-Jan-08 | 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 | 0.4 | 0.4 |
| 21-Jan-08 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | A | 0 | 0.4 | 0.5 |
| 22-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | A | 0 | 0 | 0 | 0.4 | 0.7 |
| 23-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 0.6 | 1.3 |
| 24-Jan-08 | 1 | 1 | 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 | 1.4 |
| 25-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.8 |
| 26-Jan-08 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.3 |
| 27-Jan-08 | 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 | 0.3 | 0.4 |
| 28-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0.5 | 0.8 |
| 29-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.6 |
| 30-Jan-08 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.2 |
| 31-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | C | C | 1 | 0 | 0 | 0 | 0 | 0.3 | 0.6 |
| Hourly Avg | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 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 | 0.4 | 0.4 | 0.4 | | |
| Hourly Max | 1.4 | 1.1 | 1.2 | 1.0 | 0.8 | 0.9 | 1.0 | 0.8 | 1.4 | 1.7 | 1.3 | 1.5 | 1.8 | 1.5 | 0.9 | 1.0 | 1.0 | 0.9 | 0.8 | 1.1 | 1.4 | 1.2 | 1.2 | 1.2 | | | |

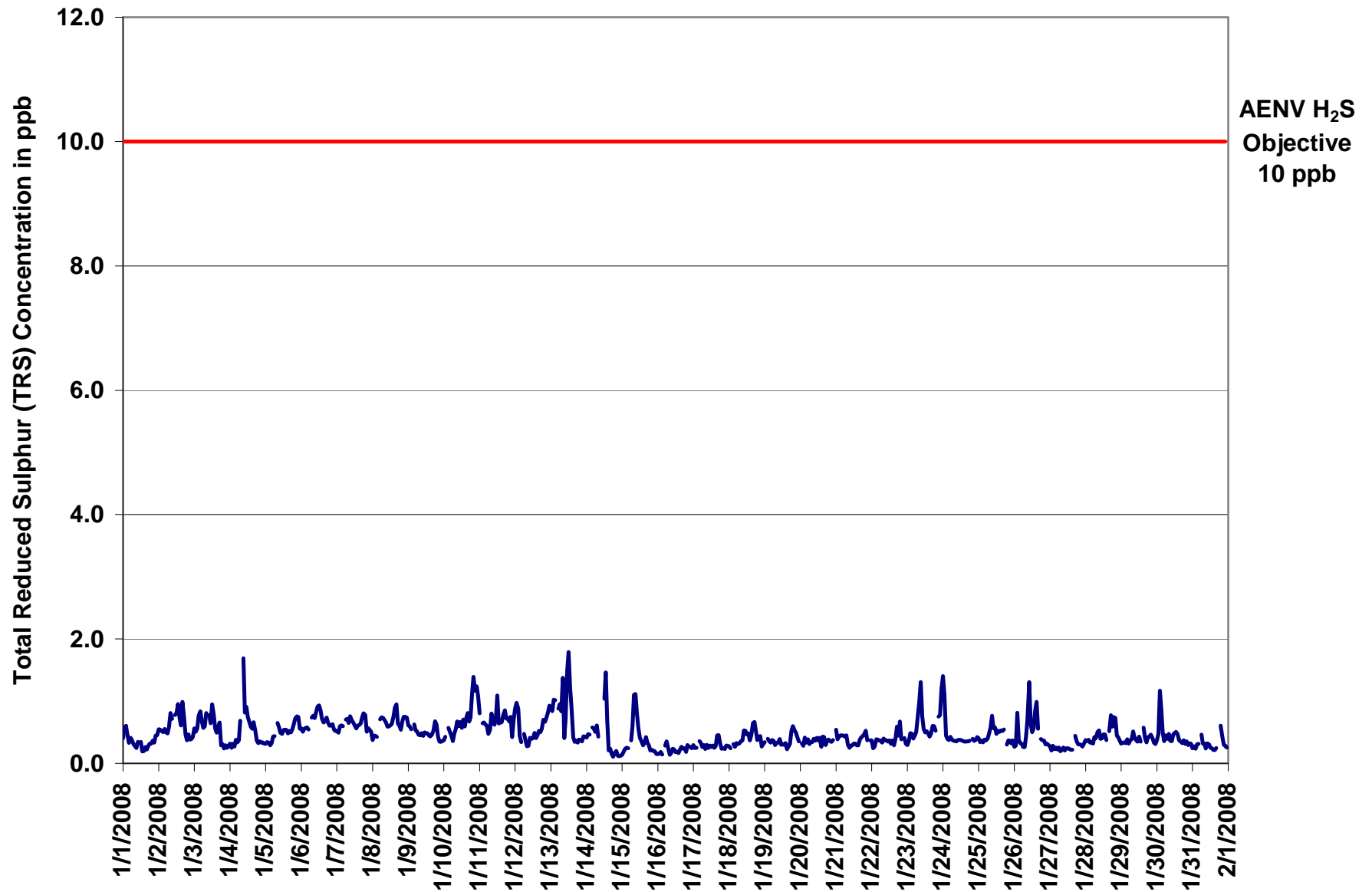


Figure 13. PASZA - Henry Pirker Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

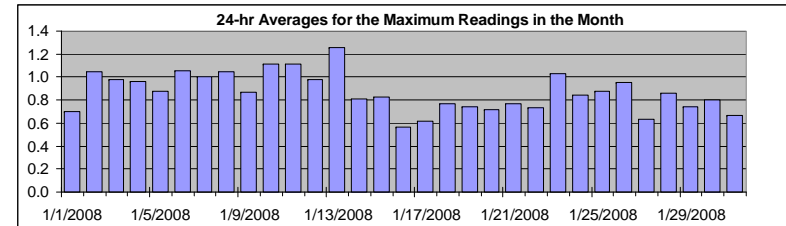
Total Reduced Sulphur (TRS)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-----|-----|--------|------------|
| Maximum 1-hr Value: | 2.7 | ppb | 4-Jan | 9:00 10:00 |
| Maximum 24-hr Value: | 1.3 | ppb | 13-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 31 hrs | Operational Time: | 708 hrs | | | | | | |
| Calibration Time: | 5 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 1.9 | 1.4 | 1.0 | 0.8 | 0.7 | 0.5 | 0.5 | 0.9 ppb | 0.8 ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum | |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|-----|
| 1-Jan-08 | 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 | |
| 2-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.9 | |
| 3-Jan-08 | 1 | 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 | 1.4 | |
| 4-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 2.7 | |
| 5-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.2 | |
| 6-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.1 | 1.3 | |
| 7-Jan-08 | 1 | 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 | 1.3 | |
| 8-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.6 | |
| 9-Jan-08 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.2 | |
| 10-Jan-08 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1.1 | 1.9 | |
| 11-Jan-08 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.1 | 1.4 | |
| 12-Jan-08 | 1 | 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 | 1.4 | |
| 13-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.3 | 2.6 | |
| 14-Jan-08 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | C | C | C | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0.8 | 2.0 | |
| 15-Jan-08 | 0 | 0 | 1 | 1 | 1 | A | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0.8 | 1.9 | | |
| 16-Jan-08 | 1 | 1 | 1 | 0 | A | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.7 | |
| 17-Jan-08 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.8 | |
| 18-Jan-08 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.0 | |
| 19-Jan-08 | 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 | 1.1 | |
| 20-Jan-08 | A | 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 | 0.8 | |
| 21-Jan-08 | 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 | 1.0 | |
| 22-Jan-08 | 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 | 1.1 | |
| 23-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 2 | 1.0 | 1.8 | |
| 24-Jan-08 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0.8 | 2.1 | |
| 25-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.8 | |
| 26-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 1.8 | |
| 27-Jan-08 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1.0 | |
| 28-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.3 | |
| 29-Jan-08 | 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 | 1.2 | |
| 30-Jan-08 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.7 |
| 31-Jan-08 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | C | C | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.2 | |
| Hourly Avg | 0.8 | 0.8 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 1.0 | 1.0 | 0.9 | 1.0 | 0.9 | 0.9 | 0.8 | 0.8 | 0.9 | 0.9 | 0.8 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | | | |
| Hourly Max | 1.9 | 2.1 | 1.7 | 1.6 | 1.1 | 1.3 | 1.4 | 1.4 | 2.0 | 2.7 | 1.8 | 2.5 | 2.6 | 2.0 | 1.3 | 1.4 | 1.9 | 1.4 | 1.2 | 1.5 | 1.9 | 1.5 | 1.8 | 1.6 | | | |

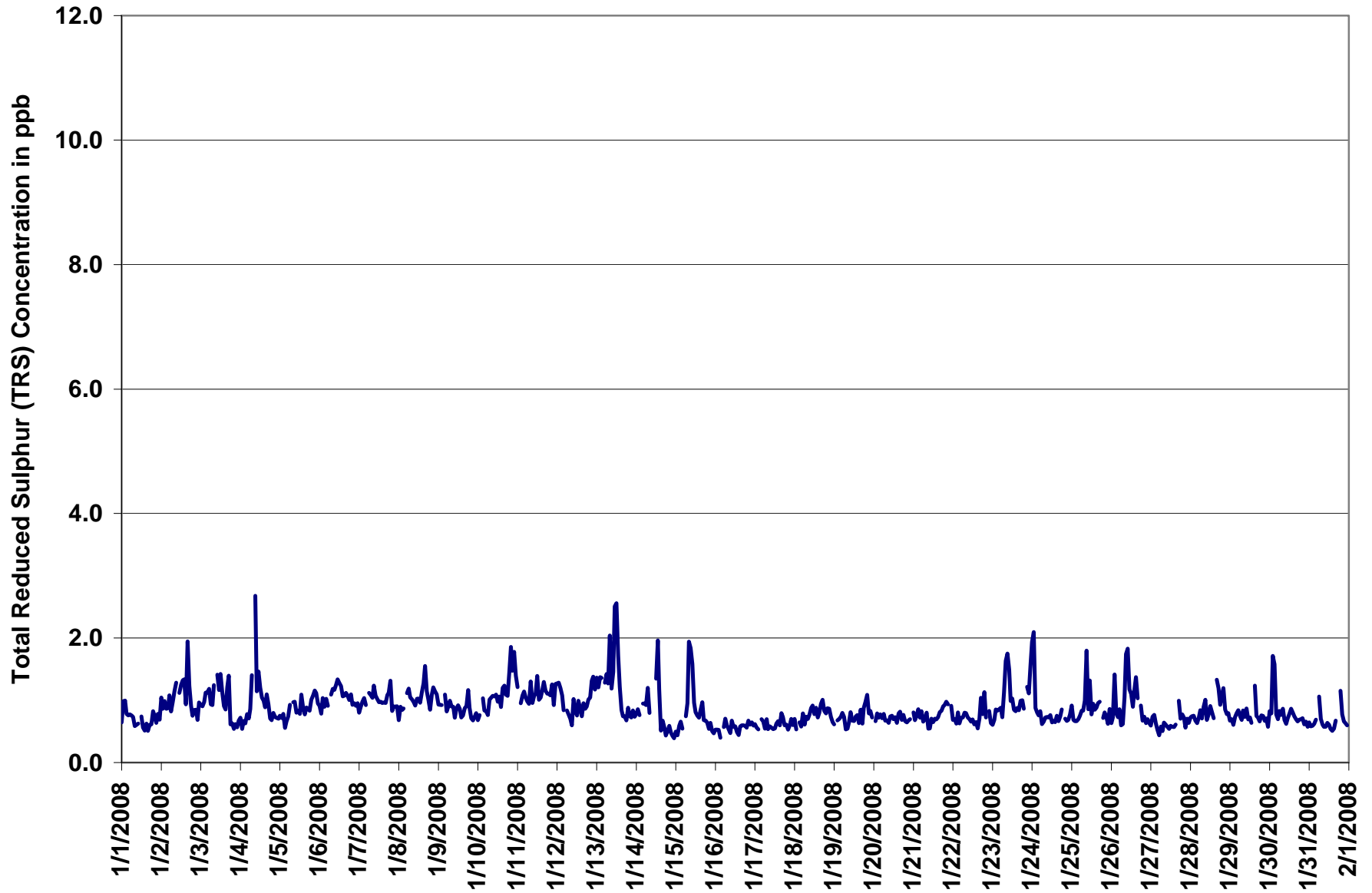
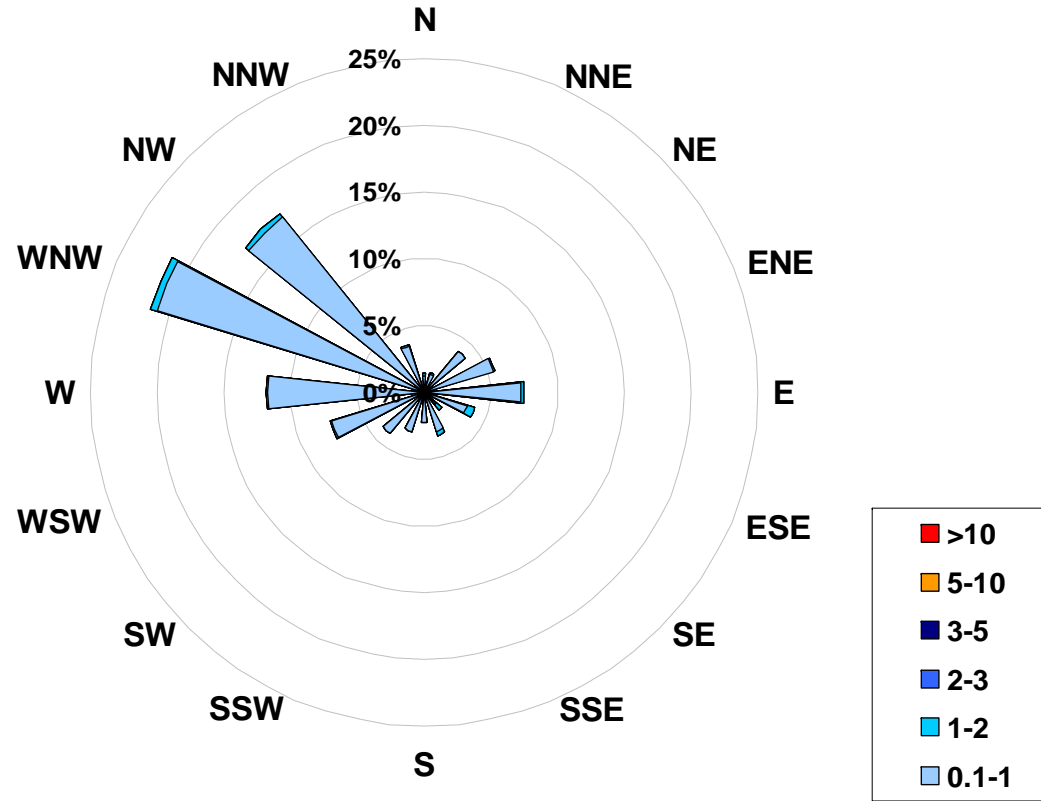


Figure 14. PASZA - Henry Pirker Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)
Located at the Henry Pirker Site for January 2008**



Calms: 0%

| Frequency Distribution of TRS in ppb | | | Frequency (hrs) |
|--------------------------------------|----|----|-----------------|
| Range | | | |
| 0.1 | < | 1 | 685 |
| 1 | to | 2 | 23 |
| 2 | to | 3 | 0 |
| 3 | to | 5 | 0 |
| 5 | to | 10 | 0 |
| | > | 10 | 0 |
| Total Non-Zero Values | | | 708 |

PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

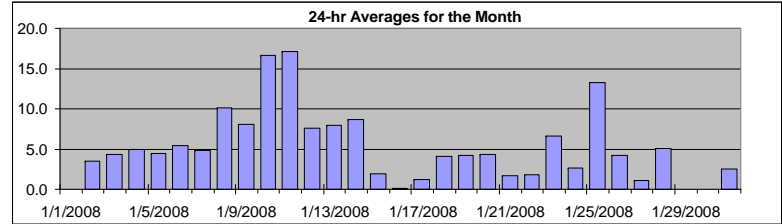
HOURLY AVERAGE TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | |
|--------------------------------------|---|
| Number of 24-hr Exceedances (draft): | 0 |
| Maximum 1-hr Average: | 33.9 µg/m ³ 14-Jan 13:00 14:00 |
| Maximum 24-hr Value: | 17.1 µg/m ³ 11-Jan |



| | | | |
|-------------------|-------|-------------------------|-----------------------|
| AIC Time: | 0 hrs | Operational Time: | 689 hrs |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 92.6% |
| Percentile | 99 | 95 | 75 |
| | 25.3 | 18.6 | 7.8 |
| | | | 3.7 |
| | | | 1.0 |
| | | | 0.0 |
| | | | 0.0 |
| | | | 5.5 |
| | | | 4 µg/m ³ |
| | | | 4.0 µg/m ³ |

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|---------------|---------------|
| | Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | | | 23:00 0:00 |
| 1-Jan-08 | 9 | 7 | 8 | 1 | 5 | 7 | 4 | 3 | 3 | 2 | 0 | 0 | D | 0 | D | D | D | D | D | D | D | D | D | 0 | N | 8.7 | |
| 2-Jan-08 | 2 | 2 | 2 | 1 | 3 | 2 | 3 | 5 | 8 | 6 | 7 | 5 | 0 | 9 | 8 | 2 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 10 | 3.5 | 9.7 | |
| 3-Jan-08 | D | 8 | 6 | 6 | 5 | 0 | 1 | 3 | 5 | 7 | 8 | 6 | 9 | 9 | 5 | 5 | 5 | 4 | 0 | D | 0 | 0 | 0 | 1 | 4.4 | 9.4 | |
| 4-Jan-08 | 0 | 2 | 3 | 4 | 3 | 3 | 2 | 5 | 13 | 15 | 11 | 10 | 7 | 7 | 12 | 6 | 6 | 4 | 0 | 0 | 0 | 0 | D | 1 | 4.9 | 15.5 | |
| 5-Jan-08 | 0 | 2 | 2 | 1 | 1 | 3 | 1 | 4 | 4 | 6 | 6 | 5 | 5 | 6 | 5 | 4 | 5 | 7 | 8 | 5 | 8 | 9 | 6 | 6 | 4.5 | 8.7 | |
| 6-Jan-08 | 6 | 8 | 7 | 7 | 8 | 9 | 8 | 5 | 8 | 7 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 8 | 4 | 4 | 4 | 5 | 3 | 2 | 5.4 | 9.0 | |
| 7-Jan-08 | 3 | 3 | 3 | 3 | 4 | 2 | 3 | 4 | 4 | 6 | 8 | 7 | 2 | 4 | 3 | 5 | 7 | 8 | 10 | 9 | 6 | 5 | 5 | 3 | 4.8 | 10.0 | |
| 8-Jan-08 | 4 | 2 | 6 | 3 | 2 | 4 | 5 | 5 | 8 | 10 | 15 | 12 | 13 | 15 | 16 | 21 | 25 | 13 | 11 | 9 | 8 | 13 | 13 | 10 | 10.2 | 24.9 | |
| 9-Jan-08 | 7 | 9 | 11 | 8 | 6 | 6 | 5 | 6 | 6 | 6 | 7 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 14 | 13 | 7 | 6 | 7 | 6 | 8.0 | 13.9 | |
| 10-Jan-08 | 6 | 7 | 9 | 7 | 7 | 7 | 9 | 10 | 10 | 13 | 13 | 15 | 15 | 18 | 17 | 24 | 24 | 31 | 31 | 26 | 26 | 22 | 28 | 24 | 16.6 | 31.5 | |
| 11-Jan-08 | 22 | 22 | 19 | 19 | 19 | 15 | 9 | 13 | 18 | 22 | 18 | 21 | 29 | 19 | 16 | 19 | 17 | 19 | 12 | 14 | 12 | 15 | 9 | 13 | 17.1 | 29.5 | |
| 12-Jan-08 | 20 | 11 | 18 | 4 | 0 | 1 | 3 | 5 | 4 | 4 | 8 | 4 | 4 | 3 | 2 | 8 | 6 | 9 | 7 | 11 | 13 | 11 | 9 | 18 | 7.6 | 19.9 | |
| 13-Jan-08 | 9 | 11 | 14 | 18 | 14 | 11 | 11 | 6 | 6 | 0 | 2 | 11 | 14 | 20 | 18 | 9 | 1 | 0 | 0 | 2 | 1 | 3 | 4 | 4 | 7.9 | 20.4 | |
| 14-Jan-08 | 4 | 4 | 6 | 5 | 7 | 10 | 7 | 10 | 8 | 9 | 15 | 21 | 19 | 34 | 18 | 1 | D | D | D | 0 | 0 | 1 | 4 | 0 | 8.7 | 33.9 | |
| 15-Jan-08 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 4 | 7 | 10 | 8 | 6 | 0 | 0 | 0 | 1 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 1.9 | 9.7 | |
| 16-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 2.3 | |
| 17-Jan-08 | 0 | 0 | 2 | 7 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 7 | 1 | 0 | 0 | 0 | 3 | 2 | 1.2 | 7.4 | |
| 18-Jan-08 | 1 | 0 | 1 | 1 | 1 | 4 | 1 | 4 | 3 | 4 | 8 | 11 | 8 | 7 | 3 | 6 | 10 | 11 | 4 | 4 | 5 | 1 | 0 | 1 | 4.2 | 11.5 | |
| 19-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 10 | 7 | 10 | 9 | 12 | 10 | 4 | 4 | 4.2 | 11.7 | |
| 20-Jan-08 | 6 | 5 | 5 | 8 | 5 | 6 | 4 | 0 | 7 | 6 | 9 | 1 | 8 | 3 | D | 8 | 8 | 2 | 1 | 4 | 2 | 2 | 2 | 1 | 4.4 | 9.1 | |
| 21-Jan-08 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 1 | 4 | 6 | 0 | 0 | 3 | 1.7 | 5.7 | |
| 22-Jan-08 | 1 | 2 | 3 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 2 | 6 | 3 | 4 | 5 | 2 | 3 | 3 | 1.9 | 6.1 | |
| 23-Jan-08 | 3 | 3 | 6 | 4 | 2 | 7 | 9 | 13 | 20 | 12 | 6 | 7 | 3 | 0 | 1 | 2 | 5 | 6 | 4 | 6 | 9 | 8 | 17 | 6.6 | 19.5 | | |
| 24-Jan-08 | 17 | 15 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 1 | 0 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 4 | 2.7 | 17.1 | |
| 25-Jan-08 | 10 | 16 | 12 | 11 | 8 | 7 | 11 | 18 | 17 | 22 | 22 | 25 | 20 | 20 | 21 | 19 | 19 | 20 | 20 | 0 | 0 | 0 | 0 | 2 | 13.3 | 25.1 | |
| 26-Jan-08 | 0 | 1 | 6 | 4 | 4 | 2 | 0 | 2 | 3 | 8 | 14 | 9 | 4 | 6 | 11 | 11 | 5 | 0 | 0 | 3 | 2 | 2 | 3 | 2 | 4.2 | 13.5 | |
| 27-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 1.1 | 1.8 | |
| 28-Jan-08 | 1 | 1 | 0 | 1 | 1 | 3 | 5 | 3 | 6 | 9 | 9 | 4 | 10 | 5 | 7 | 6 | 2 | 17 | 11 | 9 | 6 | 2 | 0 | N | 5.1 | 16.8 | |
| 29-Jan-08 | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | 0.0 |
| 30-Jan-08 | N | N | N | N | N | N | N | N | N | N | N | N | N | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 3 | 1 | 1 | 0 | N | 2.7 | |
| 31-Jan-08 | 0 | 0 | 0 | 7 | 3 | 0 | 1 | 0 | 0 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 2 | 4 | 5 | 3 | 4 | 3 | 4 | 2.6 | 7.3 | |
| Hourly Avg | 4.7 | 5.0 | 5.4 | 4.7 | 4.0 | 4.0 | 3.8 | 4.4 | 6.0 | 7.0 | 7.4 | 6.8 | 6.7 | 6.9 | 6.6 | 6.2 | 6.8 | 7.3 | 5.9 | 5.2 | 4.8 | 4.3 | 4.3 | 4.9 | | | |
| Hourly Max | 22.3 | 21.9 | 18.8 | 18.6 | 18.9 | 14.8 | 11.1 | 17.6 | 18.4 | 22.3 | 22.1 | 25.1 | 29.5 | 33.9 | 21.3 | 23.5 | 24.9 | 31.5 | 30.8 | 26.5 | 26.3 | 21.5 | 28.4 | 23.5 | | | |

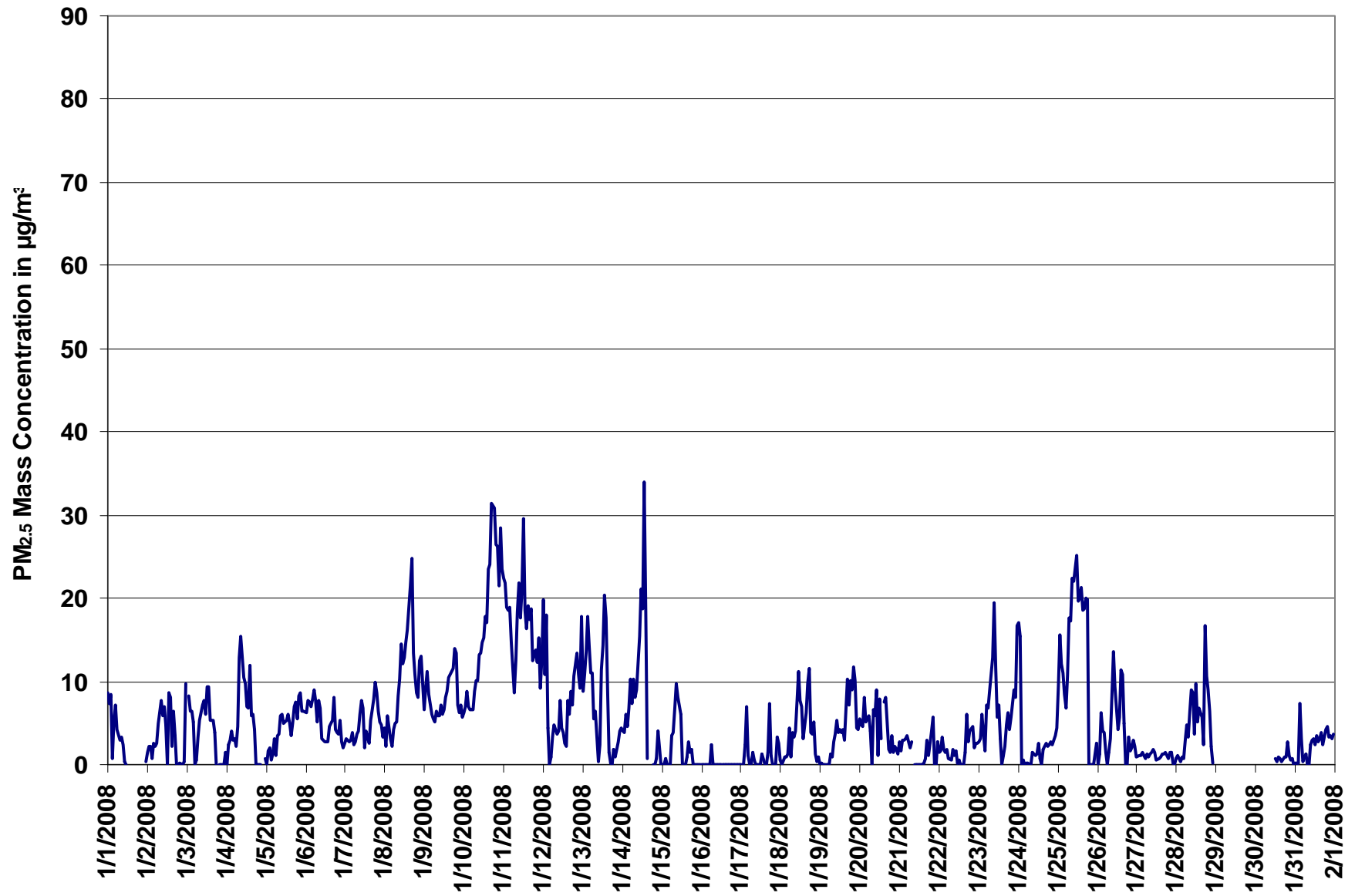


Figure 15. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Henry Pirker
 Station Owner: PASZA

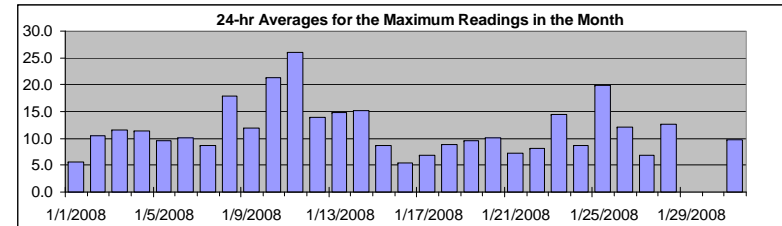
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|-------------------|--------|------------|
| Maximum 1-hr Average: | 63.9 | µg/m ³ | 11-Jan | 9:00 10:00 |
| Maximum 24-hr Value: | 26.0 | µg/m ³ | 11-Jan | |



| | | | | | | | | | |
|-------------------|-------|-------------------------|---------|-----|-----|-----|-----|------------------|---------------------|
| AIC Time: | 0 hrs | Operational Time: | 707 hrs | | | | | | |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 95.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average / Median | Geomean |
| | 34.9 | 26.7 | 14.8 | 9.2 | 6.3 | 3.5 | 1.0 | 11.5 | 9 µg/m ³ |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum | |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|-----|
| 1-Jan-08 | 17 | 13 | 14 | 10 | 10 | 10 | 8 | 6 | 9 | 6 | 4 | 6 | 0 | 3 | 0 | 0 | 0 | 4 | 2 | 2 | 1 | 2 | 4 | 5.5 | 16.8 | | |
| 2-Jan-08 | 6 | 6 | 5 | 4 | 7 | 7 | 6 | 10 | 12 | 12 | 16 | 11 | 10 | 17 | 17 | 12 | 17 | 15 | 4 | 4 | 6 | 3 | 18 | 26 | 10.5 | 26.0 | |
| 3-Jan-08 | 35 | 15 | 13 | 10 | 10 | 7 | 6 | 9 | 13 | 13 | 17 | 15 | 17 | 16 | 12 | 15 | 10 | 10 | 3 | 4 | 6 | 6 | 5 | 9 | 11.5 | 35.0 | |
| 4-Jan-08 | 8 | 12 | 8 | 9 | 7 | 6 | 6 | 14 | 19 | 22 | 15 | 17 | 16 | 15 | 19 | 11 | 17 | 14 | 5 | 5 | 6 | 7 | 6 | 9 | 11.3 | 22.0 | |
| 5-Jan-08 | 7 | 7 | 8 | 5 | 7 | 8 | 7 | 7 | 8 | 9 | 10 | 9 | 10 | 13 | 9 | 7 | 10 | 14 | 12 | 12 | 12 | 14 | 10 | 12 | 9.5 | 14.2 | |
| 6-Jan-08 | 12 | 12 | 12 | 11 | 12 | 13 | 13 | 10 | 12 | 12 | 7 | 6 | 7 | 8 | 10 | 10 | 11 | 14 | 8 | 10 | 8 | 9 | 9 | 7 | 10.1 | 14.1 | |
| 7-Jan-08 | 6 | 7 | 6 | 6 | 6 | 5 | 6 | 9 | 6 | 9 | 11 | 12 | 9 | 10 | 8 | 10 | 11 | 14 | 14 | 13 | 9 | 7 | 8 | 5 | 8.7 | 14.3 | |
| 8-Jan-08 | 18 | 17 | 16 | 10 | 16 | 8 | 7 | 9 | 20 | 33 | 27 | 18 | 21 | 20 | 24 | 26 | 30 | 23 | 14 | 12 | 13 | 16 | 18 | 13 | 17.8 | 32.9 | |
| 9-Jan-08 | 11 | 13 | 15 | 14 | 11 | 9 | 8 | 8 | 8 | 10 | 9 | 11 | 13 | 13 | 12 | 14 | 15 | 16 | 18 | 19 | 12 | 9 | 10 | 9 | 12.0 | 18.9 | |
| 10-Jan-08 | 11 | 10 | 12 | 10 | 9 | 14 | 10 | 13 | 14 | 18 | 18 | 21 | 21 | 24 | 24 | 30 | 29 | 38 | 42 | 31 | 30 | 26 | 34 | 26 | 21.4 | 41.5 | |
| 11-Jan-08 | 28 | 27 | 26 | 22 | 26 | 22 | 14 | 20 | 23 | 64 | 42 | 30 | 36 | 26 | 23 | 23 | 22 | 24 | 19 | 21 | 17 | 20 | 19 | 31 | 26.0 | 63.9 | |
| 12-Jan-08 | 30 | 17 | 24 | 17 | 4 | 5 | 7 | 8 | 7 | 8 | 13 | 10 | 14 | 16 | 14 | 13 | 9 | 14 | 10 | 17 | 17 | 16 | 16 | 24 | 13.8 | 29.8 | |
| 13-Jan-08 | 15 | 15 | 19 | 26 | 21 | 15 | 16 | 15 | 15 | 22 | 12 | 18 | 23 | 27 | 24 | 15 | 7 | 7 | 7 | 9 | 6 | 8 | 9 | 8 | 14.9 | 27.2 | |
| 14-Jan-08 | 11 | 9 | 16 | 9 | 11 | 16 | 13 | 15 | 13 | 15 | 21 | 31 | 29 | 46 | 31 | 16 | 1 | 0 | 5 | 4 | 5 | 21 | 20 | 5 | 15.1 | 46.1 | |
| 15-Jan-08 | 5 | 6 | 8 | 5 | 7 | 12 | 18 | 9 | 11 | 15 | 16 | 23 | 2 | 7 | 7 | 9 | 12 | 8 | 9 | 3 | 3 | 3 | 4 | 5 | 8.6 | 23.3 | |
| 16-Jan-08 | 4 | 4 | 3 | 5 | 5 | 4 | 8 | 8 | 5 | 6 | 7 | 9 | 8 | 4 | 7 | 3 | 6 | 6 | 7 | 5 | 5 | 2 | 4 | 5 | 5.4 | 8.5 | |
| 17-Jan-08 | 5 | 6 | 9 | 17 | 6 | 5 | 5 | 8 | 9 | 5 | 5 | 2 | 5 | 8 | 6 | 4 | 8 | 13 | 6 | 5 | 6 | 5 | 8 | 7 | 6.8 | 16.8 | |
| 18-Jan-08 | 6 | 3 | 5 | 4 | 5 | 10 | 5 | 8 | 9 | 10 | 13 | 17 | 12 | 12 | 8 | 11 | 16 | 16 | 8 | 6 | 11 | 5 | 6 | 4 | 8.8 | 16.8 | |
| 19-Jan-08 | 2 | 6 | 4 | 4 | 4 | 4 | 6 | 6 | 7 | 7 | 9 | 8 | 11 | 8 | 9 | 8 | 21 | 11 | 21 | 20 | 18 | 18 | 10 | 7 | 9.5 | 21.2 | |
| 20-Jan-08 | 10 | 8 | 8 | 15 | 12 | 11 | 9 | 8 | 13 | 15 | 19 | 9 | 14 | 8 | 5 | 15 | 17 | 9 | 6 | 9 | 6 | 10 | 5 | 4 | 10.2 | 19.3 | |
| 21-Jan-08 | 6 | 6 | 7 | 10 | 9 | 9 | 10 | 11 | 7 | 3 | 4 | 5 | 4 | 6 | 5 | 5 | 8 | 8 | 8 | 10 | 11 | 8 | 8 | 8 | 7.3 | 10.8 | |
| 22-Jan-08 | 7 | 7 | 14 | 8 | 5 | 7 | 6 | 4 | 8 | 7 | 6 | 6 | 7 | 5 | 4 | 6 | 8 | 13 | 7 | 15 | 14 | 10 | 9 | 9 | 8.1 | 15.4 | |
| 23-Jan-08 | 8 | 10 | 15 | 10 | 9 | 14 | 12 | 18 | 28 | 26 | 22 | 11 | 18 | 12 | 9 | 9 | 7 | 9 | 15 | 10 | 13 | 25 | 15 | 25 | 14.5 | 28.0 | |
| 24-Jan-08 | 26 | 23 | 11 | 5 | 5 | 7 | 6 | 5 | 8 | 7 | 7 | 6 | 9 | 7 | 5 | 10 | 8 | 8 | 7 | 8 | 9 | 7 | 8 | 10 | 8.7 | 25.6 | |
| 25-Jan-08 | 21 | 21 | 19 | 15 | 13 | 13 | 18 | 23 | 21 | 30 | 30 | 34 | 31 | 27 | 29 | 24 | 24 | 27 | 32 | 6 | 5 | 4 | 6 | 10 | 20.0 | 33.6 | |
| 26-Jan-08 | 10 | 10 | 12 | 10 | 12 | 8 | 5 | 8 | 9 | 19 | 23 | 18 | 16 | 16 | 21 | 19 | 16 | 16 | 5 | 9 | 7 | 7 | 6 | 6 | 12.1 | 23.2 | |
| 27-Jan-08 | 4 | 5 | 7 | 8 | 6 | 6 | 6 | 6 | 7 | 9 | 8 | 9 | 5 | 7 | 7 | 8 | 6 | 8 | 8 | 7 | 7 | 8 | 5 | 6 | 6.8 | 9.0 | |
| 28-Jan-08 | 7 | 7 | 8 | 7 | 8 | 10 | 10 | 10 | 15 | 15 | 15 | 11 | 17 | 9 | 21 | 10 | 11 | 31 | 21 | 17 | 15 | 9 | 8 | N | 12.7 | 31.3 | |
| 29-Jan-08 | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | N | 0.0 |
| 30-Jan-08 | N | N | N | N | N | N | N | N | N | N | N | N | N | 4 | 3 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | N | 4.4 | |
| 31-Jan-08 | 3 | 3 | 8 | 41 | 17 | 8 | 12 | 32 | 5 | 24 | 5 | 5 | 6 | 6 | 5 | 6 | 8 | 5 | 6 | 6 | 6 | 6 | 5 | 6 | 9.8 | 41.0 | |
| Hourly Avg | 11.6 | 10.5 | 11.4 | 11.3 | 9.7 | 9.4 | 9.1 | 10.9 | 11.8 | 15.5 | 14.2 | 13.4 | 13.1 | 13.3 | 12.6 | 11.8 | 12.3 | 13.2 | 11.2 | 10.1 | 9.6 | 9.7 | 9.7 | 10.5 | | | |
| Hourly Max | 35.0 | 27.4 | 25.5 | 41.0 | 25.8 | 22.4 | 17.7 | 32.1 | 28.0 | 63.9 | 42.3 | 33.6 | 36.2 | 46.1 | 31.5 | 30.0 | 30.2 | 38.4 | 41.5 | 30.7 | 29.8 | 25.9 | 33.8 | 30.5 | | | |

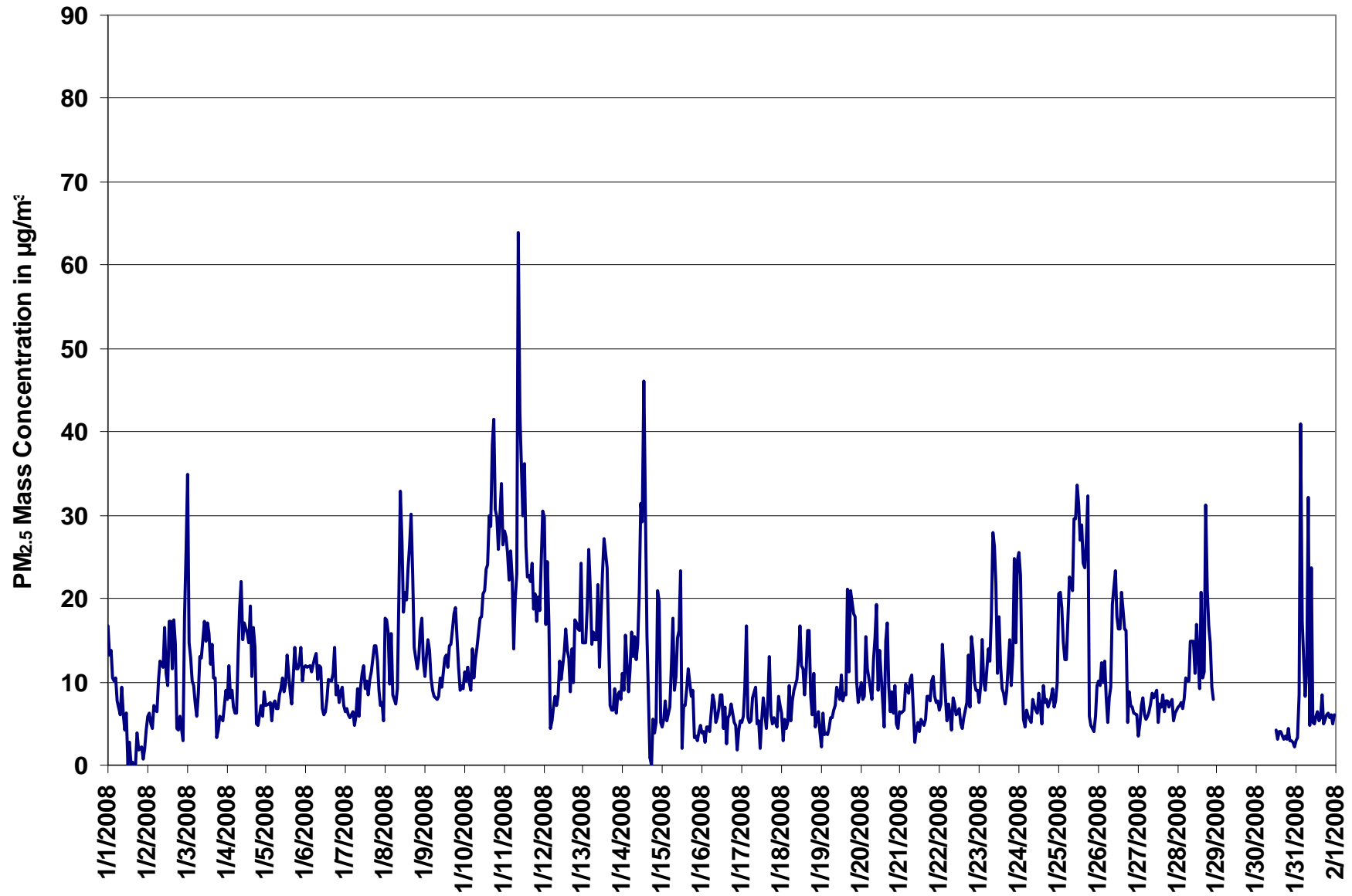
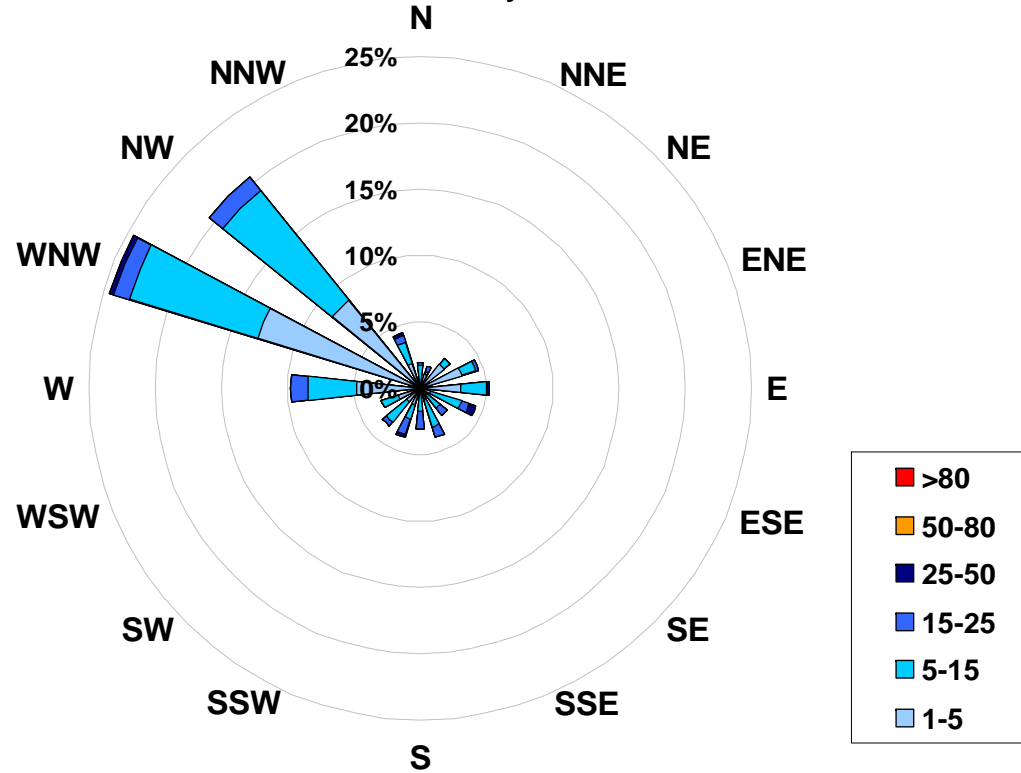


Figure 16. PASZA - Henry Pirker Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Henry Pirker Site for January 2008



Calms: 0%

| Frequency Distribution of PM _{2.5} in µg/m ³ | | | |
|--|----|----|-----------------|
| Range | | | Frequency (hrs) |
| 1.0 | < | 5 | 403 |
| 5 | to | 15 | 225 |
| 15 | to | 25 | 53 |
| 25 | to | 50 | 8 |
| 50 | to | 80 | 0 |
| | > | 80 | 0 |
| Total Non-Zero Values | | | 689 |

PASZA - Henry Pirker Relative Humidity Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

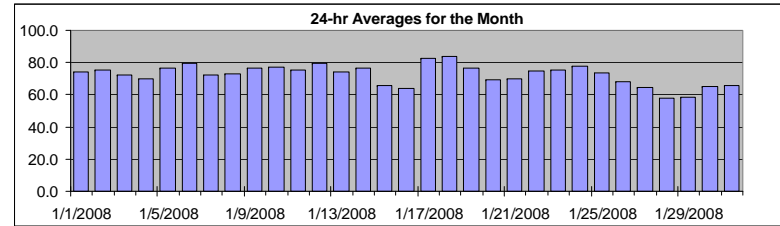
HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|---|--------|-----------|
| Maximum 1-hr Average: | 91.3 | % | 17-Jan | 8:00 9:00 |
| Maximum 24-hr Value: | 83.5 | % | 18-Jan | |



| | | | | | | | | |
|-------------------|-------|-------------------------|---------|------|------|------|---------|--------|
| AIC Time: | 0 hrs | Operational Time: | 744 hrs | | | | | |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 100.0% | | | | | |
| Percentile 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| 88.1 | 84.8 | 78.9 | 73.9 | 65.4 | 57.7 | 52.8 | 72.4 | 73.9 |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum |
|------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|-----------------|---------------|
| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | | |
| 1-Jan-08 | 72 | 73 | 74 | 75 | 75 | 76 | 76 | 79 | 79 | 79 | 79 | 78 | 77 | 76 | 74 | 73 | 71 | 71 | 72 | 72 | 69 | 67 | 69 | 78 | 74.3 | 79.0 |
| 2-Jan-08 | 78 | 78 | 79 | 80 | 80 | 79 | 79 | 79 | 80 | 79 | 76 | 74 | 73 | 71 | 70 | 73 | 76 | 78 | 75 | 74 | 74 | 68 | 70 | 68 | 75.4 | 80.2 |
| 3-Jan-08 | 71 | 76 | 80 | 82 | 80 | 78 | 78 | 80 | 79 | 78 | 75 | 72 | 68 | 70 | 70 | 73 | 74 | 75 | 64 | 63 | 64 | 64 | 64 | 64 | 72.5 | 82.5 |
| 4-Jan-08 | 67 | 67 | 77 | 81 | 83 | 84 | 85 | 85 | 84 | 83 | 76 | 67 | 59 | 58 | 65 | 70 | 74 | 70 | 58 | 56 | 57 | 57 | 54 | 56 | 69.6 | 85.1 |
| 5-Jan-08 | 57 | 65 | 67 | 66 | 66 | 74 | 77 | 82 | 85 | 85 | 80 | 75 | 71 | 75 | 76 | 77 | 79 | 82 | 82 | 81 | 82 | 83 | 84 | 85 | 76.6 | 84.8 |
| 6-Jan-08 | 84 | 85 | 85 | 85 | 86 | 86 | 86 | 87 | 85 | 84 | 81 | 79 | 75 | 72 | 70 | 71 | 75 | 79 | 78 | 76 | 77 | 76 | 75 | 75 | 79.6 | 86.8 |
| 7-Jan-08 | 76 | 76 | 78 | 79 | 79 | 77 | 77 | 77 | 77 | 75 | 73 | 67 | 64 | 61 | 61 | 61 | 69 | 73 | 74 | 73 | 73 | 74 | 74 | 74 | 72.6 | 79.0 |
| 8-Jan-08 | 73 | 73 | 72 | 72 | 73 | 73 | 73 | 72 | 71 | 71 | 68 | 65 | 66 | 68 | 72 | 73 | 74 | 76 | 77 | 77 | 78 | 77 | 76 | 77 | 72.9 | 77.6 |
| 9-Jan-08 | 77 | 78 | 78 | 79 | 78 | 77 | 77 | 77 | 77 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 77 | 76.6 | 79.0 |
| 10-Jan-08 | 76 | 76 | 76 | 75 | 74 | 72 | 74 | 76 | 76 | 77 | 78 | 78 | 77 | 76 | 75 | 74 | 77 | 79 | 80 | 79 | 80 | 81 | 81 | 80 | 77.0 | 80.7 |
| 11-Jan-08 | 79 | 79 | 80 | 79 | 80 | 80 | 78 | 79 | 80 | 76 | 75 | 69 | 60 | 59 | 59 | 64 | 70 | 75 | 77 | 78 | 77 | 78 | 83 | 85 | 75.0 | 85.2 |
| 12-Jan-08 | 86 | 85 | 84 | 83 | 82 | 81 | 79 | 79 | 79 | 78 | 77 | 73 | 67 | 65 | 71 | 79 | 80 | 82 | 81 | 82 | 84 | 85 | 85 | 85 | 79.7 | 85.5 |
| 13-Jan-08 | 84 | 84 | 84 | 84 | 84 | 83 | 83 | 79 | 77 | 55 | 59 | 65 | 68 | 68 | 68 | 63 | 65 | 67 | 68 | 74 | 75 | 79 | 80 | 73.9 | 84.2 | |
| 14-Jan-08 | 79 | 80 | 80 | 82 | 84 | 84 | 84 | 83 | 81 | 80 | 78 | 76 | 73 | 73 | 75 | 87 | 90 | 70 | 59 | 59 | 59 | 61 | 85 | 78 | 76.7 | 90.2 |
| 15-Jan-08 | 74 | 76 | 79 | 78 | 74 | 78 | 82 | 82 | 80 | 80 | 72 | 57 | 52 | 50 | 48 | 49 | 55 | 57 | 58 | 60 | 60 | 60 | 57 | 60 | 65.8 | 82.3 |
| 16-Jan-08 | 62 | 64 | 65 | 68 | 71 | 70 | 71 | 67 | 64 | 64 | 63 | 62 | 61 | 60 | 61 | 61 | 61 | 62 | 64 | 64 | 62 | 61 | 60 | 62 | 63.8 | 71.2 |
| 17-Jan-08 | 62 | 63 | 64 | 78 | 88 | 88 | 84 | 88 | 91 | 89 | 86 | 82 | 77 | 87 | 83 | 85 | 88 | 91 | 90 | 80 | 80 | 80 | 83 | 86 | 82.2 | 91.3 |
| 18-Jan-08 | 86 | 85 | 82 | 80 | 79 | 80 | 81 | 80 | 81 | 81 | 81 | 82 | 82 | 82 | 83 | 84 | 86 | 86 | 87 | 88 | 88 | 88 | 88 | 88 | 83.5 | 88.1 |
| 19-Jan-08 | 86 | 85 | 85 | 84 | 83 | 82 | 81 | 80 | 79 | 77 | 74 | 72 | 71 | 69 | 65 | 68 | 72 | 78 | 79 | 75 | 76 | 75 | 72 | 69 | 76.4 | 85.7 |
| 20-Jan-08 | 68 | 68 | 69 | 70 | 70 | 70 | 72 | 70 | 69 | 68 | 71 | 69 | 67 | 64 | 58 | 57 | 65 | 71 | 73 | 73 | 73 | 73 | 73 | 74 | 69.0 | 73.7 |
| 21-Jan-08 | 74 | 74 | 74 | 76 | 75 | 76 | 77 | 77 | 71 | 68 | 67 | 64 | 58 | 58 | 57 | 56 | 60 | 69 | 71 | 77 | 79 | 74 | 70 | 74 | 69.8 | 79.1 |
| 22-Jan-08 | 72 | 65 | 67 | 66 | 69 | 71 | 74 | 76 | 77 | 74 | 73 | 73 | 71 | 73 | 69 | 69 | 75 | 82 | 85 | 83 | 81 | 81 | 80 | 79 | 74.4 | 84.9 |
| 23-Jan-08 | 79 | 79 | 79 | 80 | 78 | 78 | 78 | 78 | 79 | 77 | 74 | 71 | 64 | 60 | 61 | 67 | 72 | 76 | 79 | 79 | 79 | 79 | 82 | 82 | 75.3 | 82.2 |
| 24-Jan-08 | 82 | 80 | 71 | 74 | 76 | 77 | 79 | 80 | 80 | 79 | 77 | 76 | 74 | 76 | 78 | 79 | 79 | 79 | 78 | 79 | 79 | 80 | 80 | 80 | 78.0 | 82.2 |
| 25-Jan-08 | 78 | 78 | 79 | 79 | 80 | 82 | 84 | 84 | 84 | 83 | 82 | 76 | 70 | 69 | 70 | 69 | 71 | 73 | 69 | 58 | 60 | 60 | 63 | 67 | 73.6 | 84.4 |
| 26-Jan-08 | 64 | 64 | 67 | 67 | 68 | 63 | 61 | 64 | 68 | 74 | 74 | 67 | 61 | 61 | 61 | 61 | 66 | 72 | 73 | 75 | 76 | 76 | 75 | 73 | 67.9 | 76.4 |
| 27-Jan-08 | 72 | 71 | 71 | 70 | 69 | 68 | 67 | 65 | 65 | 64 | 63 | 61 | 61 | 60 | 60 | 62 | 62 | 63 | 63 | 64 | 65 | 63 | 62 | 62 | 64.7 | 72.2 |
| 28-Jan-08 | 62 | 61 | 60 | 59 | 58 | 59 | 58 | 58 | 58 | 59 | 58 | 56 | 56 | 55 | 56 | 57 | 58 | 62 | 63 | 59 | 56 | 54 | 53 | 53 | 57.8 | 63.2 |
| 29-Jan-08 | 53 | 53 | 53 | 53 | 53 | 53 | 54 | 55 | 56 | 58 | 59 | 59 | 59 | 59 | 59 | 60 | 61 | 61 | 63 | 64 | 64 | 64 | 64 | 64 | 58.4 | 64.2 |
| 30-Jan-08 | 64 | 64 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 64 | 62 | 62 | 63 | 63 | 64 | 65 | 67 | 67 | 67 | 67 | 67 | 68 | 68 | 65.1 | 67.9 |
| 31-Jan-08 | 68 | 68 | 66 | 64 | 65 | 66 | 66 | 67 | 67 | 67 | 66 | 64 | 63 | 61 | 61 | 62 | 64 | 66 | 67 | 67 | 67 | 67 | 67 | 68 | 65.5 | 67.8 |
| Hourly Avg | 73.2 | 73.4 | 73.8 | 74.6 | 74.9 | 75.2 | 75.5 | 75.8 | 75.6 | 74.2 | 72.8 | 70.0 | 67.4 | 67.1 | 67.0 | 68.3 | 71.1 | 73.0 | 72.4 | 72.0 | 72.1 | 71.8 | 72.6 | 73.2 | | |
| Hourly Max | 86.4 | 85.4 | 84.8 | 84.7 | 88.3 | 87.9 | 86.4 | 88.1 | 91.3 | 88.9 | 86.1 | 82.4 | 81.9 | 87.2 | 83.1 | 86.9 | 90.2 | 90.9 | 89.7 | 87.1 | 87.8 | 87.9 | 88.1 | 88.1 | | |

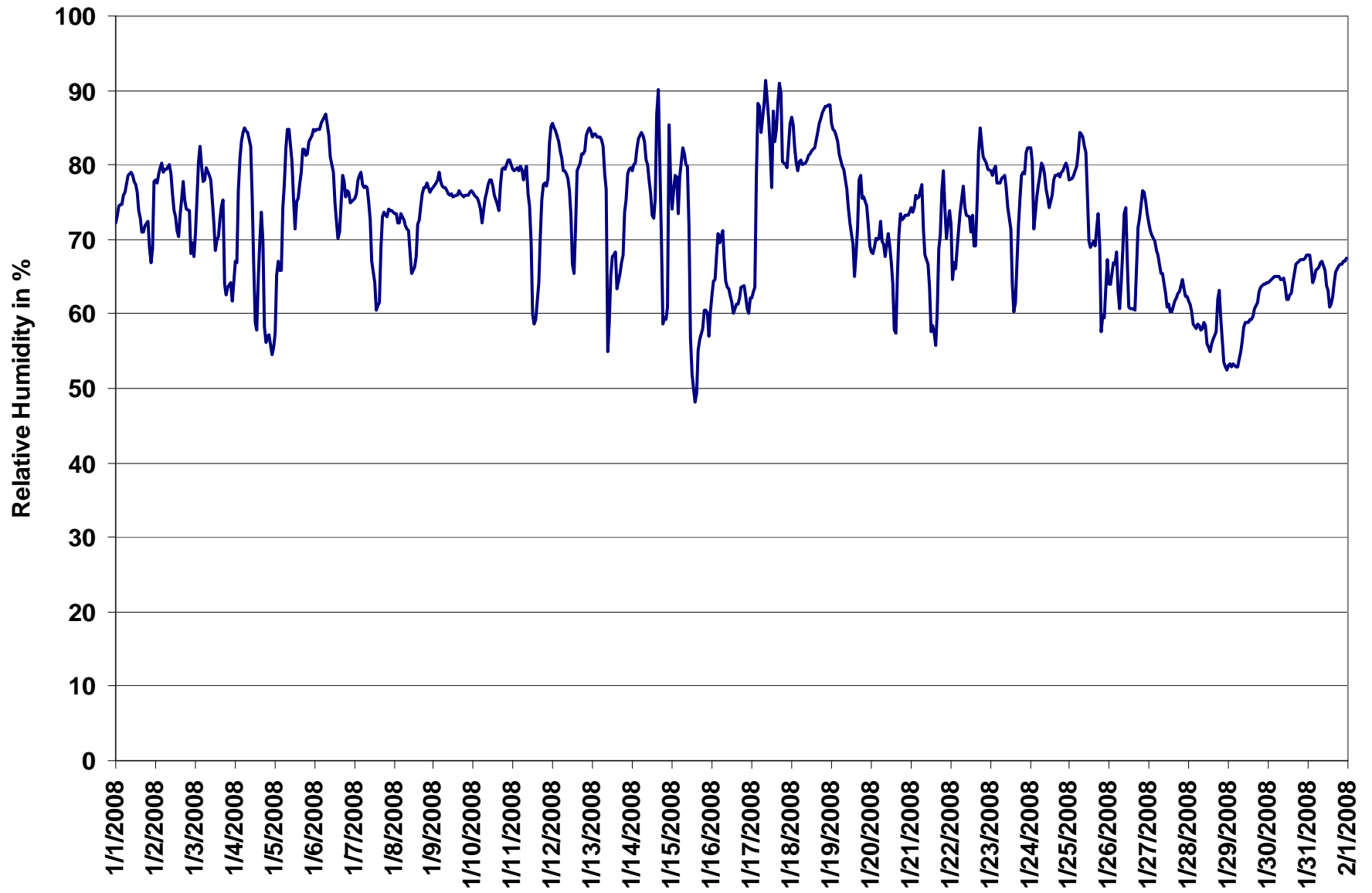


Figure 17. PASZA - Henry Pirker Relative Humidity 1-hr Average Monthly Trend

PASZA - Henry Pirker Temperature Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

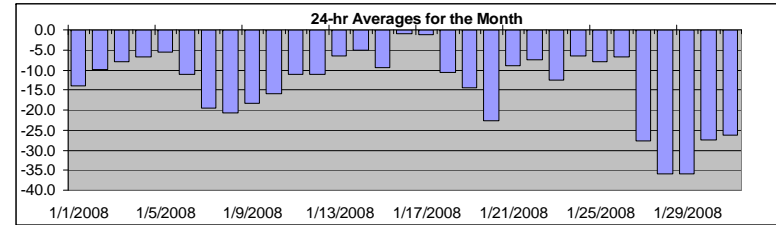
HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | |
|-----------------------|---------|--------|-------------|
| Maximum 1-hr Average: | 3.7 °C | 16-Jan | 21:00 22:00 |
| Maximum 24-hr Value: | -1.1 °C | 16-Jan | |



| | | | | | | | | | |
|-------------------|-------|-------------------------|---------|-------|-------|-------|-------|----------|----------|
| AIC Time: | 0 hrs | Operational Time: | 744 hrs | | | | | | |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 3.0 | -1.0 | -6.6 | -11.6 | -19.3 | -31.0 | -43.5 | -13.7 °C | -11.6 °C |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|-------|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | | | |
| 1-Jan-08 | -24 | -23 | -22 | -21 | -21 | -20 | -19 | -17 | -16 | -16 | -15 | -14 | -13 | -11 | -10 | -9 | -8 | -7 | -7 | -7 | -6 | -6 | -8 | -13 | -13.9 | -6.2 | |
| 2-Jan-08 | -13 | -13 | -13 | -15 | -15 | -15 | -15 | -16 | -17 | -16 | -15 | -13 | -12 | -9 | -4 | -3 | -3 | -3 | -3 | -4 | -4 | -3 | -5 | -5 | -9.8 | -2.9 | |
| 3-Jan-08 | -6 | -8 | -10 | -10 | -9 | -11 | -13 | -15 | -14 | -14 | -13 | -11 | -8 | -7 | -8 | -8 | -7 | -3 | -2 | -2 | -2 | -1 | -2 | -2 | -8.1 | -1.4 | |
| 4-Jan-08 | -3 | -3 | -6 | -8 | -9 | -10 | -10 | -12 | -12 | -12 | -11 | -8 | -6 | -6 | -9 | -10 | -11 | -7 | -3 | -2 | -2 | -1 | 0 | 0 | -6.7 | -0.3 | |
| 5-Jan-08 | -1 | -3 | -4 | -3 | -3 | -5 | -6 | -9 | -10 | -10 | -8 | -6 | -4 | -4 | -3 | -4 | -5 | -6 | -6 | -6 | -6 | -6 | -7 | -7 | -5.5 | -1.0 | |
| 6-Jan-08 | -7 | -7 | -7 | -8 | -8 | -8 | -8 | -9 | -10 | -12 | -12 | -13 | -12 | -12 | -11 | -11 | -13 | -14 | -14 | -13 | -13 | -14 | -15 | -16 | -11.1 | -7.0 | |
| 7-Jan-08 | -16 | -17 | -19 | -20 | -20 | -20 | -20 | -20 | -20 | -22 | -20 | -18 | -17 | -15 | -16 | -15 | -17 | -19 | -22 | -23 | -24 | -24 | -23 | -24 | -19.6 | -15.2 | |
| 8-Jan-08 | -24 | -24 | -24 | -25 | -23 | -23 | -23 | -24 | -25 | -25 | -21 | -19 | -19 | -19 | -17 | -18 | -17 | -18 | -18 | -18 | -19 | -20 | -20 | -19 | -20.8 | -16.9 | |
| 9-Jan-08 | -19 | -18 | -18 | -17 | -18 | -18 | -18 | -19 | -19 | -19 | -19 | -18 | -17 | -17 | -17 | -17 | -18 | -19 | -20 | -19 | -19 | -19 | -18 | -18 | -18.2 | -17.0 | |
| 10-Jan-08 | -19 | -19 | -20 | -21 | -21 | -23 | -22 | -19 | -18 | -17 | -16 | -14 | -13 | -13 | -12 | -11 | -12 | -13 | -13 | -12 | -12 | -13 | -14 | -13 | -15.8 | -11.1 | |
| 11-Jan-08 | -13 | -12 | -13 | -12 | -13 | -14 | -14 | -13 | -13 | -13 | -13 | -11 | -7 | -6 | -6 | -7 | -9 | -11 | -12 | -13 | -12 | -11 | -9 | -9 | -11.1 | -5.9 | |
| 12-Jan-08 | -9 | -10 | -11 | -12 | -13 | -15 | -16 | -18 | -18 | -17 | -14 | -10 | -8 | -7 | -7 | -10 | -10 | -9 | -7 | -7 | -8 | -9 | -10 | -11 | -11.0 | -6.5 | |
| 13-Jan-08 | -11 | -11 | -12 | -12 | -12 | -12 | -12 | -8 | -9 | -1 | -3 | -4 | -3 | -2 | -2 | 0 | -1 | -2 | -3 | -6 | -7 | -9 | -8 | -8 | -6.6 | -0.1 | |
| 14-Jan-08 | -8 | -8 | -8 | -8 | -8 | -9 | -9 | -9 | -8 | -7 | -6 | -4 | -3 | -2 | -1 | 0 | -1 | -2 | -2 | -3 | -3 | -4 | -6 | -5 | -5.2 | -0.1 | |
| 15-Jan-08 | -6 | -8 | -8 | -9 | -9 | -12 | -14 | -13 | -15 | -16 | -12 | -8 | -7 | -7 | -6 | -7 | -8 | -9 | -9 | -9 | -9 | -8 | -8 | -8 | -9.4 | -5.8 | |
| 16-Jan-08 | -8 | -8 | -7 | -8 | -8 | -7 | -8 | -4 | -2 | -2 | 0 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | -1.1 | 3.7 | |
| 17-Jan-08 | 3 | 2 | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | -2 | -3 | -2 | -2 | -3 | -9 | -9 | -9 | -1.1 | 2.7 | |
| 18-Jan-08 | -9 | -10 | -14 | -16 | -17 | -16 | -15 | -15 | -15 | -14 | -13 | -11 | -10 | -10 | -9 | -8 | -8 | -8 | -7 | -7 | -6 | -6 | -5 | -5 | -10.6 | -4.9 | |
| 19-Jan-08 | -6 | -8 | -8 | -8 | -9 | -10 | -11 | -11 | -12 | -12 | -13 | -13 | -13 | -14 | -13 | -14 | -16 | -18 | -20 | -22 | -22 | -23 | -25 | -27 | -14.5 | -6.3 | |
| 20-Jan-08 | -29 | -29 | -28 | -27 | -27 | -27 | -25 | -26 | -27 | -28 | -22 | -19 | -17 | -15 | -14 | -14 | -16 | -19 | -21 | -23 | -24 | -24 | -22 | -21 | -22.6 | -13.6 | |
| 21-Jan-08 | -20 | -18 | -17 | -16 | -15 | -13 | -12 | -12 | -7 | -6 | -5 | -5 | -3 | -3 | -2 | -1 | -3 | -6 | -7 | -8 | -9 | -9 | -9 | -10 | -9.0 | -1.1 | |
| 22-Jan-08 | -10 | -6 | -6 | -4 | -4 | -6 | -7 | -7 | -7 | -5 | -5 | -4 | -4 | -3 | -3 | -3 | -5 | -7 | -8 | -12 | -15 | -16 | -16 | -17 | -7.6 | -2.8 | |
| 23-Jan-08 | -17 | -17 | -17 | -16 | -18 | -18 | -18 | -18 | -17 | -16 | -13 | -11 | -8 | -6 | -5 | -5 | -7 | -9 | -11 | -11 | -11 | -11 | -11 | -11 | -12.5 | -5.1 | |
| 24-Jan-08 | -11 | -10 | -6 | -6 | -6 | -6 | -7 | -7 | -8 | -8 | -7 | -6 | -5 | -4 | -6 | -5 | -5 | -5 | -5 | -6 | -6 | -6 | -6 | -7 | -6.4 | -4.4 | |
| 25-Jan-08 | -7 | -7 | -7 | -7 | -7 | -8 | -10 | -11 | -12 | -12 | -11 | -9 | -9 | -8 | -9 | -9 | -10 | -10 | -7 | -3 | -4 | -4 | -5 | -5 | -7.9 | -3.2 | |
| 26-Jan-08 | -3 | -4 | -5 | -5 | -5 | -4 | -3 | -4 | -5 | -6 | -6 | -4 | -2 | -1 | -1 | 0 | -3 | -7 | -12 | -14 | -15 | -17 | -18 | -20 | -6.7 | -0.2 | |
| 27-Jan-08 | -21 | -22 | -23 | -24 | -25 | -26 | -27 | -27 | -28 | -28 | -29 | -28 | -28 | -28 | -28 | -28 | -28 | -29 | -29 | -29 | -30 | -30 | -31 | -32 | -34 | -27.8 | -21.5 |
| 28-Jan-08 | -35 | -36 | -36 | -38 | -39 | -38 | -38 | -39 | -38 | -37 | -35 | -32 | -30 | -28 | -29 | -27 | -30 | -33 | -33 | -36 | -40 | -43 | -44 | -45 | -35.8 | -27.5 | |
| 29-Jan-08 | -44 | -44 | -44 | -44 | -44 | -44 | -43 | -41 | -39 | -37 | -35 | -35 | -34 | -31 | -31 | -31 | -31 | -31 | -30 | -30 | -30 | -30 | -30 | -30 | -35.9 | -29.6 | |
| 30-Jan-08 | -30 | -30 | -30 | -30 | -29 | -29 | -29 | -29 | -28 | -28 | -27 | -26 | -26 | -26 | -25 | -26 | -26 | -26 | -26 | -26 | -26 | -26 | -26 | -27 | -27.4 | -25.5 | |
| 31-Jan-08 | -28 | -29 | -29 | -32 | -31 | -30 | -29 | -28 | -27 | -27 | -26 | -25 | -25 | -23 | -24 | -24 | -24 | -25 | -25 | -24 | -24 | -24 | -24 | -24 | -26.3 | -23.4 | |
| Hourly Avg | -14.6 | -14.8 | -15.1 | -15.5 | -15.7 | -16.0 | -16.1 | -16.1 | -16.0 | -15.6 | -14.4 | -12.9 | -11.6 | -10.8 | -10.4 | -10.4 | -11.3 | -12.2 | -12.3 | -12.8 | -13.2 | -13.6 | -13.9 | -14.4 | | | |
| Hourly Max | 2.7 | 2.2 | 2.4 | 1.3 | 0.5 | 0.6 | 0.8 | 0.5 | 0.1 | 0.0 | 0.2 | 1.2 | 1.8 | 2.5 | 2.7 | 3.0 | 3.3 | 3.4 | 3.2 | 3.1 | 3.5 | 3.7 | 3.6 | 2.9 | | | |

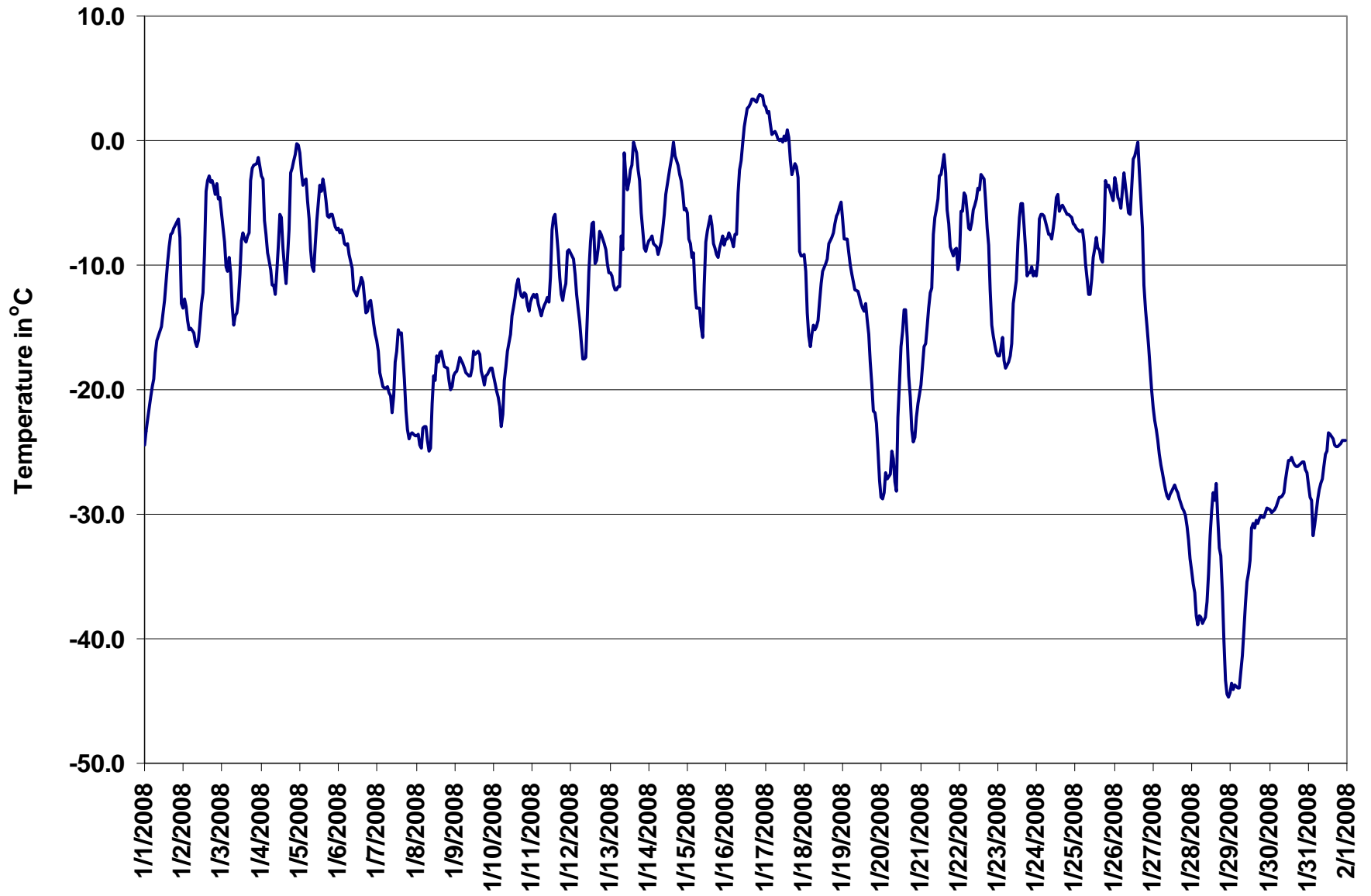


Figure 18. PASZA - Henry Pirker Temperature 1-hr Average Monthly Trend

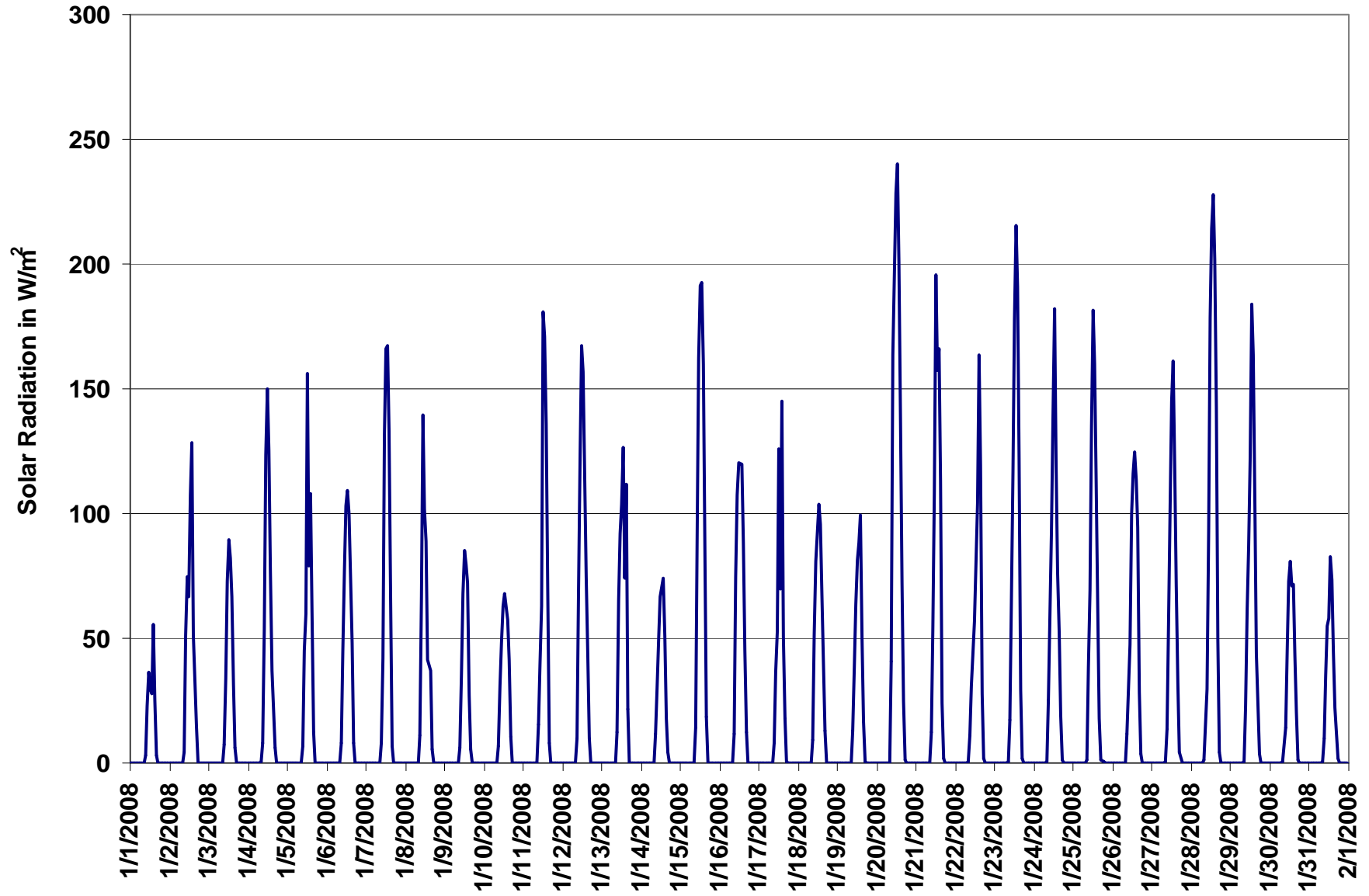


Figure 19. PASZA - Henry Pirker Solar Radiation 1-hr Average Monthly Trend

PASZA - Henry Pirker Scalar Wind Speed Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

HOURLY AVERAGE TABLE

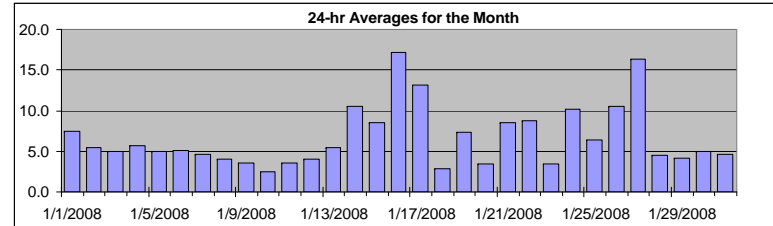
Wind Speed (WSs)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|-------|--------|-----------|
| Maximum 1-hr Average: | 26.1 | km/hr | 27-Jan | 0:00 1:00 |
| Maximum 24-hr Value: | 17.2 | km/hr | 16-Jan | |

| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|-----------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 744 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 100.0% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | AverageS |
| | 24.5 | 19.4 | 7.6 | 4.6 | 3.5 | 2.3 | 1.8 | 6.7 km/hr |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | 24-hr Scalar Average | Daily Max | | |
|--------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-----------|------|--|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | | |
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | |
| 1-Jan-08 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 4 | 7 | 7 | 7 | 8 | 14 | 14 | 14 | 12 | 11 | 9 | 12 | 9 | 10 | 11 | 8 | 5 | 7.4 | 14.4 | |
| 2-Jan-08 | 3 | 3 | 4 | 3 | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 7 | 5 | 5 | 8 | 5 | 9 | 9 | 10 | 8 | 7 | 9 | 6 | 5 | 5.4 | 9.6 | |
| 3-Jan-08 | 4 | 5 | 3 | 4 | 5 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 4 | 5 | 4 | 3 | 4 | 7 | 7 | 9 | 8 | 11 | 9 | 5.0 | 11.0 | |
| 4-Jan-08 | 6 | 6 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 4 | 3 | 5 | 3 | 4 | 5 | 4 | 4 | 5 | 8 | 10 | 9 | 11 | 13 | 10 | 5.7 | 12.7 | |
| 5-Jan-08 | 7 | 5 | 6 | 7 | 4 | 4 | 4 | 3 | 4 | 5 | 4 | 4 | 6 | 5 | 7 | 8 | 6 | 6 | 4 | 5 | 3 | 3 | 3 | 3 | 4.9 | 8.4 | |
| 6-Jan-08 | 3 | 5 | 3 | 4 | 3 | 2 | 3 | 3 | 4 | 5 | 8 | 7 | 7 | 8 | 7 | 6 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 5 | 5.1 | 7.8 | |
| 7-Jan-08 | 5 | 5 | 4 | 3 | 4 | 7 | 6 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 4.6 | 6.5 | |
| 8-Jan-08 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 3 | 3 | 3 | 4 | 4.1 | 5.4 | |
| 9-Jan-08 | 4 | 5 | 3 | 6 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 3.5 | 5.9 | |
| 10-Jan-08 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 2.5 | 3.4 | |
| 11-Jan-08 | 4 | 4 | 3 | 3 | 4 | 5 | 4 | 2 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 5 | 3 | 3 | 3.6 | 5.3 | |
| 12-Jan-08 | 4 | 3 | 3 | 3 | 3 | 2 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 7 | 5 | 5 | 3 | 3 | 3 | 4 | 3 | 4 | 4.0 | 7.0 | |
| 13-Jan-08 | 5 | 4 | 3 | 6 | 5 | 5 | 6 | 6 | 6 | 13 | 5 | 5 | 6 | 6 | 5 | 5 | 7 | 7 | 5 | 5 | 6 | 5 | 4 | 3 | 5.5 | 13.1 | |
| 14-Jan-08 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 2 | 4 | 6 | 18 | 24 | 22 | 24 | 22 | 26 | 25 | 23 | 18 | 10.5 | 25.6 | |
| 15-Jan-08 | 17 | 10 | 9 | 8 | 11 | 7 | 5 | 4 | 4 | 3 | 2 | 3 | 7 | 10 | 8 | 5 | 7 | 12 | 13 | 14 | 12 | 10 | 12 | 9 | 8.6 | 16.9 | |
| 16-Jan-08 | 9 | 11 | 11 | 9 | 7 | 8 | 6 | 15 | 18 | 16 | 19 | 22 | 20 | 15 | 20 | 19 | 23 | 23 | 19 | 22 | 23 | 24 | 26 | 26 | 17.2 | 25.7 | |
| 17-Jan-08 | 20 | 15 | 19 | 17 | 19 | 24 | 22 | 18 | 17 | 17 | 14 | 10 | 9 | 11 | 8 | 6 | 4 | 4 | 10 | 12 | 12 | 12 | 9 | 7 | 13.1 | 23.7 | |
| 18-Jan-08 | 3 | 1 | 5 | 2 | 3 | 4 | 4 | 2 | 2 | 2 | 1 | 1 | 3 | 3 | 4 | 2 | 2 | 2 | 4 | 2 | 2 | 4 | 5 | 6 | 2.9 | 5.8 | |
| 19-Jan-08 | 8 | 8 | 8 | 10 | 10 | 11 | 12 | 11 | 10 | 10 | 10 | 10 | 9 | 8 | 7 | 8 | 5 | 3 | 2 | 4 | 2 | 4 | 3 | 3 | 7.3 | 11.9 | |
| 20-Jan-08 | 3 | 4 | 3 | 2 | 2 | 3 | 5 | 5 | 2 | 3 | 2 | 4 | 3 | 5 | 3 | 3 | 2 | 2 | 3 | 5 | 5 | 4 | 4 | 5 | 3.4 | 5.2 | |
| 21-Jan-08 | 3 | 2 | 1 | 2 | 4 | 4 | 7 | 11 | 14 | 15 | 17 | 17 | 11 | 14 | 14 | 10 | 7 | 5 | 7 | 5 | 5 | 9 | 8 | 9 | 8.5 | 17.4 | |
| 22-Jan-08 | 9 | 13 | 15 | 24 | 23 | 15 | 12 | 11 | 12 | 10 | 7 | 3 | 3 | 7 | 5 | 5 | 4 | 6 | 5 | 4 | 5 | 4 | 5 | 5 | 8.8 | 24.0 | |
| 23-Jan-08 | 4 | 3 | 4 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 3 | 5 | 5 | 5 | 6 | 5 | 4 | 4 | 3 | 4 | 2 | 3 | 3.5 | 6.4 | |
| 24-Jan-08 | 3 | 6 | 7 | 8 | 8 | 9 | 7 | 8 | 14 | 14 | 14 | 14 | 14 | 14 | 13 | 13 | 13 | 12 | 12 | 11 | 10 | 9 | 7 | 6 | 10.2 | 14.4 | |
| 25-Jan-08 | 8 | 10 | 9 | 9 | 8 | 6 | 7 | 6 | 5 | 4 | 4 | 4 | 5 | 5 | 6 | 4 | 3 | 3 | 9 | 14 | 8 | 6 | 6 | 4 | 6.4 | 13.6 | |
| 26-Jan-08 | 10 | 6 | 7 | 6 | 6 | 10 | 10 | 5 | 2 | 2 | 4 | 7 | 3 | 4 | 4 | 3 | 5 | 19 | 23 | 21 | 21 | 24 | 25 | 26 | 10.6 | 25.9 | |
| 27-Jan-08 | 26 | 25 | 22 | 22 | 23 | 21 | 22 | 19 | 19 | 19 | 18 | 19 | 17 | 15 | 16 | 13 | 13 | 10 | 8 | 7 | 6 | 10 | 11 | 10 | 16.3 | 26.1 | |
| 28-Jan-08 | 9 | 7 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 3 | 5 | 4 | 4 | 4 | 5 | 2 | 5 | 4 | 4 | 2 | 3 | 5 | 4 | 5 | 4.5 | 9.2 | |
| 29-Jan-08 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 5 | 4 | 5 | 6 | 4 | 5 | 3 | 6 | 6 | 6 | 6 | 3 | 4.2 | 6.5 | |
| 30-Jan-08 | 4 | 4 | 4 | 4 | 6 | 4 | 4 | 4 | 2 | 5 | 5 | 5 | 5 | 6 | 7 | 8 | 8 | 7 | 5 | 5 | 5 | 5 | 4 | 4 | 5.0 | 7.7 | |
| 31-Jan-08 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 5 | 6 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 3 | 5 | 4 | 5 | 4 | 4.6 | 6.5 | |
| 1-hr Average | 6.5 | 6.0 | 5.9 | 6.2 | 6.4 | 6.3 | 6.4 | 6.1 | 6.3 | 6.5 | 6.3 | 6.4 | 6.3 | 6.7 | 6.9 | 6.6 | 6.7 | 7.0 | 7.4 | 7.5 | 7.4 | 7.9 | 7.6 | 6.8 | | | |
| Hourly Max | 26.1 | 24.6 | 22.1 | 24.0 | 23.2 | 23.7 | 22.5 | 19.5 | 18.7 | 19.4 | 19.4 | 21.6 | 19.8 | 15.4 | 19.5 | 19.5 | 24.3 | 23.4 | 23.8 | 21.9 | 25.6 | 24.9 | 25.5 | 25.9 | | | |

PASZA - Henry Pirker Vector Wind Speed Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

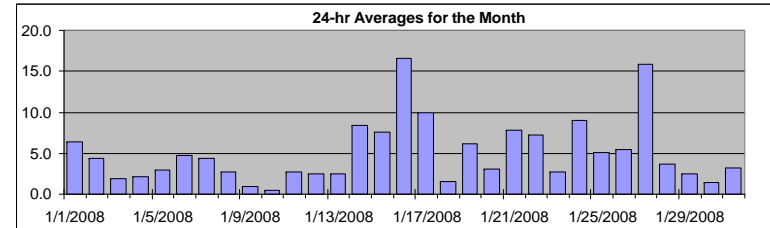
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|-------|--------|-----------|
| Maximum 1-hr Average: | 26.1 | km/hr | 27-Jan | 0:00 1:00 |
| Maximum 24-hr Value: | 16.6 | km/hr | 16-Jan | |



| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|-----------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 744 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 100.0% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | AverageV |
| | 24.4 | 19.3 | 7.5 | 4.2 | 2.9 | 1.3 | 0.9 | 8.0 km/hr |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hr Vector Average | Daily Max | |
|-------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-----------|--|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 23:00 0:00 | | |
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | |
| 1-Jan-08 | 1 | 3 | 2 | 1 | 2 | 3 | 2 | 4 | 7 | 7 | 7 | 14 | 14 | 14 | 12 | 11 | 9 | 12 | 9 | 10 | 11 | 5 | 5 | 5 | 6.4 | 14.3 | |
| 2-Jan-08 | 3 | 2 | 3 | 2 | 3 | 2 | 1 | 2 | 2 | 2 | 3 | 7 | 5 | 2 | 8 | 4 | 9 | 9 | 10 | 8 | 7 | 8 | 6 | 5 | 4.4 | 9.5 | |
| 3-Jan-08 | 3 | 4 | 3 | 4 | 4 | 2 | 4 | 3 | 1 | 3 | 4 | 2 | 3 | 3 | 5 | 3 | 1 | 3 | 7 | 7 | 9 | 8 | 11 | 9 | 1.9 | 10.8 | |
| 4-Jan-08 | 6 | 1 | 3 | 3 | 2 | 4 | 3 | 2 | 3 | 4 | 3 | 4 | 3 | 4 | 5 | 4 | 3 | 5 | 8 | 10 | 9 | 11 | 13 | 9 | 2.1 | 12.5 | |
| 5-Jan-08 | 7 | 4 | 5 | 7 | 2 | 3 | 3 | 3 | 4 | 4 | 3 | 4 | 6 | 4 | 7 | 8 | 6 | 6 | 4 | 3 | 2 | 3 | 3 | 2 | 3.0 | 8.4 | |
| 6-Jan-08 | 2 | 4 | 1 | 4 | 3 | 1 | 3 | 2 | 3 | 5 | 8 | 7 | 7 | 8 | 7 | 6 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 5 | 4.8 | 7.7 | |
| 7-Jan-08 | 5 | 5 | 4 | 3 | 4 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4.4 | 6.5 | |
| 8-Jan-08 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 5 | 5 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 2 | 3 | 4 | 2.7 | 5.2 | |
| 9-Jan-08 | 4 | 5 | 3 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 0.9 | 5.3 | |
| 10-Jan-08 | 2 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 1 | 3 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 3 | 3 | 2 | 3 | 1 | 3 | 2 | 0.4 | 3.1 | |
| 11-Jan-08 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 1 | 3 | 3 | 3 | 1 | 2 | 4 | 3 | 4 | 4 | 4 | 2 | 3 | 2 | 3 | 2 | 3 | 2.7 | 4.4 | |
| 12-Jan-08 | 3 | 2 | 2 | 2 | 2 | 2 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 2 | 1 | 6 | 5 | 3 | 2 | 1 | 2 | 2 | 1 | 1 | 2.5 | 6.1 | |
| 13-Jan-08 | 1 | 2 | 2 | 6 | 4 | 4 | 6 | 3 | 3 | 12 | 3 | 4 | 5 | 6 | 5 | 5 | 7 | 7 | 4 | 2 | 2 | 4 | 3 | 1 | 2.5 | 12.5 | |
| 14-Jan-08 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 3 | 4 | 2 | 4 | 3 | 2 | 4 | 5 | 17 | 24 | 21 | 24 | 22 | 26 | 25 | 23 | 18 | 8.4 | 25.5 | |
| 15-Jan-08 | 17 | 10 | 8 | 8 | 11 | 7 | 4 | 4 | 3 | 3 | 2 | 3 | 7 | 10 | 7 | 5 | 7 | 12 | 13 | 14 | 12 | 10 | 12 | 8 | 7.6 | 16.8 | |
| 16-Jan-08 | 9 | 11 | 11 | 9 | 6 | 6 | 6 | 15 | 18 | 16 | 19 | 21 | 20 | 15 | 19 | 19 | 23 | 23 | 19 | 21 | 23 | 24 | 25 | 26 | 16.6 | 25.6 | |
| 17-Jan-08 | 20 | 14 | 19 | 16 | 19 | 24 | 22 | 18 | 17 | 17 | 14 | 10 | 9 | 10 | 7 | 6 | 4 | 4 | 10 | 12 | 8 | 12 | 9 | 7 | 10.0 | 23.6 | |
| 18-Jan-08 | 3 | 0 | 5 | 2 | 2 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 3 | 3 | 4 | 1 | 1 | 1 | 4 | 2 | 2 | 3 | 5 | 6 | 1.5 | 5.6 | |
| 19-Jan-08 | 8 | 8 | 8 | 10 | 10 | 11 | 12 | 11 | 10 | 10 | 10 | 9 | 8 | 7 | 8 | 5 | 3 | 1 | 3 | 1 | 4 | 3 | 3 | 3 | 6.1 | 11.8 | |
| 20-Jan-08 | 3 | 3 | 3 | 1 | 2 | 3 | 5 | 4 | 2 | 3 | 2 | 4 | 3 | 5 | 2 | 3 | 2 | 2 | 2 | 4 | 5 | 4 | 3 | 5 | 3.1 | 5.1 | |
| 21-Jan-08 | 3 | 2 | 0 | 2 | 4 | 3 | 7 | 11 | 14 | 15 | 17 | 17 | 11 | 14 | 13 | 10 | 7 | 4 | 7 | 5 | 4 | 9 | 8 | 9 | 7.8 | 17.3 | |
| 22-Jan-08 | 8 | 12 | 13 | 24 | 23 | 15 | 11 | 11 | 11 | 10 | 7 | 2 | 2 | 6 | 3 | 4 | 3 | 6 | 3 | 4 | 5 | 4 | 4 | 4 | 7.3 | 23.8 | |
| 23-Jan-08 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 3 | 3 | 5 | 5 | 5 | 6 | 5 | 4 | 4 | 2 | 1 | 1 | 3 | 2.8 | 6.4 | |
| 24-Jan-08 | 1 | 6 | 7 | 8 | 7 | 8 | 7 | 8 | 14 | 14 | 14 | 14 | 14 | 13 | 13 | 13 | 12 | 12 | 11 | 10 | 8 | 6 | 6 | 6 | 9.0 | 14.3 | |
| 25-Jan-08 | 8 | 10 | 9 | 9 | 8 | 6 | 7 | 5 | 5 | 4 | 4 | 4 | 3 | 4 | 5 | 4 | 2 | 1 | 7 | 13 | 8 | 5 | 5 | 1 | 5.1 | 13.5 | |
| 26-Jan-08 | 9 | 4 | 7 | 5 | 5 | 10 | 10 | 5 | 1 | 2 | 4 | 6 | 1 | 4 | 3 | 2 | 3 | 18 | 23 | 21 | 21 | 24 | 25 | 26 | 5.4 | 25.9 | |
| 27-Jan-08 | 26 | 25 | 22 | 22 | 23 | 21 | 22 | 19 | 19 | 19 | 18 | 19 | 17 | 15 | 16 | 13 | 12 | 10 | 8 | 7 | 6 | 10 | 11 | 10 | 15.8 | 26.1 | |
| 28-Jan-08 | 9 | 7 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 3 | 5 | 4 | 3 | 3 | 5 | 2 | 5 | 3 | 4 | 2 | 2 | 5 | 4 | 5 | 3.7 | 9.1 | |
| 29-Jan-08 | 3 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 1 | 3 | 2 | 5 | 3 | 5 | 5 | 2 | 4 | 2 | 5 | 6 | 6 | 6 | 2 | 2 | 2.5 | 6.3 | |
| 30-Jan-08 | 4 | 4 | 4 | 4 | 6 | 4 | 4 | 4 | 4 | 1 | 5 | 4 | 4 | 4 | 6 | 7 | 7 | 6 | 4 | 5 | 5 | 5 | 3 | 4 | 1.5 | 7.4 | |
| 31-Jan-08 | 4 | 3 | 3 | 4 | 4 | 4 | 6 | 6 | 4 | 5 | 3 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 4 | 2 | 4 | 4 | 4 | 4 | 3.2 | 6.3 | |
| 1-hr Vector | 3.6 | 2.8 | 3.3 | 3.0 | 3.5 | 3.8 | 3.7 | 3.3 | 2.5 | 2.6 | 2.2 | 2.0 | 2.1 | 2.4 | 3.0 | 2.8 | 2.5 | 2.2 | 1.9 | 3.3 | 3.1 | 2.9 | 3.0 | 2.9 | | | |
| Hourly Max | 26.1 | 24.6 | 22.0 | 23.8 | 23.2 | 23.6 | 22.3 | 19.4 | 18.6 | 19.3 | 19.2 | 21.3 | 19.7 | 15.3 | 19.5 | 19.4 | 24.1 | 23.3 | 23.5 | 21.8 | 25.5 | 24.6 | 25.5 | 25.9 | | | |

PASZA - Henry Pirker Wind Direction Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-------|------|------|---------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 744 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 100.0% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average |
| | 345.9 | 325.3 | 301.0 | 271.9 | 145.3 | 49.8 | 21.6 | 290 deg |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | WD Sector |
|------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-----------|
| | Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | | |
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | |
| 1-Jan-08 | 306 | 338 | 314 | 157 | 151 | 111 | 82 | 64 | 83 | 86 | 79 | 88 | 91 | 91 | 96 | 93 | 88 | 92 | 95 | 80 | 74 | 81 | 122 | 225 | 90 | E |
| 2-Jan-08 | 198 | 201 | 238 | 278 | 192 | 231 | 251 | 302 | 184 | 299 | 300 | 307 | 277 | 207 | 208 | 219 | 219 | 217 | 223 | 217 | 195 | 220 | 168 | 185 | 224 | SW |
| 3-Jan-08 | 99 | 96 | 110 | 92 | 93 | 342 | 305 | 304 | 273 | 298 | 324 | 314 | 304 | 286 | 306 | 301 | 262 | 40 | 74 | 79 | 87 | 88 | 85 | 102 | 54 | NE |
| 4-Jan-08 | 101 | 132 | 293 | 286 | 316 | 295 | 288 | 330 | 111 | 292 | 322 | 310 | 304 | 293 | 306 | 310 | 320 | 50 | 88 | 83 | 82 | 74 | 65 | 83 | 39 | NE |
| 5-Jan-08 | 75 | 25 | 11 | 28 | 351 | 238 | 264 | 314 | 312 | 288 | 269 | 230 | 225 | 234 | 271 | 275 | 281 | 300 | 292 | 293 | 301 | 286 | 289 | 235 | 292 | WNW |
| 6-Jan-08 | 179 | 334 | 280 | 288 | 312 | 307 | 304 | 262 | 280 | 302 | 309 | 311 | 317 | 314 | 298 | 305 | 315 | 311 | 294 | 286 | 273 | 287 | 285 | 289 | 298 | WNW |
| 7-Jan-08 | 271 | 273 | 297 | 296 | 280 | 273 | 285 | 278 | 307 | 308 | 309 | 277 | 275 | 270 | 274 | 292 | 319 | 310 | 321 | 304 | 304 | 311 | 320 | 280 | 292 | WNW |
| 8-Jan-08 | 295 | 330 | 288 | 305 | 344 | 269 | 314 | 301 | 295 | 300 | 286 | 289 | 273 | 260 | 299 | 329 | 341 | 13 | 130 | 96 | 149 | 240 | 294 | 302 | 303 | WNW |
| 9-Jan-08 | 305 | 285 | 307 | 65 | 76 | 76 | 98 | 114 | 99 | 103 | 110 | 91 | 127 | 314 | 306 | 280 | 309 | 325 | 319 | 305 | 314 | 301 | 284 | 313 | 18 | NNE |
| 10-Jan-08 | 313 | 353 | 198 | 147 | 318 | 295 | 306 | 293 | 281 | 174 | 281 | 150 | 164 | 174 | 206 | 177 | 200 | 115 | 123 | 123 | 86 | 106 | 331 | 311 | 209 | SSW |
| 11-Jan-08 | 305 | 291 | 280 | 296 | 313 | 310 | 290 | 167 | 187 | 261 | 279 | 190 | 282 | 281 | 270 | 290 | 318 | 321 | 311 | 290 | 225 | 193 | 300 | 331 | 282 | WNW |
| 12-Jan-08 | 348 | 183 | 176 | 305 | 310 | 334 | 289 | 306 | 300 | 300 | 312 | 306 | 284 | 312 | 286 | 301 | 302 | 313 | 234 | 9 | 192 | 171 | 220 | 140 | 291 | WNW |
| 13-Jan-08 | 168 | 68 | 98 | 139 | 125 | 107 | 181 | 154 | 157 | 247 | 145 | 130 | 113 | 122 | 106 | 102 | 91 | 101 | 116 | 307 | 321 | 301 | 322 | 204 | 135 | SE |
| 14-Jan-08 | 279 | 152 | 356 | 138 | 158 | 359 | 145 | 285 | 323 | 52 | 142 | 134 | 166 | 288 | 278 | 296 | 291 | 272 | 271 | 272 | 270 | 277 | 291 | 280 | 278 | W |
| 15-Jan-08 | 284 | 296 | 290 | 257 | 265 | 297 | 294 | 214 | 280 | 298 | 259 | 320 | 282 | 269 | 277 | 287 | 251 | 237 | 238 | 237 | 234 | 208 | 217 | 258 | 260 | W |
| 16-Jan-08 | 272 | 241 | 256 | 260 | 293 | 332 | 316 | 259 | 270 | 260 | 262 | 254 | 260 | 246 | 243 | 245 | 249 | 249 | 250 | 254 | 261 | 256 | 256 | 244 | 257 | WSW |
| 17-Jan-08 | 257 | 262 | 303 | 315 | 279 | 288 | 274 | 263 | 277 | 276 | 272 | 281 | 294 | 284 | 327 | 329 | 295 | 346 | 311 | 314 | 324 | 99 | 98 | 100 | 288 | WNW |
| 18-Jan-08 | 84 | 144 | 311 | 326 | 294 | 322 | 321 | 304 | 321 | 315 | 287 | 284 | 300 | 305 | 285 | 331 | 311 | 92 | 73 | 47 | 3 | 51 | 57 | 64 | 351 | N |
| 19-Jan-08 | 46 | 45 | 47 | 48 | 41 | 44 | 46 | 46 | 43 | 46 | 47 | 50 | 43 | 54 | 62 | 76 | 103 | 158 | 226 | 317 | 259 | 304 | 320 | 320 | 45 | NE |
| 20-Jan-08 | 298 | 302 | 274 | 280 | 230 | 256 | 225 | 273 | 318 | 305 | 303 | 313 | 284 | 276 | 273 | 255 | 291 | 297 | 298 | 309 | 304 | 320 | 290 | 294 | 287 | WNW |
| 21-Jan-08 | 300 | 275 | 341 | 345 | 307 | 322 | 292 | 276 | 253 | 248 | 243 | 247 | 261 | 243 | 246 | 240 | 254 | 287 | 282 | 288 | 260 | 259 | 271 | 296 | 263 | W |
| 22-Jan-08 | 274 | 271 | 267 | 297 | 298 | 285 | 251 | 246 | 248 | 244 | 254 | 301 | 248 | 267 | 242 | 267 | 346 | 89 | 79 | 289 | 302 | 300 | 297 | 297 | 277 | W |
| 23-Jan-08 | 297 | 307 | 355 | 223 | 323 | 304 | 336 | 329 | 312 | 314 | 289 | 273 | 297 | 278 | 299 | 286 | 319 | 320 | 328 | 291 | 9 | 335 | 118 | 59 | 311 | NW |
| 24-Jan-08 | 357 | 21 | 45 | 55 | 47 | 48 | 61 | 61 | 80 | 83 | 82 | 74 | 76 | 62 | 50 | 60 | 69 | 76 | 79 | 86 | 91 | 102 | 164 | 205 | 72 | ENE |
| 25-Jan-08 | 209 | 222 | 218 | 240 | 249 | 251 | 211 | 188 | 165 | 167 | 184 | 207 | 207 | 193 | 271 | 315 | 235 | 297 | 208 | 245 | 223 | 262 | 292 | 28 | 228 | SW |
| 26-Jan-08 | 306 | 160 | 169 | 168 | 181 | 208 | 222 | 209 | 153 | 105 | 128 | 166 | 123 | 129 | 50 | 102 | 83 | 303 | 306 | 303 | 293 | 300 | 302 | 299 | 283 | WNW |
| 27-Jan-08 | 299 | 302 | 300 | 297 | 299 | 300 | 302 | 301 | 299 | 302 | 303 | 305 | 302 | 327 | 341 | 336 | 345 | 341 | 327 | 312 | 290 | 300 | 309 | 314 | 308 | NW |
| 28-Jan-08 | 317 | 323 | 325 | 302 | 284 | 310 | 295 | 307 | 308 | 300 | 291 | 295 | 266 | 239 | 287 | 278 | 318 | 13 | 61 | 78 | 284 | 310 | 302 | 291 | 306 | NW |
| 29-Jan-08 | 308 | 310 | 295 | 308 | 301 | 282 | 307 | 305 | 287 | 58 | 79 | 110 | 277 | 266 | 277 | 287 | 60 | 88 | 146 | 270 | 284 | 282 | 297 | 257 | 295 | WNW |
| 30-Jan-08 | 243 | 238 | 249 | 211 | 216 | 201 | 260 | 299 | 289 | 155 | 155 | 115 | 103 | 85 | 62 | 63 | 61 | 59 | 56 | 31 | 30 | 22 | 60 | 88 | 82 | E |
| 31-Jan-08 | 83 | 51 | 45 | 284 | 309 | 312 | 322 | 2 | 36 | 84 | 79 | 75 | 61 | 27 | 23 | 53 | 62 | 55 | 113 | 96 | 72 | 78 | 81 | 100 | 49 | NE |
| Hourly Avg | 289 | 288 | 294 | 297 | 295 | 298 | 285 | 284 | 285 | 283 | 282 | 283 | 284 | 279 | 295 | 303 | 310 | 313 | 283 | 289 | 283 | 283 | 290 | 279 | | |

PASZA - Henry Pirker Standard Deviation of Wind Direction Monthly Summary

Station: Henry Pirker
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

Determined by the Yamartino 15-min interval calculation

| | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|------|-----|-----|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 744 hrs | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 100.0% | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 |
| | 84.8 | 72.6 | 36.9 | 18.9 | 10.7 | 5.3 | 4.1 |

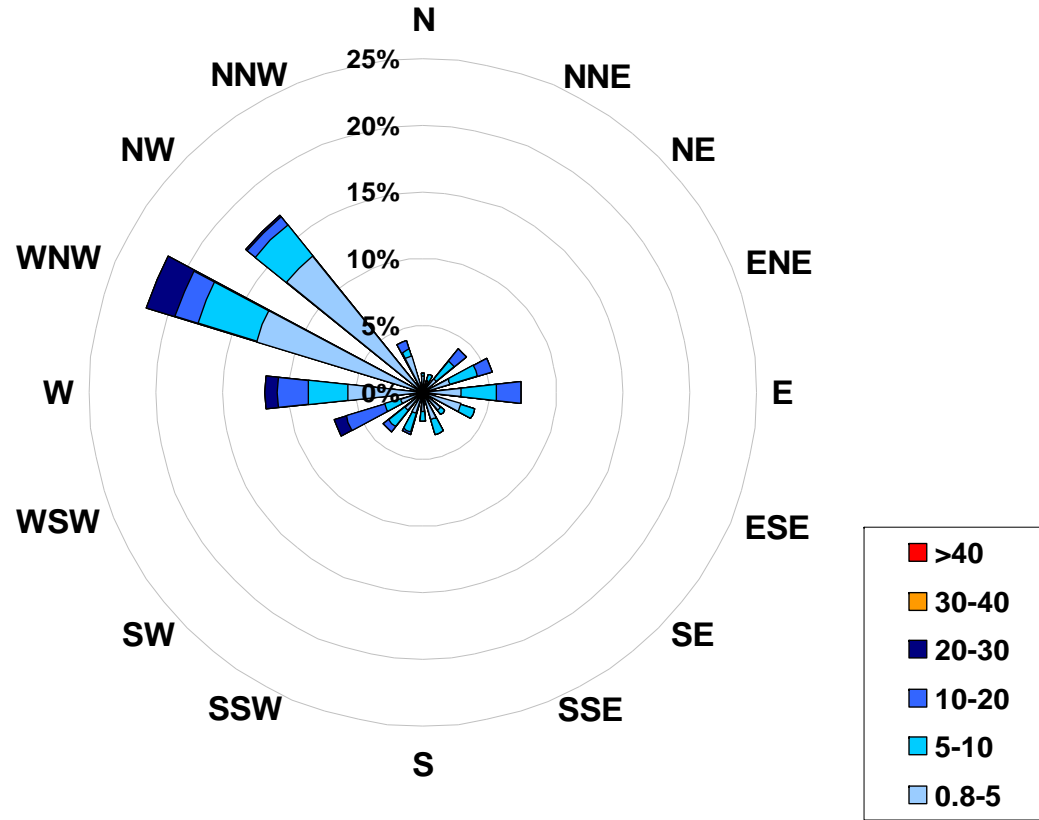
Status Flag Characters

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

Day Mountain Standard Time

| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 23:00 | 0:00 | Daily Maximum |
|------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|---------------|
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | |
| 1-Jan-08 | 53 | 28 | 62 | 76 | 33 | 17 | 39 | 13 | 9 | 11 | 10 | 13 | 7 | 5 | 5 | 5 | 7 | 8 | 11 | 15 | 6 | 6 | 54 | 26 | | 76.0 | |
| 2-Jan-08 | 37 | 66 | 41 | 60 | 41 | 73 | 77 | 51 | 65 | 73 | 52 | 10 | 32 | 63 | 19 | 45 | 15 | 9 | 7 | 15 | 24 | 27 | 34 | 19 | | 77.5 | |
| 3-Jan-08 | 37 | 31 | 38 | 18 | 23 | 68 | 47 | 68 | 79 | 47 | 35 | 64 | 33 | 37 | 18 | 70 | 85 | 50 | 9 | 12 | 10 | 18 | 11 | 12 | | 85.0 | |
| 4-Jan-08 | 12 | 83 | 42 | 60 | 90 | 63 | 35 | 67 | 62 | 43 | 59 | 42 | 51 | 34 | 23 | 20 | 50 | 20 | 8 | 6 | 10 | 15 | 9 | 24 | | 89.9 | |
| 5-Jan-08 | 8 | 30 | 24 | 10 | 58 | 43 | 35 | 49 | 28 | 38 | 55 | 35 | 12 | 28 | 11 | 7 | 14 | 7 | 29 | 59 | 75 | 41 | 28 | 61 | | 74.9 | |
| 6-Jan-08 | 50 | 21 | 81 | 16 | 16 | 79 | 36 | 58 | 37 | 20 | 7 | 12 | 9 | 9 | 13 | 11 | 12 | 17 | 7 | 12 | 9 | 7 | 8 | 14 | | 81.5 | |
| 7-Jan-08 | 9 | 23 | 14 | 13 | 12 | 8 | 8 | 13 | 10 | 14 | 15 | 13 | 7 | 11 | 8 | 17 | 8 | 14 | 12 | 14 | 16 | 11 | 21 | 18 | | 22.9 | |
| 8-Jan-08 | 20 | 15 | 44 | 33 | 20 | 45 | 10 | 18 | 17 | 38 | 21 | 14 | 11 | 30 | 41 | 27 | 19 | 35 | 40 | 22 | 33 | 66 | 16 | 17 | | 66.2 | |
| 9-Jan-08 | 19 | 11 | 23 | 30 | 26 | 17 | 23 | 33 | 27 | 19 | 19 | 25 | 45 | 22 | 20 | 34 | 13 | 18 | 38 | 15 | 17 | 24 | 26 | 19 | | 45.3 | |
| 10-Jan-08 | 18 | 62 | 69 | 47 | 33 | 11 | 20 | 21 | 66 | 29 | 82 | 70 | 33 | 23 | 61 | 39 | 66 | 19 | 25 | 48 | 36 | 92 | 22 | 52 | | 92.1 | |
| 11-Jan-08 | 16 | 21 | 27 | 21 | 28 | 27 | 40 | 82 | 37 | 46 | 56 | 66 | 67 | 14 | 44 | 34 | 15 | 24 | 76 | 41 | 62 | 58 | 59 | 68 | | 81.8 | |
| 12-Jan-08 | 52 | 45 | 58 | 56 | 69 | 45 | 32 | 13 | 24 | 17 | 9 | 18 | 26 | 62 | 84 | 28 | 34 | 67 | 77 | 90 | 61 | 60 | 83 | 84 | | 90.0 | |
| 13-Jan-08 | 92 | 60 | 46 | 28 | 41 | 27 | 27 | 63 | 57 | 17 | 53 | 63 | 23 | 11 | 12 | 20 | 14 | 8 | 50 | 85 | 69 | 55 | 46 | 74 | | 92.5 | |
| 14-Jan-08 | 80 | 80 | 49 | 31 | 83 | 47 | 30 | 43 | 51 | 49 | 19 | 32 | 59 | 27 | 52 | 7 | 6 | 9 | 10 | 4 | 3 | 9 | 8 | 6 | | 82.8 | |
| 15-Jan-08 | 6 | 6 | 14 | 16 | 8 | 14 | 28 | 16 | 32 | 41 | 25 | 29 | 10 | 4 | 9 | 16 | 9 | 7 | 5 | 5 | 8 | 12 | 14 | 32 | | 40.7 | |
| 16-Jan-08 | 23 | 19 | 10 | 10 | 37 | 37 | 36 | 5 | 6 | 7 | 8 | 9 | 7 | 6 | 5 | 6 | 5 | 5 | 6 | 8 | 4 | 5 | 4 | 5 | | 37.3 | |
| 17-Jan-08 | 5 | 14 | 8 | 15 | 4 | 6 | 6 | 5 | 5 | 5 | 5 | 6 | 7 | 10 | 23 | 14 | 34 | 13 | 11 | 7 | 52 | 8 | 9 | 10 | | 51.9 | |
| 18-Jan-08 | 44 | 77 | 11 | 21 | 29 | 9 | 10 | 13 | 23 | 30 | 17 | 15 | 9 | 9 | 21 | 51 | 21 | 84 | 13 | 25 | 44 | 23 | 11 | 16 | | 84.2 | |
| 19-Jan-08 | 12 | 14 | 12 | 7 | 9 | 8 | 9 | 11 | 10 | 10 | 10 | 9 | 12 | 18 | 17 | 11 | 20 | 19 | 57 | 14 | 59 | 13 | 15 | 12 | | 59.1 | |
| 20-Jan-08 | 16 | 19 | 13 | 36 | 29 | 25 | 14 | 27 | 16 | 10 | 31 | 7 | 12 | 6 | 23 | 23 | 26 | 45 | 46 | 11 | 10 | 20 | 29 | 13 | | 45.9 | |
| 21-Jan-08 | 23 | 75 | 73 | 32 | 21 | 39 | 15 | 9 | 8 | 8 | 4 | 6 | 8 | 5 | 7 | 9 | 22 | 34 | 10 | 14 | 45 | 13 | 9 | 9 | | 75.1 | |
| 22-Jan-08 | 22 | 13 | 25 | 7 | 5 | 18 | 11 | 11 | 23 | 7 | 21 | 57 | 50 | 22 | 48 | 45 | 26 | 16 | 65 | 19 | 14 | 17 | 18 | 22 | | 64.6 | |
| 23-Jan-08 | 17 | 18 | 43 | 45 | 23 | 19 | 47 | 12 | 66 | 65 | 25 | 18 | 29 | 18 | 15 | 20 | 7 | 12 | 38 | 35 | 70 | 87 | 73 | 30 | | 87.0 | |
| 24-Jan-08 | 79 | 23 | 12 | 7 | 13 | 13 | 15 | 11 | 7 | 5 | 5 | 6 | 7 | 8 | 9 | 10 | 6 | 7 | 6 | 7 | 7 | 12 | 26 | 15 | | 79.4 | |
| 25-Jan-08 | 11 | 8 | 11 | 11 | 13 | 17 | 9 | 16 | 9 | 16 | 18 | 30 | 53 | 52 | 51 | 19 | 58 | 90 | 34 | 8 | 8 | 39 | 36 | 71 | | 90.1 | |
| 26-Jan-08 | 21 | 59 | 12 | 49 | 31 | 15 | 19 | 23 | 83 | 19 | 19 | 17 | 74 | 35 | 40 | 41 | 53 | 34 | 5 | 6 | 5 | 5 | 4 | 4 | | 82.6 | |
| 27-Jan-08 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 16 | 5 | 8 | 12 | 9 | 12 | 6 | 6 | 6 | 5 | 6 | | 15.5 |
| 28-Jan-08 | 6 | 10 | 13 | 13 | 16 | 9 | 7 | 10 | 10 | 11 | 8 | 11 | 33 | 36 | 8 | 45 | 19 | 39 | 15 | 28 | 77 | 12 | 8 | 15 | | 77.2 | |
| 29-Jan-08 | 17 | 11 | 18 | 19 | 17 | 20 | 20 | 16 | 22 | 66 | 31 | 64 | 12 | 46 | 12 | 18 | 83 | 37 | 54 | 40 | 13 | 11 | 15 | 26 | | 83.5 | |
| 30-Jan-08 | 31 | 17 | 15 | 30 | 14 | 20 | 32 | 16 | 66 | 14 | 26 | 26 | 31 | 23 | 15 | 12 | 14 | 14 | 20 | 23 | 19 | 14 | 21 | 19 | | 65.9 | |
| 31-Jan-08 | 16 | 22 | 31 | 38 | 9 | 15 | 11 | 25 | 33 | 31 | 40 | 30 | 30 | 33 | 26 | 26 | 24 | 22 | 19 | 57 | 27 | 32 | 19 | 22 | | 56.8 | |
| Hourly Max | 92 | 83 | 81 | 76 | 90 | 79 | 77 | 82 | 83 | 73 | 82 | 70 | 74 | 63 | 84 | 70 | 85 | 90 | 77 | 90 | 77 | 92 | 83 | 84 | | | |

1-hr Average Wind Rose (in km/hr) Located at the Henry Pirker Site for January 2008



Calms: 0%

| Frequency Distribution of Wind in km/hr | | | |
|---|----|----|-----------------|
| Range | | | Frequency (hrs) |
| 0.8 | < | 5 | 421 |
| 5 | to | 10 | 192 |
| 10 | to | 20 | 99 |
| 20 | to | 30 | 32 |
| 30 | to | 40 | 0 |
| | > | 40 | 0 |
| Total Non-Zero Values | | | 744 |

PASZA
Evergreen Park Station
Monthly Summary Tables, Graphs and
Roses

PASZA - Evergreen Park Sulphur Dioxide Monthly Summary

Station: Evergreen Park
 Station Owner: PASZA

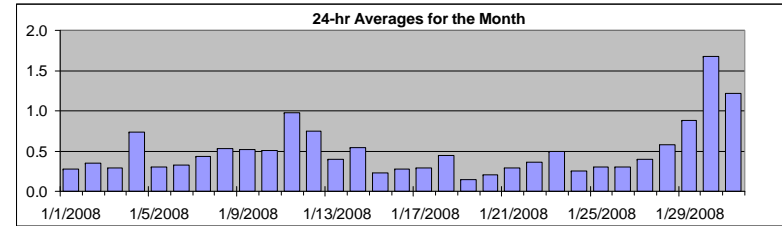
HOURLY AVERAGE TABLE

Sulphur Dioxide (SO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: Alberta Environment: 1-hr 172 ppb 24-hr 57 ppb

| | | | | |
|------------------------------|-----|-----|--------|-------------|
| Number of 1-hr Exceedances: | 0 | | | |
| Number of 24-hr Exceedances: | 0 | | | |
| Maximum 1-hr Average: | 3.0 | ppb | 30-Jan | 19:00 20:00 |
| Maximum 24-hr Average: | 1.7 | ppb | 30-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 32 hrs | Operational Time: | 709 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 99.9% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 2.1 | 1.5 | 0.6 | 0.3 | 0.2 | 0.1 | 0.0 | 0.5 ppb | 0.3 ppb |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|-----------------|---------------|-----|
| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | | | |
| 1-Jan-08 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.6 |
| 2-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | A | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.8 |
| 3-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.9 | |
| 4-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | A | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0.7 | 2.1 | |
| 5-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.5 | |
| 6-Jan-08 | 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 | |
| 7-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0.4 | 0.8 | |
| 8-Jan-08 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.2 | |
| 9-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0.5 | 1.2 | |
| 10-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0.5 | 1.0 | |
| 11-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1.0 | 1.7 | |
| 12-Jan-08 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0.8 | 1.3 | |
| 13-Jan-08 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0.4 | 1.0 | |
| 14-Jan-08 | 1 | A | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.3 | |
| 15-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | C | C | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1.0 | |
| 16-Jan-08 | 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 | |
| 17-Jan-08 | 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 | |
| 18-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.8 | |
| 19-Jan-08 | 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 | |
| 20-Jan-08 | 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 | 0.3 | |
| 21-Jan-08 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.5 | |
| 22-Jan-08 | 0 | Z | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0.4 | 0.6 | |
| 23-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0.5 | 1.4 | |
| 24-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.6 | |
| 25-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.6 | |
| 26-Jan-08 | 0 | 0 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.7 | |
| 27-Jan-08 | 0 | 0 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0.4 | 0.6 | |
| 28-Jan-08 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 1.8 | |
| 29-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | A | 0.9 | 2.1 | |
| 30-Jan-08 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | A | 1 | 1.7 | 3.0 | |
| 31-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | A | 1 | 1 | 1.2 | 2.3 | |
| Hourly Avg | 0.3 | 0.3 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | | | | |
| Hourly Max | 1.1 | 1.1 | 1.5 | 1.5 | 1.4 | 1.0 | 1.5 | 1.4 | 1.4 | 1.4 | 1.7 | 2.1 | 2.3 | 2.1 | 2.2 | 2.3 | 2.1 | 2.0 | 1.8 | 2.4 | 3.0 | 2.7 | 1.9 | 1.7 | 1.4 | | |

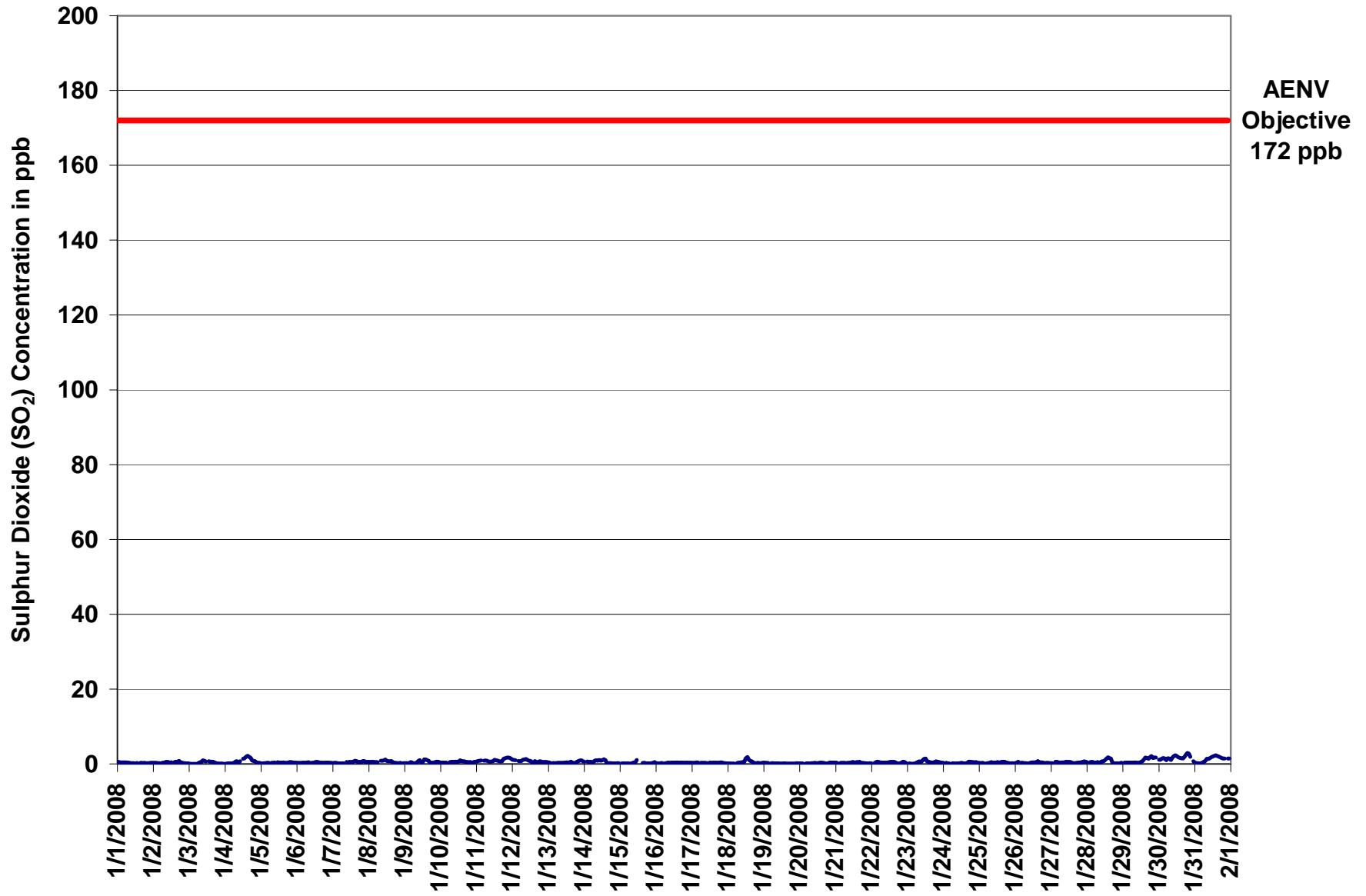


Figure 20. PASZA - Evergreen Park Sulphur Dioxide 1-hr Average Monthly Trend

Station: Evergreen Park
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

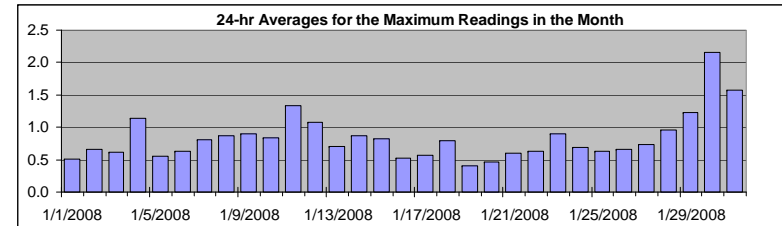
Sulphur Dioxide (SO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-----|-----|--------|-------------|
| Maximum 1-hr Value: | 7.3 | ppb | 15-Jan | 11:00 12:00 |
| Maximum 24-hr Value: | 2.2 | ppb | 30-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 33 hrs | Operational Time: | 709 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 2.7 | 1.9 | 1.0 | 0.7 | 0.5 | 0.3 | 0.2 | 0.8 ppb | 0.7 ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | A | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0.5 | 1.1 |
| 2-Jan-08 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0.7 | 1.2 |
| 3-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0.6 | 1.3 |
| 4-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | A | 2 | 2 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1.1 | 2.7 |
| 5-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1.0 |
| 6-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.9 |
| 7-Jan-08 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 2.0 |
| 8-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0.9 | 1.4 |
| 9-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.7 |
| 10-Jan-08 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0.8 | 1.7 |
| 11-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1.3 | 1.9 |
| 12-Jan-08 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.1 | 1.6 |
| 13-Jan-08 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.4 |
| 14-Jan-08 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.9 | 1.9 |
| 15-Jan-08 | A | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 7 | C | C | A | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0.8 | 7.3 |
| 16-Jan-08 | 1 | 0 | 0 | 1 | 0 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0.5 | 0.8 |
| 17-Jan-08 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0.6 | 0.9 |
| 18-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0.8 | 3.0 |
| 19-Jan-08 | 1 | 1 | 1 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.6 |
| 20-Jan-08 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0.5 | 0.7 |
| 21-Jan-08 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0.6 | 1.1 |
| 22-Jan-08 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0.6 | 0.9 |
| 23-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 2.0 |
| 24-Jan-08 | 1 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 1 | 0.7 | 4.4 |
| 25-Jan-08 | 0 | 0 | 1 | 0 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0.6 | 1.3 |
| 26-Jan-08 | 0 | 1 | 1 | A | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0.7 | 1.3 |
| 27-Jan-08 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.3 |
| 28-Jan-08 | 1 | A | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 1.0 | 2.2 |
| 29-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | A | 1.2 | 2.5 |
| 30-Jan-08 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | A | 1 | 2.2 | 3.6 |
| 31-Jan-08 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | A | 2 | 2 | 1.6 | 2.5 |
| Hourly Avg | 0.6 | 0.6 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 | 0.8 | 0.9 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 0.9 | 0.8 | 0.9 | 0.8 | 0.8 | 0.9 | 0.7 | | |
| Hourly Max | 1.8 | 1.3 | 2.1 | 1.9 | 1.9 | 1.6 | 1.9 | 2.0 | 2.1 | 2.2 | 2.5 | 7.3 | 3.0 | 2.4 | 2.7 | 2.6 | 2.6 | 2.7 | 3.0 | 3.5 | 3.6 | 2.4 | 4.4 | 1.8 | | |

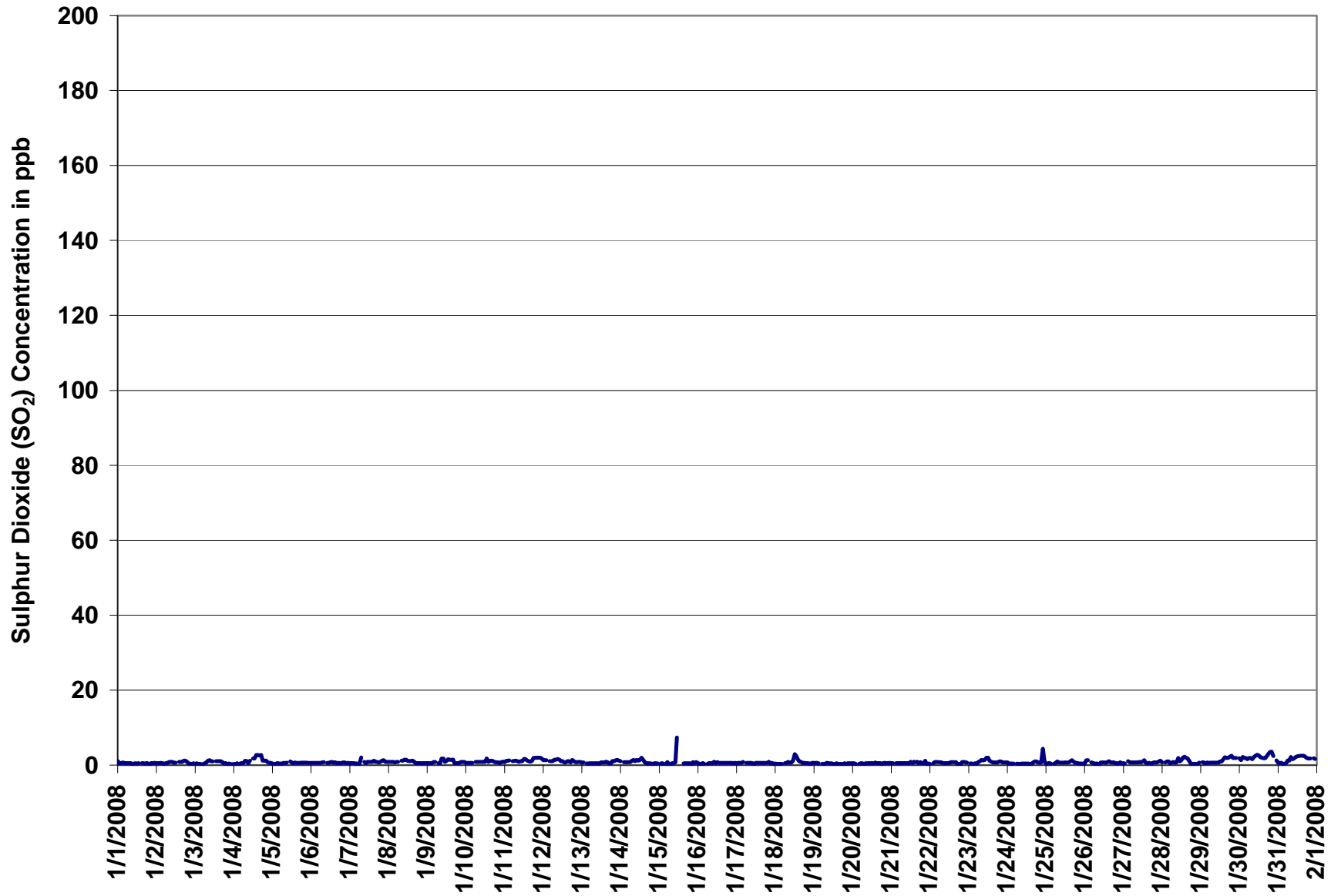
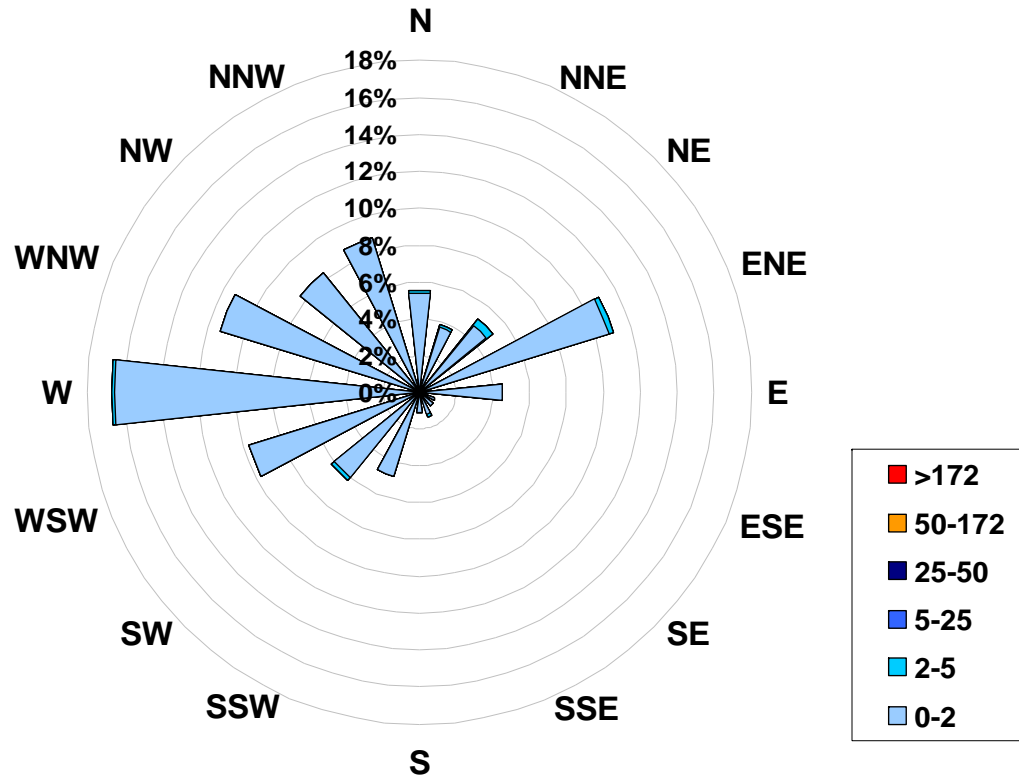


Figure 21. PASZA - Evergreen Park Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Evergreen Park Site for January 2008



Calms: 0%

| Frequency Distribution of SO ₂ in ppb | | | Frequency (hrs) |
|--|--------|--|-----------------|
| Range | | | |
| 0.0 | < 2 | | 698 |
| 2 | to 5 | | 11 |
| 5 | to 25 | | 0 |
| 25 | to 50 | | 0 |
| 50 | to 172 | | 0 |
| | > 172 | | 0 |
| Total Non-Zero Values | | | 709 |

PASZA - Evergreen Park Total Reduced Sulphur Monthly Summary

Station: Evergreen Park
 Station Owner: PASZA

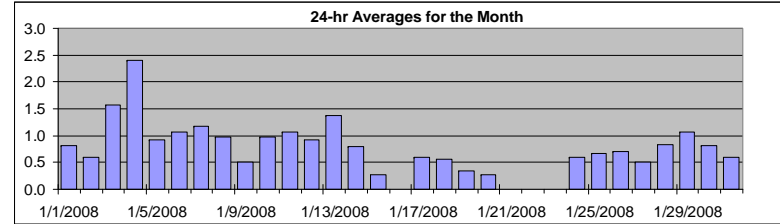
HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | | |
|-----------------------|------|-----|-------|-------------|
| Maximum 1-hr Average: | 10.0 | ppb | 4-Jan | 12:00 13:00 |
| Maximum 24-hr Value: | 2.4 | ppb | 4-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 34 hrs | Operational Time: | 629 hrs | | | | | | |
| Calibration Time: | 10 hrs | AMD Operational Uptime: | 90.5% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 3.1 | 1.8 | 1.0 | 0.7 | 0.5 | 0.2 | 0.0 | 0.8 ppb | 0.7 ppb |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum |
|------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|---------------|
| | Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | | |
| 1-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0.8 | 1.3 |
| 2-Jan-08 | D | D | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0.6 | 1.4 |
| 3-Jan-08 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 2 | 3 | A | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1.6 | 3.2 | |
| 4-Jan-08 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | A | 10 | 5 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 2.4 | 10.0 | |
| 5-Jan-08 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0.9 | 1.6 | |
| 6-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1.1 | 1.6 | |
| 7-Jan-08 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.2 | 1.6 | |
| 8-Jan-08 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | D | 1.0 | 1.6 | |
| 9-Jan-08 | 0 | 0 | 1 | 0 | 0 | 1 | A | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0.5 | 1.6 |
| 10-Jan-08 | 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 | 1.2 | |
| 11-Jan-08 | 2 | 2 | 2 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1.1 | 2.1 | |
| 12-Jan-08 | 1 | 1 | 1 | A | 1 | 0 | D | 0 | 3 | 3 | 2 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0.9 | 2.8 | |
| 13-Jan-08 | D | D | A | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1.4 | 3.3 | |
| 14-Jan-08 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.8 | 1.6 | |
| 15-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | C | C | C | C | A | 0 | 0 | 0 | 0 | 0.3 | 0.6 | |
| 16-Jan-08 | 1 | 1 | 0 | 1 | 0 | A | 0 | 0 | 0 | 0 | C | C | C | C | C | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | N | 0.9 | |
| 17-Jan-08 | 1 | 0 | 0 | 1 | 1 | A | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0.6 | 0.9 | |
| 18-Jan-08 | D | 1 | 1 | 0 | 1 | A | D | D | D | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0.6 | 0.9 | |
| 19-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.3 | 0.6 | |
| 20-Jan-08 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.9 | |
| 21-Jan-08 | 0 | 0 | A | 0 | 1 | 1 | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | N | 0.6 | |
| 22-Jan-08 | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | N | 0.0 | |
| 23-Jan-08 | A | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | C | M | M | A | 1 | 1 | N | 1.1 | |
| 24-Jan-08 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.9 | |
| 25-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0.7 | 1.0 | |
| 26-Jan-08 | 1 | 1 | 2 | A | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0.7 | 2.1 | |
| 27-Jan-08 | 0 | 0 | A | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0.5 | 0.7 | |
| 28-Jan-08 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0.8 | 1.6 | |
| 29-Jan-08 | A | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1.1 | 1.6 | |
| 30-Jan-08 | 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 | 1.2 | |
| 31-Jan-08 | 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 | 0.9 | |
| Hourly Avg | 0.8 | 0.8 | 0.9 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 | 1.0 | 0.9 | 0.9 | 0.9 | 1.2 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | | |
| Hourly Max | 1.8 | 2.1 | 2.1 | 1.7 | 2.1 | 1.8 | 2.3 | 2.9 | 3.2 | 2.7 | 2.5 | 3.3 | 10.0 | 4.7 | 4.3 | 3.3 | 2.8 | 1.8 | 1.6 | 1.6 | 1.5 | 1.5 | 1.6 | 1.6 | | |

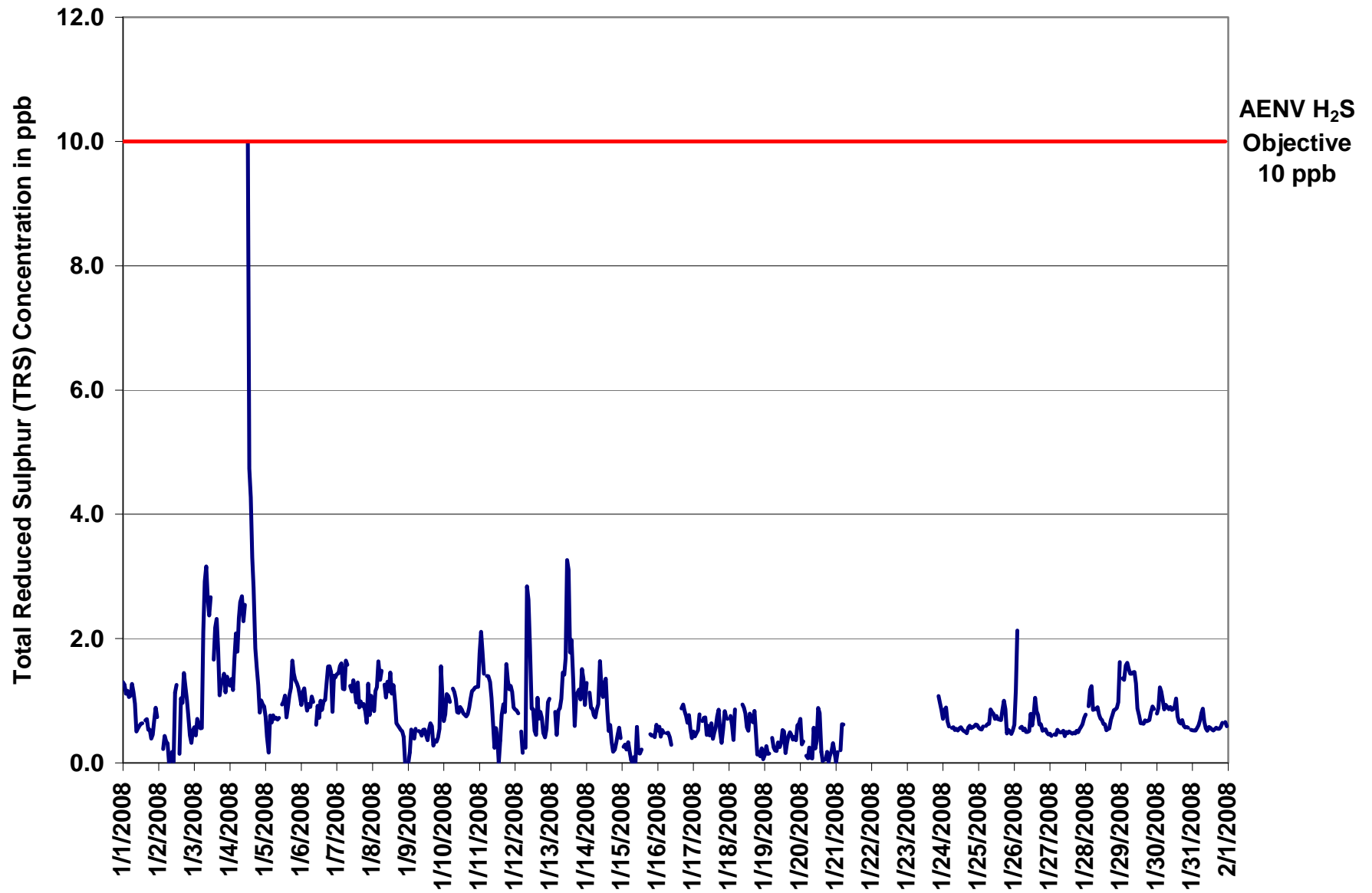


Figure 22. PASZA - Evergreen Park Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Evergreen Park
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

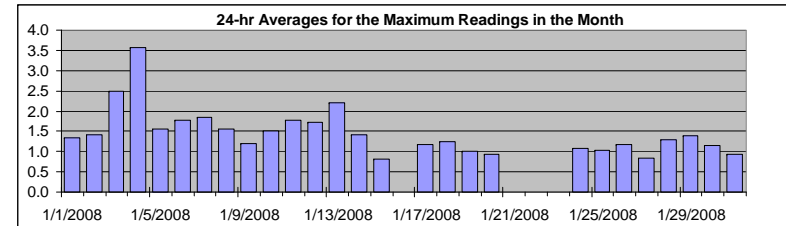
Total Reduced Sulphur (TRS)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|------|-----|-------|-------------|
| Maximum 1-hr Value: | 15.3 | ppb | 4-Jan | 12:00 13:00 |
| Maximum 24-hr Value: | 3.6 | ppb | 4-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 33 hrs | Operational Time: | 629 hrs | | | | | | |
| Calibration Time: | 10 hrs | AMD Operational Uptime: | 90.3% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 4.2 | 2.8 | 1.7 | 1.3 | 1.0 | 0.8 | 0.6 | 1.5 ppb | 1.3 ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum | |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|-----|
| 1-Jan-08 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1.3 | 1.9 | |
| 2-Jan-08 | D | D | D | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | A | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1.4 | 2.5 | |
| 3-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | A | 3 | 3 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2.5 | 4.4 | |
| 4-Jan-08 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | A | 15 | 8 | 5 | 4 | 4 | 3 | 2 | 2 | 1 | 2 | 2 | 1 | 3.6 | 15.3 | |
| 5-Jan-08 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | A | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1.6 | 2.2 | |
| 6-Jan-08 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | A | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1.8 | 3.4 | |
| 7-Jan-08 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | A | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1.8 | 2.5 | |
| 8-Jan-08 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | A | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | D | 1.6 | 2.1 | |
| 9-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 3 | 1.2 | 4.2 | |
| 10-Jan-08 | 1 | 2 | 2 | 2 | 1 | A | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1.5 | 1.8 | |
| 11-Jan-08 | 3 | 3 | 2 | 2 | A | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1.8 | 3.0 | |
| 12-Jan-08 | 1 | 2 | 1 | A | 1 | 1 | D | 2 | 4 | 3 | 3 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1.7 | 3.6 | |
| 13-Jan-08 | D | D | A | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 6 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 2.2 | 5.8 | |
| 14-Jan-08 | 2 | A | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.4 | 2.2 | |
| 15-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | C | C | C | C | A | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.3 | |
| 16-Jan-08 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | C | C | C | C | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | N | 1.5 | |
| 17-Jan-08 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.2 | 1.5 | |
| 18-Jan-08 | D | 1 | 1 | 1 | 2 | A | D | D | D | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.3 | 1.9 | |
| 19-Jan-08 | 1 | 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 | 1.4 | |
| 20-Jan-08 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.4 | |
| 21-Jan-08 | 0 | 1 | A | 1 | 1 | 1 | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | N | 1.4 | |
| 22-Jan-08 | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | N | 0.0 |
| 23-Jan-08 | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | D | C | M | M | A | 1 | 1 | 1 | N | 1.4 | |
| 24-Jan-08 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 1 | 1.1 | 4.0 | |
| 25-Jan-08 | 1 | 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 | 1.4 | |
| 26-Jan-08 | 1 | 2 | 4 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.2 | 3.5 | |
| 27-Jan-08 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.2 | |
| 28-Jan-08 | 1 | A | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1.3 | 2.4 | |
| 29-Jan-08 | A | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1.4 | 2.0 | |
| 30-Jan-08 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1.2 | 1.7 | |
| 31-Jan-08 | 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 | 1.3 | |
| Hourly Avg | 1.3 | 1.4 | 1.5 | 1.4 | 1.3 | 1.3 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.9 | 1.6 | 1.5 | 1.5 | 1.5 | 1.3 | 1.3 | 1.3 | 1.3 | 1.4 | 1.6 | 1.4 | | | |
| Hourly Max | 2.8 | 3.0 | 3.5 | 2.6 | 2.7 | 2.5 | 4.1 | 3.7 | 4.4 | 4.2 | 3.7 | 5.8 | 15.3 | 8.5 | 5.2 | 4.0 | 3.8 | 2.9 | 2.3 | 2.1 | 3.4 | 2.7 | 4.2 | 3.1 | | | |

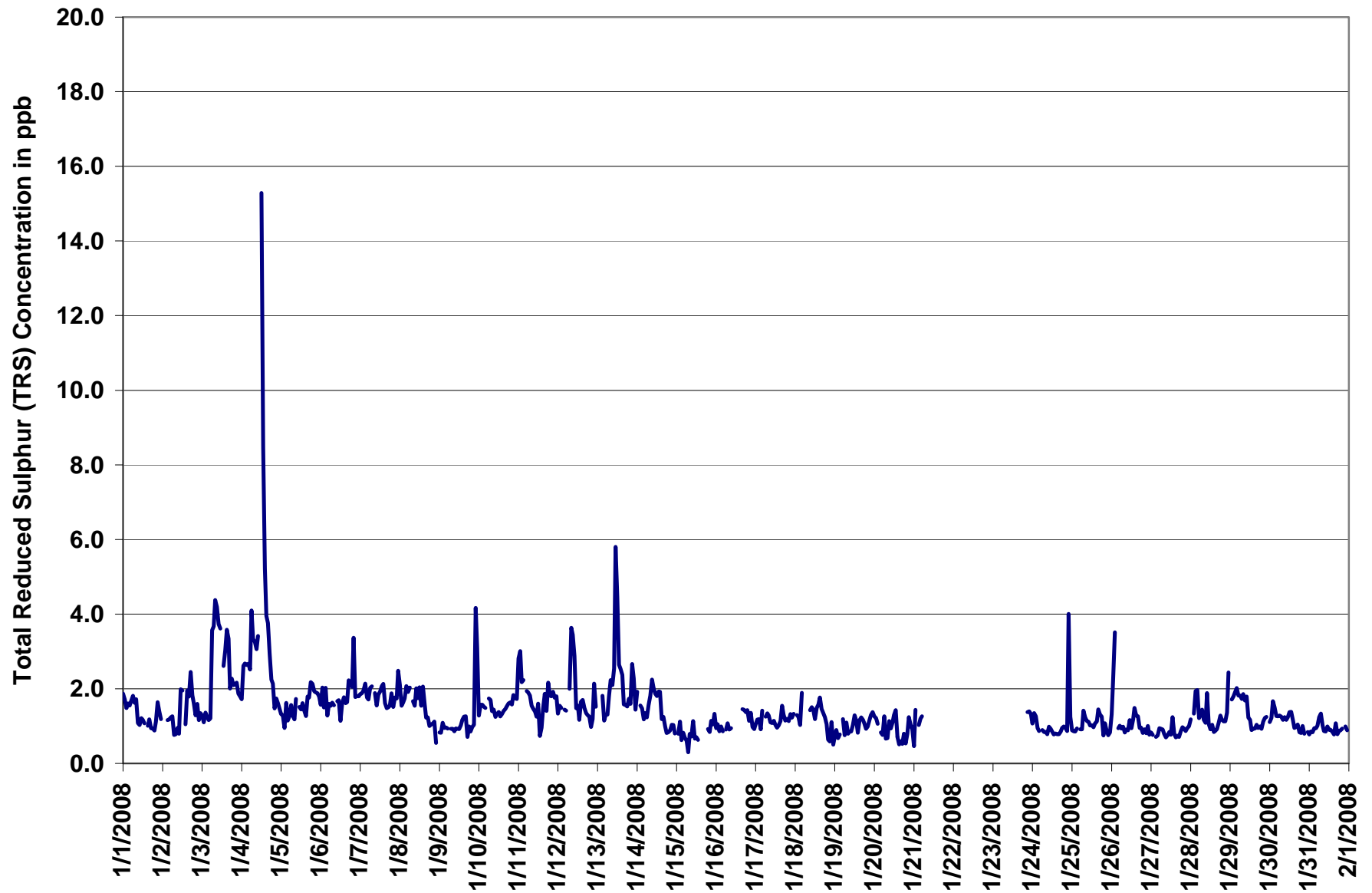
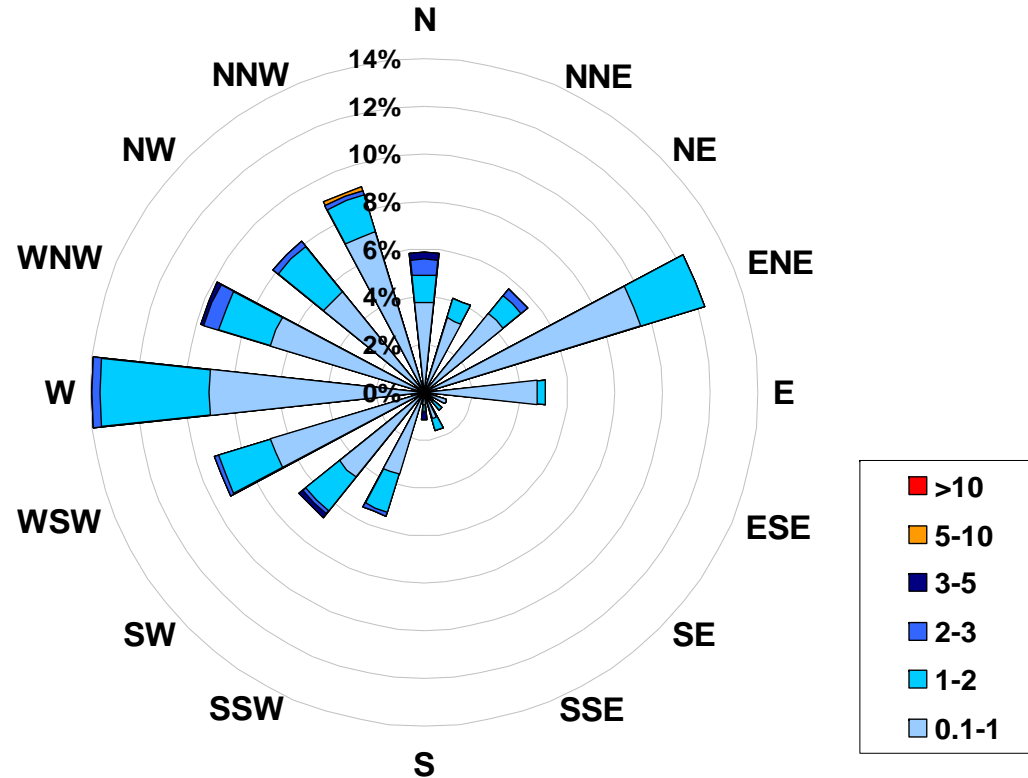


Figure 23. PASZA - Evergreen Park Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)
Located at the Evergreen Park Site for January 2008**



Calms: 0%

| Frequency Distribution of TRS in ppb | | | |
|--------------------------------------|----|----|-----------------|
| Range | | | Frequency (hrs) |
| 0.1 | < | 1 | 457 |
| 1 | to | 2 | 147 |
| 2 | to | 3 | 18 |
| 3 | to | 5 | 6 |
| 5 | to | 10 | 1 |
| | > | 10 | 0 |
| Total Non-Zero Values | | | 629 |

PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) Monthly Summary

Station: Evergreen Park
 Station Owner: PASZA

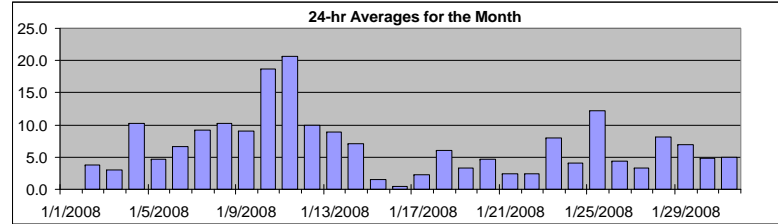
HOURLY AVERAGE TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | |
|--------------------------------------|---|
| Number of 24-hr Exceedances (draft): | 0 |
| Maximum 1-hr Average: | 49.9 µg/m ³ 10-Jan 13:00 14:00 |
| Maximum 24-hr Value: | 20.7 µg/m ³ 11-Jan |



| | | | |
|-------------------|-------------------|-------------------------|-----------------------|
| AIC Time: | 0 hrs | Operational Time: | 729 hrs |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 98.3% |
| Percentile | 99 | 95 | 75 |
| | 28.0 | 19.7 | 8.4 |
| | 5.1 | 2.7 | 0.0 |
| | 5 | 1 | 0.0 |
| | Average / Median | | 6.7 |
| | µg/m ³ | | 5 µg/m ³ |
| | Geomean | | 5.3 µg/m ³ |

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum |
|------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|---------------|
| | Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | | |
| 1-Jan-08 | 6 | 6 | 5 | 5 | 2 | 2 | 3 | 3 | 4 | 3 | 2 | 1 | D | 0 | D | D | D | D | D | D | D | 0 | 1 | 2 | N | 5.8 |
| 2-Jan-08 | 2 | 3 | 1 | 3 | 3 | 2 | 3 | 3 | 4 | 7 | 8 | 3 | 5 | 6 | 6 | 7 | 7 | 8 | 5 | 6 | 0 | 0 | 0 | 0 | 3.8 | 7.8 |
| 3-Jan-08 | D | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 6 | 9 | 8 | 11 | 11 | 7 | 3 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 10.9 |
| 4-Jan-08 | 0 | 1 | 4 | 5 | 6 | 7 | 8 | 9 | 7 | 6 | 14 | 20 | 13 | 28 | 32 | 29 | 23 | 12 | 4 | 4 | 1 | 0 | D | 0 | 10.2 | 32.1 |
| 5-Jan-08 | 1 | 1 | 1 | 2 | 3 | 4 | 3 | 5 | 4 | 7 | 8 | 10 | 2 | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 6 | 6 | 6 | 5 | 4.7 | 10.4 |
| 6-Jan-08 | 6 | 7 | 9 | 11 | 10 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 2 | 6 | 6 | 6 | 7 | 7 | 6 | 7 | 8 | 4 | 3 | 4 | 6.7 | 10.9 |
| 7-Jan-08 | 4 | 4 | 4 | 3 | 3 | 4 | 5 | 6 | 11 | 15 | 16 | 21 | 11 | 12 | 9 | 13 | 15 | 12 | 11 | 11 | 11 | 8 | 6 | 6 | 9.2 | 20.8 |
| 8-Jan-08 | 6 | 5 | 7 | 7 | 4 | 6 | 6 | 11 | 12 | 12 | 17 | 22 | 13 | 20 | 19 | 19 | 17 | 10 | 6 | 4 | 5 | 5 | 6 | 8 | 10.3 | 21.9 |
| 9-Jan-08 | 8 | 8 | 9 | 9 | 8 | 7 | 7 | 6 | 6 | 8 | 9 | 7 | 7 | 9 | 11 | 13 | 12 | 10 | 10 | 10 | 11 | 14 | 11 | 8 | 9.0 | 13.7 |
| 10-Jan-08 | 8 | 7 | 8 | 6 | 7 | 8 | 11 | 12 | 12 | 16 | 16 | 15 | 15 | 50 | 29 | 35 | 37 | 30 | 27 | 24 | 20 | 18 | 19 | 19 | 18.7 | 49.9 |
| 11-Jan-08 | 21 | 26 | 27 | 27 | 25 | 26 | 25 | 21 | 17 | 18 | 17 | 21 | 20 | 15 | 20 | 16 | 16 | 16 | 23 | 22 | 22 | 21 | 19 | 16 | 20.7 | 27.4 |
| 12-Jan-08 | 15 | 14 | 13 | 11 | 8 | 8 | 9 | 13 | 14 | 14 | 14 | 14 | 8 | 6 | 4 | 11 | 8 | 7 | 9 | 9 | 7 | 7 | 8 | 9 | 10.0 | 14.8 |
| 13-Jan-08 | 7 | 7 | 7 | 6 | 6 | 7 | 8 | 8 | 10 | 8 | 10 | 14 | 17 | 10 | 11 | 10 | 8 | 8 | 6 | 7 | 9 | 11 | 9 | 7 | 8.8 | 17.4 |
| 14-Jan-08 | 6 | 5 | 7 | 4 | 5 | 6 | 4 | 8 | 11 | 10 | 13 | 10 | 13 | 22 | 15 | 3 | D | D | D | 0 | 0 | 0 | 9 | 0 | 7.2 | 22.4 |
| 15-Jan-08 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 2 | 5 | 5 | C | C | 4 | 4 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 1.6 | 5.3 |
| 16-Jan-08 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 0.5 | 2.2 |
| 17-Jan-08 | 1 | 2 | 5 | 5 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 3 | 1 | 2 | 4 | 6 | 2 | 1 | 1 | 2 | 3 | 1 | 2.3 | 6.1 |
| 18-Jan-08 | 1 | 0 | 1 | 2 | 6 | 5 | 2 | 4 | 6 | 7 | 12 | 12 | 10 | 10 | 16 | 15 | 13 | 4 | 3 | 3 | 4 | 2 | 1 | 2 | 6.0 | 15.7 |
| 19-Jan-08 | 2 | 1 | 2 | 1 | 0 | 1 | 2 | 2 | 3 | 5 | 5 | 6 | 6 | 5 | 5 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 5 | 5 | 3.3 | 5.6 |
| 20-Jan-08 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 7 | 7 | 7 | 8 | 6 | 3 | 3 | 3 | 5 | 4 | 3 | 1 | 3 | 4 | 2 | 5 | 4 | 4.6 | 8.3 |
| 21-Jan-08 | 5 | 5 | 5 | 4 | 5 | 5 | 3 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 4 | 8 | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 1 | 2.5 | 8.5 |
| 22-Jan-08 | 1 | 4 | 3 | 4 | 3 | 3 | 2 | 1 | 3 | 4 | 3 | 2 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 4 | 7 | 6 | 4 | 2.5 | 7.3 |
| 23-Jan-08 | 4 | 5 | 4 | 6 | 10 | 9 | 8 | 7 | 11 | 10 | 18 | 27 | 22 | 5 | 2 | 1 | 4 | 7 | 4 | 8 | 7 | 6 | 5 | 4 | 8.0 | 27.2 |
| 24-Jan-08 | 5 | 17 | 26 | 7 | 2 | 1 | 1 | 0 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 9 | 4.1 | 25.6 |
| 25-Jan-08 | 12 | 13 | 11 | 13 | 13 | 12 | 12 | 13 | 16 | 21 | 23 | 23 | 20 | 14 | 13 | 14 | 17 | 17 | 13 | 0 | 0 | 0 | 1 | 2 | 12.2 | 23.1 |
| 26-Jan-08 | 2 | 7 | 10 | 7 | 6 | 3 | 2 | 2 | 2 | 1 | 2 | 4 | 3 | 4 | 7 | 8 | 7 | 4 | 3 | 4 | 4 | 4 | 5 | 4 | 4.4 | 9.7 |
| 27-Jan-08 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 3.3 | 4.1 |
| 28-Jan-08 | 4 | 5 | 4 | 5 | 5 | 5 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 6 | 4 | 3 | 4 | 14 | 15 | 15 | 16 | 15 | 16 | 15 | 8.1 | 16.2 |
| 29-Jan-08 | 10 | 7 | 8 | 6 | 6 | 5 | 6 | 7 | 7 | 9 | 7 | 5 | 6 | 6 | 4 | 5 | 6 | 7 | 5 | 6 | 8 | 12 | 9 | 9 | 6.9 | 11.6 |
| 30-Jan-08 | 8 | 9 | 7 | 6 | 5 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 4.8 | 8.6 |
| 31-Jan-08 | 2 | 3 | 4 | 4 | 4 | 5 | 7 | 8 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 6 | 5 | 6 | 6 | 5 | 5 | 5 | 4.9 | 7.8 |
| Hourly Avg | 5.2 | 5.9 | 6.4 | 5.9 | 5.4 | 5.3 | 5.5 | 6.0 | 6.6 | 7.4 | 8.7 | 9.2 | 7.6 | 8.9 | 8.2 | 8.5 | 8.4 | 7.3 | 6.3 | 5.8 | 5.6 | 5.2 | 5.6 | 5.1 | | |
| Hourly Max | 20.8 | 26.1 | 26.5 | 27.4 | 25.1 | 26.4 | 24.9 | 21.4 | 17.2 | 20.9 | 22.8 | 27.2 | 21.5 | 49.9 | 32.1 | 34.9 | 37.2 | 30.0 | 26.7 | 23.7 | 21.7 | 21.0 | 19.5 | 18.9 | | |

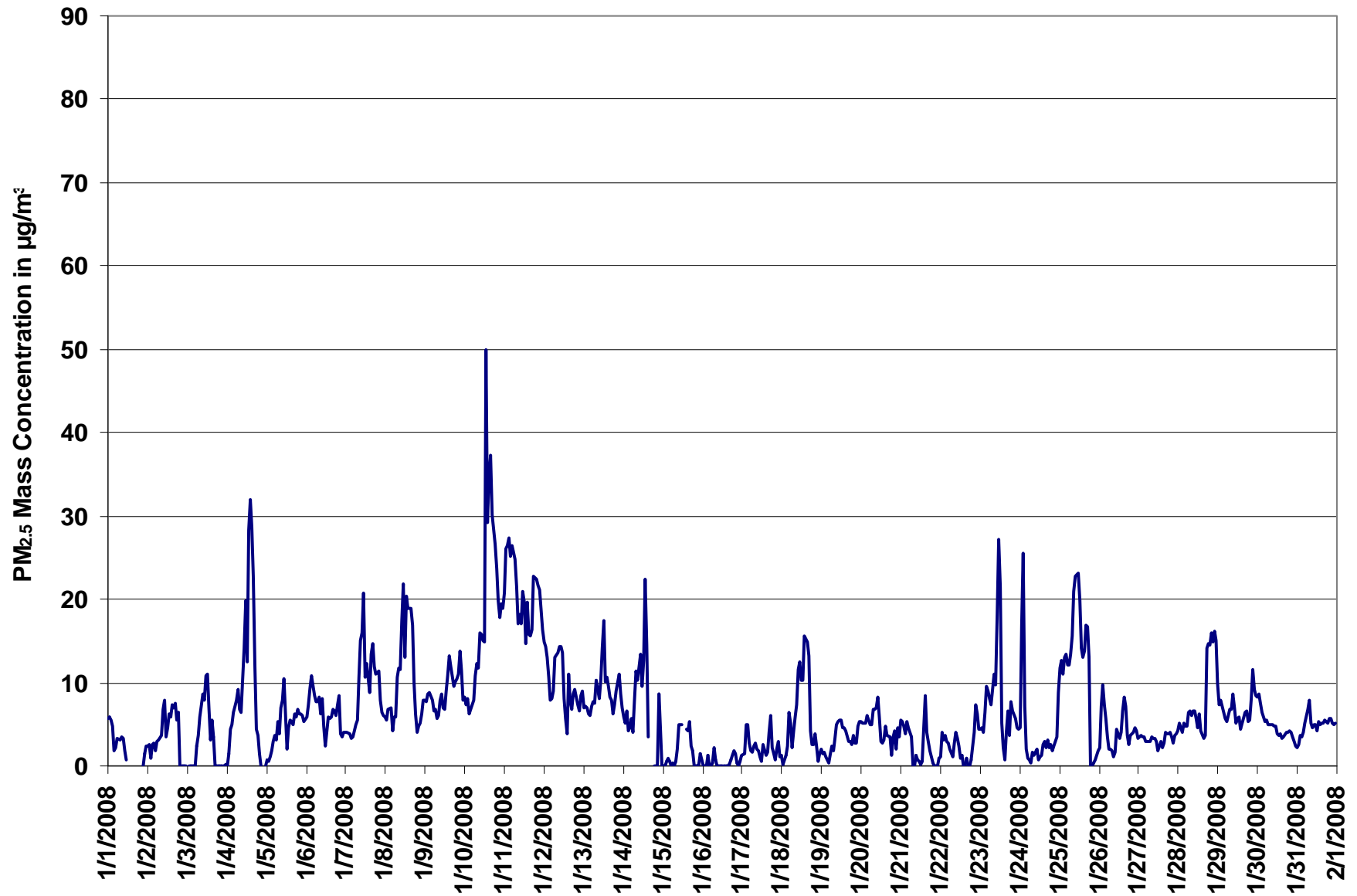


Figure 24. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Evergreen Park
 Station Owner: PASZA

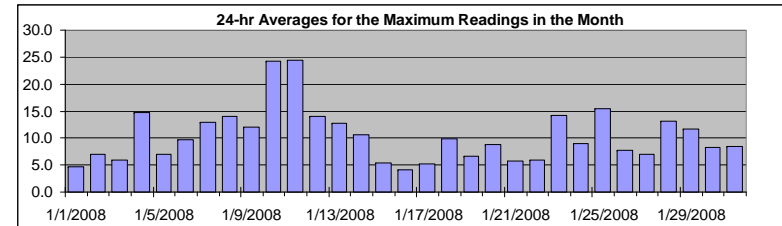
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|-------------------|--------|-------------|
| Maximum 1-hr Average: | 83.2 | µg/m ³ | 10-Jan | 13:00 14:00 |
| Maximum 24-hr Value: | 24.4 | µg/m ³ | 11-Jan | |



| | | | | | | | | | |
|-------------------|-------|-------------------------|---------|-----|-----|-----|-----|------------------|-----------------------|
| AIC Time: | 0 hrs | Operational Time: | 741 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 99.9% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average / Median | Geomean |
| | 37.5 | 25.3 | 12.4 | 8.7 | 5.9 | 2.0 | 0.0 | 10.4 | 9.3 µg/m ³ |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 9 | 11 | 10 | 15 | 6 | 7 | 7 | 6 | 6 | 6 | 5 | 3 | 0 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 6 | 4.7 | 14.6 | |
| 2-Jan-08 | 5 | 7 | 5 | 5 | 5 | 4 | 5 | 5 | 6 | 9 | 11 | 10 | 7 | 9 | 9 | 11 | 10 | 11 | 11 | 18 | 0 | 1 | 0 | 4 | 7.0 | 17.9 |
| 3-Jan-08 | 0 | 1 | 2 | 1 | 3 | 2 | 6 | 6 | 10 | 11 | 12 | 21 | 20 | 10 | 7 | 8 | 7 | 3 | 2 | 0 | 1 | 3 | 3 | 4 | 6.0 | 20.7 |
| 4-Jan-08 | 1 | 6 | 6 | 8 | 9 | 9 | 10 | 11 | 10 | 12 | 21 | 27 | 28 | 36 | 41 | 34 | 26 | 25 | 10 | 6 | 4 | 6 | 1 | 5 | 14.6 | 40.6 |
| 5-Jan-08 | 3 | 2 | 3 | 4 | 6 | 6 | 5 | 8 | 8 | 10 | 10 | 13 | 6 | 6 | 7 | 8 | 6 | 8 | 8 | 9 | 9 | 8 | 8 | 7 | 7.0 | 12.8 |
| 6-Jan-08 | 9 | 9 | 12 | 13 | 12 | 11 | 11 | 10 | 10 | 11 | 11 | 7 | 6 | 14 | 14 | 8 | 9 | 10 | 8 | 10 | 11 | 7 | 5 | 6 | 9.8 | 14.0 |
| 7-Jan-08 | 6 | 7 | 6 | 6 | 6 | 7 | 8 | 15 | 15 | 20 | 25 | 25 | 14 | 15 | 11 | 18 | 18 | 14 | 14 | 13 | 14 | 14 | 9 | 10 | 12.9 | 24.6 |
| 8-Jan-08 | 9 | 10 | 11 | 10 | 8 | 10 | 13 | 13 | 15 | 15 | 25 | 25 | 16 | 24 | 22 | 24 | 22 | 13 | 10 | 7 | 7 | 8 | 9 | 11 | 14.0 | 25.5 |
| 9-Jan-08 | 10 | 11 | 12 | 11 | 12 | 9 | 9 | 8 | 10 | 11 | 12 | 10 | 12 | 12 | 17 | 16 | 14 | 12 | 13 | 13 | 13 | 16 | 14 | 11 | 12.0 | 16.5 |
| 10-Jan-08 | 10 | 10 | 10 | 8 | 9 | 11 | 13 | 16 | 15 | 23 | 19 | 19 | 25 | 83 | 36 | 44 | 46 | 36 | 33 | 28 | 24 | 20 | 22 | 22 | 24.3 | 83.2 |
| 11-Jan-08 | 24 | 30 | 30 | 31 | 27 | 29 | 28 | 25 | 19 | 23 | 19 | 24 | 26 | 18 | 22 | 24 | 19 | 21 | 26 | 27 | 27 | 23 | 22 | 19 | 24.4 | 30.5 |
| 12-Jan-08 | 17 | 17 | 16 | 14 | 11 | 10 | 13 | 16 | 16 | 19 | 17 | 20 | 12 | 10 | 21 | 22 | 11 | 11 | 10 | 12 | 9 | 10 | 12 | 13 | 14.1 | 21.6 |
| 13-Jan-08 | 11 | 10 | 10 | 9 | 9 | 10 | 11 | 11 | 13 | 12 | 17 | 20 | 23 | 25 | 13 | 13 | 10 | 11 | 10 | 11 | 12 | 15 | 12 | 10 | 12.8 | 25.3 |
| 14-Jan-08 | 9 | 7 | 9 | 7 | 6 | 9 | 6 | 10 | 16 | 14 | 19 | 12 | 17 | 33 | 26 | 7 | 2 | D | 0 | 2 | 1 | 2 | 27 | 0 | 10.5 | 33.2 |
| 15-Jan-08 | 1 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 4 | 6 | 14 | 22 | C | C | 7 | 6 | 10 | 8 | 10 | 2 | 4 | 3 | 3 | 4 | 5.4 | 21.7 |
| 16-Jan-08 | 5 | 3 | 4 | 11 | 2 | 2 | 5 | 7 | 4 | 3 | 3 | 7 | 5 | 2 | 1 | 4 | 4 | 4 | 4 | 6 | 4 | 4 | 3 | 3 | 4.1 | 10.9 |
| 17-Jan-08 | 5 | 4 | 7 | 8 | 5 | 6 | 4 | 5 | 6 | 4 | 5 | 3 | 4 | 5 | 4 | 3 | 9 | 9 | 6 | 4 | 5 | 5 | 7 | 4 | 5.2 | 9.1 |
| 18-Jan-08 | 4 | 4 | 5 | 8 | 11 | 11 | 6 | 8 | 10 | 12 | 15 | 15 | 15 | 15 | 19 | 19 | 19 | 9 | 6 | 7 | 7 | 6 | 3 | 5 | 9.9 | 19.3 |
| 19-Jan-08 | 5 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 7 | 8 | 8 | 9 | 9 | 8 | 8 | 7 | 6 | 6 | 6 | 7 | 7 | 6 | 9 | 10 | 6.7 | 10.0 |
| 20-Jan-08 | 10 | 11 | 10 | 11 | 11 | 10 | 9 | 11 | 11 | 12 | 13 | 10 | 8 | 6 | 7 | 8 | 6 | 7 | 5 | 6 | 8 | 7 | 8 | 7 | 8.8 | 13.0 |
| 21-Jan-08 | 8 | 8 | 8 | 7 | 9 | 9 | 9 | 3 | 3 | 5 | 4 | 4 | 1 | 2 | 9 | 14 | 6 | 6 | 7 | 3 | 2 | 3 | 2 | 4 | 5.7 | 13.6 |
| 22-Jan-08 | 9 | 8 | 6 | 7 | 7 | 6 | 6 | 5 | 8 | 7 | 7 | 5 | 3 | 4 | 4 | 2 | 4 | 0 | 4 | 6 | 7 | 10 | 9 | 8 | 5.9 | 10.3 |
| 23-Jan-08 | 9 | 8 | 9 | 11 | 15 | 14 | 12 | 11 | 21 | 15 | 41 | 42 | 30 | 14 | 6 | 2 | 11 | 13 | 7 | 13 | 11 | 9 | 8 | 8 | 14.2 | 41.7 |
| 24-Jan-08 | 9 | 42 | 38 | 15 | 6 | 3 | 4 | 3 | 8 | 5 | 4 | 4 | 3 | 5 | 6 | 6 | 5 | 5 | 4 | 5 | 4 | 6 | 13 | 14 | 9.1 | 42.4 |
| 25-Jan-08 | 19 | 18 | 14 | 16 | 15 | 15 | 14 | 16 | 19 | 26 | 25 | 26 | 23 | 17 | 16 | 16 | 20 | 20 | 18 | 3 | 0 | 5 | 4 | 5 | 15.5 | 26.0 |
| 26-Jan-08 | 5 | 11 | 14 | 10 | 8 | 7 | 5 | 5 | 6 | 3 | 4 | 8 | 5 | 8 | 14 | 14 | 9 | 10 | 7 | 6 | 7 | 7 | 8 | 7 | 7.8 | 14.0 |
| 27-Jan-08 | 7 | 7 | 6 | 7 | 7 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 5 | 9 | 6 | 6 | 8 | 7 | 8 | 8 | 8 | 7 | 7 | 8 | 6.9 | 8.6 |
| 28-Jan-08 | 9 | 10 | 9 | 10 | 10 | 10 | 11 | 11 | 10 | 11 | 10 | 10 | 8 | 12 | 11 | 8 | 7 | 23 | 20 | 19 | 21 | 20 | 24 | 23 | 13.1 | 23.6 |
| 29-Jan-08 | 17 | 13 | 13 | 12 | 12 | 11 | 11 | 13 | 12 | 14 | 11 | 10 | 11 | 11 | 8 | 8 | 10 | 11 | 9 | 9 | 15 | 16 | 13 | 12 | 11.6 | 17.0 |
| 30-Jan-08 | 12 | 12 | 11 | 10 | 11 | 9 | 9 | 8 | 8 | 9 | 8 | 7 | 7 | 7 | 8 | 8 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 6 | 8.2 | 12.5 |
| 31-Jan-08 | 5 | 7 | 8 | 7 | 7 | 9 | 12 | 11 | 8 | 8 | 8 | 9 | 8 | 9 | 8 | 8 | 9 | 10 | 9 | 8 | 9 | 8 | 8 | 9 | 8.4 | 12.1 |
| Hourly Avg | 8.5 | 10.0 | 10.1 | 9.6 | 8.7 | 8.6 | 8.9 | 9.4 | 10.4 | 11.4 | 13.3 | 13.9 | 11.9 | 14.6 | 12.6 | 12.1 | 11.3 | 11.0 | 9.4 | 8.8 | 8.3 | 8.4 | 9.1 | 8.5 | | |
| Hourly Max | 24.5 | 42.4 | 38.2 | 30.5 | 27.3 | 29.2 | 27.6 | 25.4 | 21.4 | 26.0 | 41.2 | 41.7 | 30.3 | 83.2 | 40.6 | 44.3 | 45.6 | 36.4 | 32.9 | 27.5 | 27.3 | 23.1 | 26.5 | 23.2 | | |

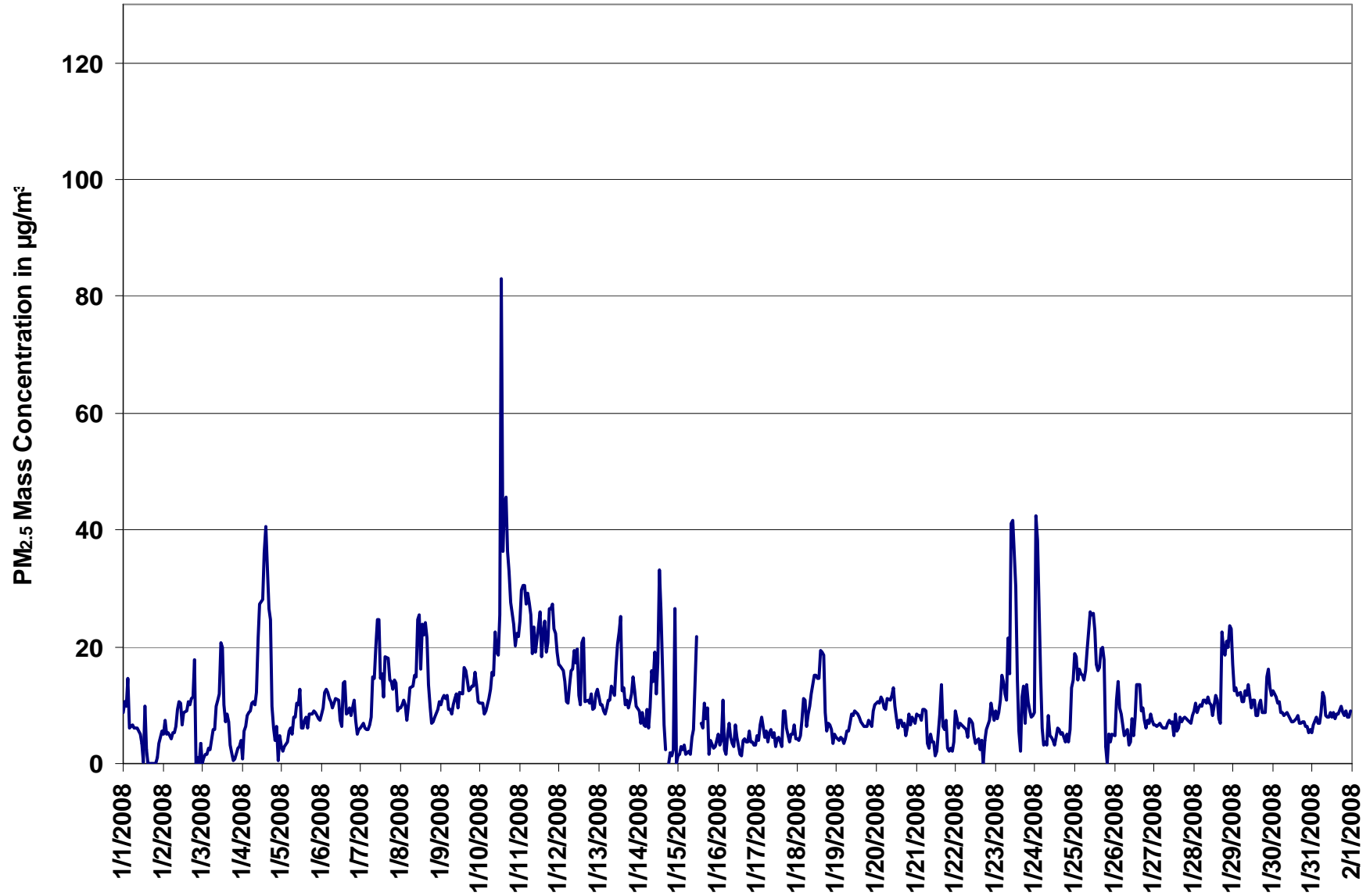
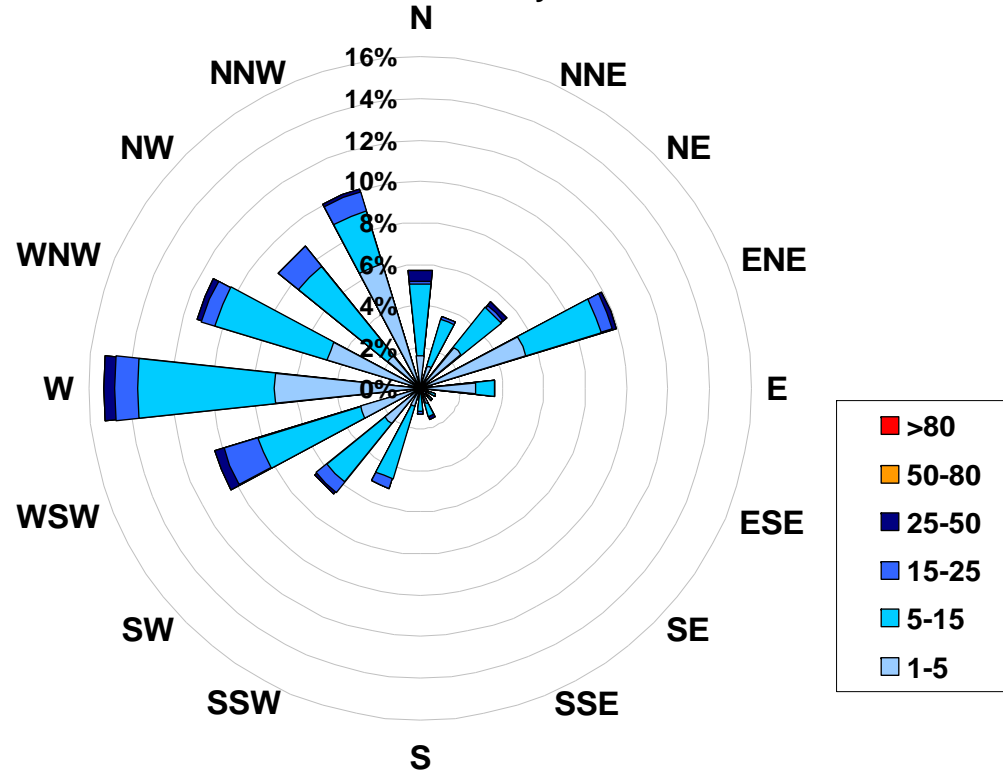


Figure 25. PASZA - Evergreen Park Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Evergreen Park Site for January 2008



Calms: 0%

| Frequency Distribution of PM _{2.5} in µg/m ³ | | | |
|--|----|----|-----------------|
| Range | | | Frequency (hrs) |
| 1.0 | < | 5 | 353 |
| 5 | to | 15 | 309 |
| 15 | to | 25 | 51 |
| 25 | to | 50 | 16 |
| 50 | to | 80 | 0 |
| | > | 80 | 0 |
| Total Non-Zero Values | | | 729 |

PASZA - Evergreen Park Temperature Monthly Summary

Station: Evergreen Park
 Station Owner: PASZA

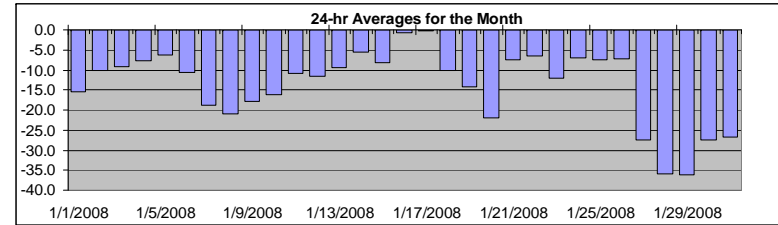
HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|----|--------|-------------|
| Maximum 1-hr Average: | 4.6 | °C | 16-Jan | 16:00 17:00 |
| Maximum 24-hr Value: | -0.3 | °C | 17-Jan | |



| | | | | | | | | | |
|-------------------|-------|-------------------------|---------|-------|-------|-------|-------|----------|----------|
| AIC Time: | 0 hrs | Operational Time: | 744 hrs | | | | | | |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 4.2 | -0.6 | -6.5 | -12.1 | -19.3 | -31.4 | -41.8 | -13.8 °C | -12.1 °C |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------|------------------------|----------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|-------|
| | Hour Start | Hour End | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 6:00 7:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | | | 21:00 |
| 1-Jan-08 | -25 | -25 | -25 | -24 | -23 | -23 | -23 | -21 | -20 | -18 | -17 | -15 | -12 | -10 | -9 | -8 | -8 | -8 | -8 | -7 | -7 | -7 | -11 | -13 | -15.4 | -7.4 | |
| 2-Jan-08 | -13 | -13 | -13 | -14 | -15 | -15 | -15 | -16 | -17 | -16 | -15 | -12 | -11 | -9 | -5 | -5 | -6 | -9 | -4 | -2 | -1 | -3 | -4 | -7 | -10.0 | -1.1 | |
| 3-Jan-08 | -9 | -11 | -13 | -14 | -14 | -14 | -14 | -15 | -15 | -15 | -13 | -11 | -8 | -6 | -5 | -5 | -6 | -6 | -6 | -5 | -4 | -4 | -4 | -4 | -9.2 | -3.6 | |
| 4-Jan-08 | -5 | -6 | -6 | -8 | -10 | -10 | -11 | -13 | -14 | -15 | -13 | -9 | -5 | -4 | -4 | -6 | -8 | -8 | -8 | -8 | -6 | -4 | -3 | -2 | -7.8 | -2.1 | |
| 5-Jan-08 | -3 | -5 | -6 | -5 | -6 | -7 | -8 | -9 | -10 | -11 | -9 | -7 | -5 | -4 | -3 | -3 | -4 | -6 | -6 | -7 | -7 | -7 | -7 | -7 | -6.3 | -2.7 | |
| 6-Jan-08 | -7 | -7 | -7 | -7 | -8 | -8 | -9 | -10 | -10 | -11 | -11 | -11 | -11 | -11 | -10 | -10 | -12 | -13 | -13 | -12 | -13 | -13 | -14 | -15 | -10.7 | -7.2 | |
| 7-Jan-08 | -16 | -16 | -17 | -18 | -20 | -21 | -21 | -22 | -22 | -21 | -21 | -16 | -15 | -14 | -12 | -13 | -16 | -18 | -20 | -21 | -22 | -22 | -23 | -23 | -18.7 | -12.4 | |
| 8-Jan-08 | -24 | -24 | -25 | -25 | -24 | -24 | -24 | -25 | -25 | -26 | -23 | -19 | -18 | -16 | -16 | -16 | -17 | -18 | -18 | -19 | -19 | -19 | -19 | -19 | -20.9 | -15.9 | |
| 9-Jan-08 | -18 | -18 | -18 | -18 | -18 | -18 | -18 | -18 | -19 | -19 | -19 | -18 | -17 | -17 | -16 | -16 | -17 | -18 | -19 | -18 | -17 | -17 | -17 | -18 | -17.9 | -16.2 | |
| 10-Jan-08 | -19 | -21 | -22 | -22 | -23 | -23 | -21 | -19 | -18 | -17 | -16 | -14 | -13 | -13 | -12 | -11 | -12 | -13 | -13 | -13 | -13 | -14 | -15 | -14 | -16.2 | -11.2 | |
| 11-Jan-08 | -13 | -12 | -12 | -12 | -13 | -14 | -12 | -12 | -13 | -13 | -13 | -12 | -10 | -7 | -5 | -4 | -7 | -9 | -11 | -12 | -12 | -12 | -13 | -13 | -10.9 | -4.2 | |
| 12-Jan-08 | -14 | -14 | -15 | -15 | -15 | -16 | -17 | -17 | -17 | -17 | -14 | -10 | -7 | -5 | -5 | -8 | -8 | -7 | -7 | -8 | -9 | -10 | -11 | -12 | -11.6 | -5.0 | |
| 13-Jan-08 | -11 | -12 | -14 | -15 | -16 | -16 | -16 | -15 | -13 | -13 | -12 | -8 | -5 | -1 | -1 | 0 | -2 | -5 | -6 | -8 | -8 | -9 | -9 | -9 | -9.3 | 0.2 | |
| 14-Jan-08 | -9 | -9 | -9 | -10 | -10 | -11 | -11 | -10 | -9 | -8 | -7 | -5 | -3 | -2 | -1 | 0 | -1 | -1 | -2 | -2 | -2 | -3 | -5 | -5 | -5.5 | 0.4 | |
| 15-Jan-08 | -5 | -6 | -7 | -8 | -9 | -10 | -10 | -12 | -13 | -13 | -12 | -9 | -7 | -6 | -5 | -5 | -7 | -8 | -8 | -7 | -7 | -7 | -7 | -7 | -8.1 | -5.0 | |
| 16-Jan-08 | -9 | -11 | -13 | -7 | -5 | -8 | -10 | -4 | -1 | 0 | 1 | 2 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | -0.6 | 4.6 | |
| 17-Jan-08 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | 1 | 1 | -1 | -2 | -1 | -1 | -3 | -7 | -8 | -8 | -0.3 | 3.8 | |
| 18-Jan-08 | -9 | -10 | -11 | -12 | -13 | -13 | -14 | -14 | -14 | -14 | -13 | -12 | -11 | -9 | -8 | -8 | -8 | -8 | -8 | -7 | -7 | -6 | -6 | -6 | -10.0 | -5.8 | |
| 19-Jan-08 | -6 | -7 | -7 | -7 | -8 | -9 | -10 | -11 | -12 | -12 | -12 | -13 | -13 | -13 | -13 | -14 | -16 | -18 | -19 | -21 | -22 | -24 | -25 | -26 | -14.1 | -6.0 | |
| 20-Jan-08 | -27 | -28 | -28 | -29 | -28 | -29 | -28 | -25 | -25 | -24 | -22 | -19 | -17 | -15 | -14 | -13 | -13 | -17 | -19 | -21 | -21 | -22 | -21 | -20 | -22.0 | -13.3 | |
| 21-Jan-08 | -18 | -17 | -17 | -17 | -16 | -14 | -10 | -7 | -6 | -6 | -5 | -4 | -4 | -2 | -2 | -1 | -1 | -5 | -5 | -4 | -4 | -4 | -5 | -5 | -7.6 | -0.7 | |
| 22-Jan-08 | -6 | -5 | -5 | -4 | -4 | -5 | -5 | -6 | -6 | -5 | -5 | -4 | -3 | -3 | -2 | -2 | -3 | -7 | -10 | -12 | -13 | -14 | -15 | -15 | -6.5 | -1.8 | |
| 23-Jan-08 | -16 | -16 | -17 | -17 | -18 | -19 | -19 | -19 | -20 | -19 | -16 | -11 | -7 | -5 | -2 | -1 | -3 | -5 | -7 | -9 | -11 | -11 | -12 | -13 | -12.1 | -0.5 | |
| 24-Jan-08 | -13 | -13 | -12 | -9 | -8 | -7 | -7 | -9 | -9 | -9 | -8 | -5 | -4 | -4 | -4 | -4 | -4 | -5 | -5 | -5 | -6 | -6 | -6 | -6 | -7.1 | -3.5 | |
| 25-Jan-08 | -7 | -7 | -7 | -7 | -7 | -7 | -9 | -12 | -14 | -14 | -12 | -10 | -9 | -7 | -5 | -5 | -7 | -8 | -7 | -3 | -3 | -3 | -5 | -6 | -7.6 | -2.7 | |
| 26-Jan-08 | -6 | -5 | -5 | -5 | -6 | -7 | -6 | -6 | -8 | -9 | -8 | -5 | -2 | 0 | 1 | -1 | -2 | -5 | -10 | -13 | -15 | -16 | -18 | -20 | -7.3 | 0.7 | |
| 27-Jan-08 | -21 | -22 | -23 | -24 | -25 | -26 | -26 | -27 | -28 | -28 | -28 | -28 | -28 | -28 | -28 | -28 | -28 | -29 | -29 | -29 | -29 | -30 | -31 | -32 | -27.4 | -21.1 | |
| 28-Jan-08 | -34 | -34 | -36 | -37 | -37 | -39 | -39 | -38 | -39 | -37 | -36 | -34 | -32 | -30 | -29 | -29 | -29 | -34 | -36 | -38 | -40 | -41 | -42 | -42 | -35.9 | -28.7 | |
| 29-Jan-08 | -42 | -42 | -42 | -43 | -42 | -42 | -42 | -41 | -40 | -39 | -38 | -36 | -34 | -34 | -32 | -31 | -31 | -31 | -31 | -31 | -30 | -30 | -31 | -30 | -30 | -36.1 | -30.2 |
| 30-Jan-08 | -30 | -30 | -30 | -30 | -30 | -30 | -29 | -29 | -29 | -28 | -27 | -26 | -25 | -25 | -25 | -26 | -26 | -26 | -26 | -26 | -26 | -26 | -27 | -27 | -27.4 | -24.6 | |
| 31-Jan-08 | -29 | -31 | -31 | -32 | -31 | -31 | -29 | -28 | -28 | -27 | -27 | -26 | -25 | -24 | -24 | -24 | -24 | -25 | -25 | -25 | -24 | -24 | -24 | -24 | -26.7 | -23.8 | |
| Hourly Avg | -14.9 | -15.4 | -15.8 | -15.9 | -16.2 | -16.5 | -16.5 | -16.5 | -16.5 | -16.3 | -15.1 | -13.1 | -11.5 | -10.3 | -9.5 | -9.4 | -10.4 | -11.9 | -12.3 | -12.6 | -12.8 | -13.3 | -13.9 | -14.3 | | | |
| Hourly Max | 3.8 | 3.6 | 3.3 | 2.1 | 0.9 | 1.1 | 1.3 | 0.9 | 0.6 | 0.6 | 0.8 | 1.6 | 2.7 | 3.5 | 4.1 | 4.4 | 4.6 | 4.5 | 4.5 | 4.4 | 4.5 | 4.3 | 4.2 | 4.1 | | | |

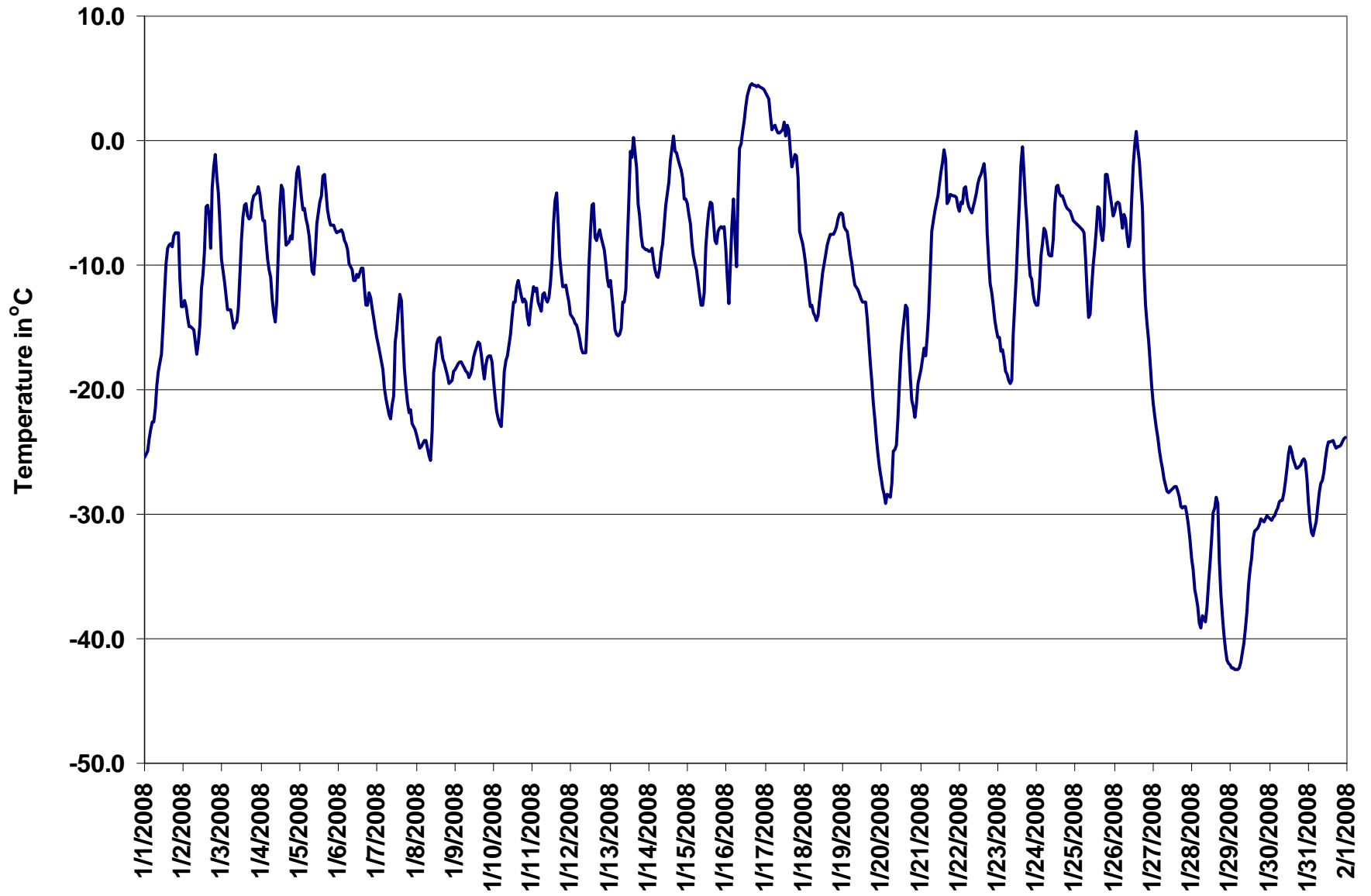


Figure 26. PASZA - Evergreen Park Temperature 1-hr Average Monthly Trend

PASZA - Evergreen Park Scalar Wind Speed Monthly Summary

Station: Evergreen Park
 Station Owner: PASZA

HOURLY AVERAGE TABLE

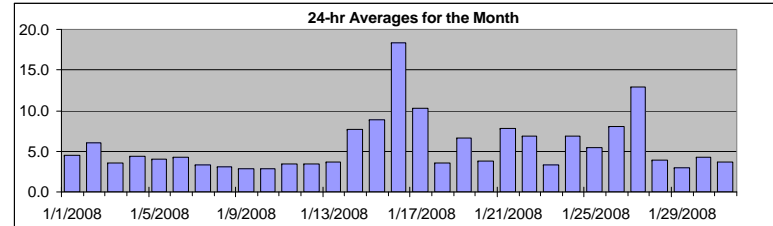
Wind Speed (WSs)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | | | | |
|-----------------------|--|--|--|------|-------|--------|-------------|
| Maximum 1-hr Average: | | | | 29.2 | km/hr | 16-Jan | 17:00 18:00 |
| Maximum 24-hr Value: | | | | 18.4 | km/hr | 16-Jan | |

| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|-----------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 744 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 100.0% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | AverageS |
| | 25.9 | 15.5 | 6.2 | 3.9 | 2.9 | 2.2 | 1.8 | 5.6 km/hr |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hr Scalar Average | Daily Max | |
|--------------|------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------------|--------------|-------|
| | Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | | | 23:00 |
| 1-Jan-08 | Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | 4.5 | 8.6 |
| 2-Jan-08 | 4 | 3 | 2 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 5 | 5 | 4 | 5 | 4 | 3 | 7 | 13 | 14 | 14 | 10 | 11 | 5 | 6.1 | 14.2 |
| 3-Jan-08 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 5 | 3 | 3 | 3.5 | 4.7 |
| 4-Jan-08 | 3 | 4 | 4 | 4 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 4 | 7 | 4 | 6 | 6 | 9 | 10 | 5 | 4 | 4.3 | 10.1 |
| 5-Jan-08 | 4 | 4 | 4 | 3 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 6 | 6 | 6 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 4.0 | 6.5 |
| 6-Jan-08 | 3 | 4 | 2 | 3 | 2 | 3 | 3 | 3 | 4 | 4 | 3 | 6 | 8 | 7 | 6 | 4 | 4 | 4 | 4 | 4 | 6 | 5 | 6 | 5 | 5 | 4.3 | 7.7 |
| 7-Jan-08 | 6 | 6 | 6 | 3 | 2 | 2 | 2 | 2 | 3 | 5 | 3 | 3 | 4 | 4 | 3 | 4 | 3 | 2 | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 3.3 | 6.5 |
| 8-Jan-08 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 5 | 3 | 3 | 2 | 2 | 3.1 | 4.9 |
| 9-Jan-08 | 4 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2.9 | 4.1 |
| 10-Jan-08 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 4 | 4 | 3 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 2 | 2.8 | 4.4 |
| 11-Jan-08 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 2 | 2 | 3.4 | 5.5 |
| 12-Jan-08 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 4 | 5 | 4 | 6 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 3.4 | 5.8 |
| 13-Jan-08 | 5 | 5 | 3 | 4 | 4 | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 5 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3.7 | 5.0 |
| 14-Jan-08 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 5 | 12 | 18 | 15 | 16 | 15 | 18 | 18 | 16 | 12 | 12 | 7.7 | 18.3 |
| 15-Jan-08 | 13 | 9 | 7 | 7 | 7 | 7 | 7 | 4 | 6 | 5 | 4 | 9 | 10 | 12 | 11 | 9 | 8 | 8 | 10 | 12 | 13 | 12 | 11 | 12 | 12 | 8.8 | 13.3 |
| 16-Jan-08 | 4 | 3 | 3 | 15 | 13 | 4 | 5 | 11 | 16 | 14 | 21 | 21 | 19 | 20 | 26 | 29 | 28 | 29 | 29 | 29 | 27 | 26 | 25 | 26 | 28 | 18.4 | 29.2 |
| 17-Jan-08 | 24 | 20 | 14 | 13 | 11 | 15 | 13 | 13 | 10 | 10 | 9 | 8 | 10 | 7 | 8 | 5 | 3 | 6 | 9 | 10 | 11 | 7 | 6 | 5 | 5 | 10.3 | 23.6 |
| 18-Jan-08 | 3 | 2 | 3 | 4 | 3 | 5 | 5 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 5 | 6 | 6 | 6 | 3.6 | 6.3 |
| 19-Jan-08 | 7 | 6 | 8 | 8 | 10 | 9 | 9 | 11 | 11 | 10 | 10 | 8 | 7 | 6 | 6 | 7 | 5 | 5 | 5 | 3 | 3 | 2 | 2 | 2 | 2 | 6.7 | 11.0 |
| 20-Jan-08 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 5 | 5 | 5 | 5 | 6 | 7 | 7 | 5 | 3 | 2 | 2 | 2 | 3 | 4 | 3 | 3 | 3 | 3 | 3.7 | 7.2 |
| 21-Jan-08 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 9 | 12 | 10 | 13 | 14 | 13 | 12 | 11 | 7 | 5 | 4 | 7 | 7 | 8 | 10 | 10 | 10 | 10 | 7.8 | 13.8 |
| 22-Jan-08 | 13 | 13 | 14 | 14 | 12 | 11 | 10 | 12 | 8 | 5 | 5 | 4 | 3 | 6 | 6 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 6.9 | 14.5 |
| 23-Jan-08 | 3 | 3 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 5 | 5 | 4 | 6 | 4 | 4 | 2 | 3 | 2 | 2 | 3 | 3 | 3.3 | 6.3 |
| 24-Jan-08 | 3 | 4 | 5 | 6 | 7 | 5 | 6 | 6 | 9 | 8 | 7 | 7 | 10 | 10 | 10 | 8 | 8 | 9 | 8 | 8 | 6 | 4 | 5 | 6 | 6 | 6.8 | 10.3 |
| 25-Jan-08 | 7 | 10 | 8 | 6 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 3 | 4 | 7 | 5 | 4 | 3 | 2 | 5 | 10 | 9 | 5 | 4 | 3 | 5 | 5.4 | 10.0 |
| 26-Jan-08 | 5 | 4 | 7 | 6 | 5 | 6 | 9 | 3 | 4 | 2 | 2 | 4 | 3 | 3 | 4 | 3 | 4 | 16 | 16 | 14 | 15 | 17 | 19 | 19 | 19 | 8.0 | 19.3 |
| 27-Jan-08 | 20 | 18 | 16 | 17 | 19 | 19 | 18 | 15 | 16 | 16 | 16 | 16 | 15 | 12 | 9 | 9 | 10 | 7 | 5 | 6 | 6 | 8 | 9 | 7 | 7 | 12.9 | 19.6 |
| 28-Jan-08 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 6 | 8 | 7 | 5 | 6 | 4 | 3 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3.9 | 8.3 |
| 29-Jan-08 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 2 | 6 | 4 | 4 | 4 | 4 | 2.9 | 6.2 |
| 30-Jan-08 | 4 | 4 | 4 | 5 | 4 | 3 | 4 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 7 | 7 | 6 | 6 | 5 | 4 | 4 | 4 | 3 | 2 | 2 | 4.3 | 7.2 |
| 31-Jan-08 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 5 | 5 | 5 | 7 | 6 | 6 | 5 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3.6 | 6.6 |
| 1-hr Average | 5.6 | 5.2 | 4.9 | 5.3 | 5.0 | 4.8 | 4.9 | 5.0 | 5.5 | 5.1 | 5.4 | 5.7 | 6.1 | 6.2 | 6.1 | 5.9 | 5.5 | 5.8 | 6.0 | 6.3 | 6.5 | 6.3 | 6.3 | 5.7 | 5.7 | | |
| Hourly Max | 23.6 | 19.7 | 16.1 | 17.2 | 19.1 | 18.5 | 18.3 | 15.3 | 15.8 | 16.0 | 20.8 | 20.7 | 19.4 | 20.3 | 25.8 | 28.9 | 28.1 | 29.2 | 29.1 | 27.3 | 25.9 | 24.6 | 26.2 | 27.6 | 27.6 | | |

PASZA - Evergreen Park Vector Wind Speed Monthly Summary

Station: Evergreen Park
 Station Owner: PASZA

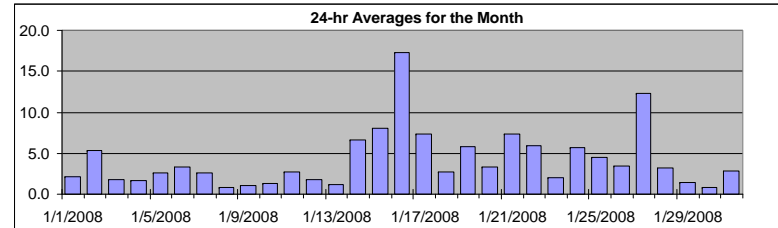
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|-------|--------|-------------|
| Maximum 1-hr Average: | 29.0 | km/hr | 16-Jan | 17:00 18:00 |
| Maximum 24-hr Value: | 17.3 | km/hr | 16-Jan | |



| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|-----------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 744 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 100.0% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | AverageV |
| | 25.7 | 15.3 | 5.9 | 3.3 | 2.1 | 1.0 | 0.6 | 6.0 km/hr |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hr Vector Average | Daily Max | | |
|-------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-----------|--|--|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 23:00 | 0:00 | | |
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | | |
| 1-Jan-08 | 2 | 2 | 1 | 2 | 1 | 2 | 3 | 4 | 3 | 5 | 4 | 8 | 8 | 6 | 5 | 5 | 3 | 4 | 4 | 4 | 5 | 2 | 6 | 6 | 2.1 | 8.4 | | |
| 2-Jan-08 | 5 | 4 | 5 | 5 | 4 | 4 | 4 | 2 | 3 | 2 | 2 | 4 | 5 | 2 | 3 | 2 | 2 | 5 | 13 | 14 | 14 | 10 | 10 | 3 | 5.3 | 14.2 | | |
| 3-Jan-08 | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 1 | 1.8 | 4.3 | | |
| 4-Jan-08 | 2 | 2 | 3 | 3 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 7 | 4 | 5 | 6 | 9 | 10 | 3 | 1.6 | 9.8 | | |
| 5-Jan-08 | 4 | 3 | 4 | 3 | 2 | 4 | 3 | 4 | 2 | 2 | 4 | 5 | 6 | 6 | 5 | 4 | 4 | 3 | 1 | 2 | 1 | 1 | 2 | 2 | 2.6 | 6.3 | | |
| 6-Jan-08 | 1 | 3 | 2 | 1 | 2 | 3 | 3 | 2 | 4 | 4 | 3 | 6 | 8 | 6 | 5 | 4 | 4 | 3 | 4 | 4 | 5 | 5 | 6 | 5 | 3.3 | 7.6 | | |
| 7-Jan-08 | 6 | 6 | 6 | 3 | 2 | 2 | 2 | 1 | 3 | 5 | 2 | 2 | 4 | 2 | 3 | 4 | 3 | 2 | 2 | 1 | 2 | 3 | 2 | 2 | 2.7 | 6.4 | | |
| 8-Jan-08 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 3 | 2 | 4 | 2 | 4 | 3 | 5 | 2 | 2 | 2 | 1 | 0.8 | 4.7 | | |
| 9-Jan-08 | 4 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 2 | 1 | 2 | 3 | 3 | 2 | 1.1 | 3.7 | | |
| 10-Jan-08 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 2 | 1 | 2 | 4 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 1.2 | 4.3 | | |
| 11-Jan-08 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 4 | 5 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 1 | 3 | 1 | 1 | 2.7 | 5.3 | | |
| 12-Jan-08 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 2 | 5 | 4 | 2 | 3 | 2 | 1 | 4 | 1 | 0 | 1.8 | 4.9 | | |
| 13-Jan-08 | 2 | 1 | 1 | 1 | 1 | 0 | 2 | 2 | 5 | 2 | 1 | 3 | 4 | 2 | 3 | 5 | 4 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 1.2 | 4.5 | | |
| 14-Jan-08 | 0 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 5 | 12 | 17 | 14 | 15 | 15 | 18 | 18 | 15 | 11 | 6.6 | 18.2 | | |
| 15-Jan-08 | 13 | 9 | 7 | 7 | 7 | 7 | 6 | 4 | 5 | 5 | 4 | 9 | 9 | 12 | 10 | 9 | 8 | 8 | 10 | 12 | 13 | 12 | 11 | 12 | 8.1 | 13.0 | | |
| 16-Jan-08 | 2 | 3 | 2 | 15 | 10 | 2 | 4 | 11 | 16 | 14 | 21 | 21 | 19 | 20 | 26 | 29 | 28 | 29 | 29 | 27 | 26 | 24 | 26 | 27 | 17.3 | 29.0 | | |
| 17-Jan-08 | 24 | 19 | 12 | 12 | 11 | 15 | 12 | 13 | 9 | 10 | 9 | 8 | 10 | 6 | 8 | 5 | 2 | 6 | 9 | 10 | 7 | 6 | 6 | 4 | 7.3 | 23.5 | | |
| 18-Jan-08 | 2 | 1 | 2 | 3 | 3 | 5 | 5 | 3 | 2 | 1 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 3 | 5 | 6 | 6 | 2.8 | 6.1 | | |
| 19-Jan-08 | 7 | 6 | 8 | 8 | 10 | 9 | 8 | 10 | 11 | 10 | 10 | 8 | 6 | 6 | 6 | 7 | 5 | 5 | 4 | 1 | 2 | 2 | 2 | 2 | 5.8 | 10.8 | | |
| 20-Jan-08 | 2 | 2 | 3 | 1 | 3 | 3 | 4 | 5 | 4 | 4 | 5 | 6 | 7 | 7 | 5 | 3 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 3.3 | 7.0 | | |
| 21-Jan-08 | 2 | 3 | 2 | 1 | 2 | 1 | 5 | 9 | 12 | 10 | 13 | 14 | 13 | 12 | 11 | 7 | 5 | 2 | 7 | 7 | 8 | 9 | 10 | 10 | 7.3 | 13.7 | | |
| 22-Jan-08 | 13 | 13 | 14 | 14 | 12 | 11 | 9 | 11 | 8 | 4 | 4 | 2 | 1 | 5 | 6 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 6.0 | 14.3 | | |
| 23-Jan-08 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 3 | 2 | 4 | 5 | 4 | 6 | 4 | 3 | 2 | 1 | 1 | 1 | 2 | 2.1 | 6.1 | | |
| 24-Jan-08 | 3 | 4 | 4 | 6 | 7 | 4 | 6 | 6 | 8 | 8 | 6 | 7 | 10 | 10 | 10 | 8 | 8 | 8 | 8 | 8 | 6 | 3 | 5 | 6 | 5.7 | 9.9 | | |
| 25-Jan-08 | 7 | 10 | 8 | 6 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 4 | 6 | 4 | 3 | 2 | 1 | 4 | 10 | 9 | 2 | 3 | 1 | 4.5 | 9.9 | | |
| 26-Jan-08 | 3 | 4 | 7 | 3 | 4 | 5 | 9 | 1 | 2 | 1 | 1 | 4 | 2 | 2 | 1 | 1 | 2 | 16 | 16 | 14 | 14 | 17 | 19 | 19 | 3.4 | 19.1 | | |
| 27-Jan-08 | 19 | 18 | 16 | 17 | 19 | 18 | 18 | 15 | 15 | 16 | 16 | 16 | 15 | 11 | 9 | 9 | 10 | 7 | 5 | 6 | 5 | 8 | 9 | 7 | 12.3 | 19.5 | | |
| 28-Jan-08 | 4 | 4 | 3 | 4 | 4 | 2 | 3 | 4 | 4 | 6 | 8 | 7 | 6 | 4 | 6 | 3 | 2 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 3.2 | 8.2 | | |
| 29-Jan-08 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 | 3 | 4 | 4 | 3 | 3 | 3 | 0 | 2 | 6 | 4 | 4 | 4 | 1.4 | 6.0 | | |
| 30-Jan-08 | 4 | 4 | 4 | 5 | 4 | 3 | 4 | 3 | 3 | 3 | 4 | 1 | 3 | 2 | 6 | 7 | 6 | 6 | 4 | 4 | 4 | 4 | 2 | 2 | 0.8 | 6.9 | | |
| 31-Jan-08 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 1 | 3 | 3 | 4 | 4 | 5 | 6 | 6 | 5 | 5 | 3 | 2 | 3 | 4 | 3 | 2 | 2 | 2.8 | 6.1 | | |
| 1-hr Vector | 2.5 | 2.8 | 2.4 | 2.8 | 2.8 | 2.2 | 2.4 | 2.5 | 2.1 | 2.3 | 2.6 | 2.9 | 2.8 | 2.6 | 3.0 | 3.0 | 2.5 | 1.8 | 2.2 | 2.7 | 3.0 | 2.7 | 2.9 | 2.6 | | | | |
| Hourly Max | 23.5 | 19.4 | 15.8 | 17.1 | 19.0 | 18.4 | 18.1 | 15.1 | 15.6 | 15.8 | 20.7 | 20.5 | 19.2 | 20.1 | 25.6 | 28.8 | 27.9 | 29.0 | 28.9 | 27.2 | 25.8 | 24.5 | 26.1 | 27.4 | | | | |

PASZA - Evergreen Park Wind Direction Monthly Summary

Station: Evergreen Park
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|------|------|-----|---------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 744 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 100.0% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average |
| | 356.6 | 344.3 | 292.9 | 256.2 | 94.5 | 29.8 | 6.0 | 297 deg |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24-hour Average | WD Sector | |
|------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-----------|---|
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | |
| 1-Jan-08 | 202 | 235 | 356 | 277 | 332 | 281 | 46 | 67 | 63 | 73 | 70 | 67 | 100 | 106 | 92 | 83 | 69 | 72 | 86 | 59 | 75 | 140 | 262 | 264 | 81 | E | |
| 2-Jan-08 | 268 | 260 | 266 | 272 | 243 | 267 | 247 | 245 | 235 | 266 | 301 | 315 | 267 | 256 | 262 | 356 | 256 | 219 | 231 | 228 | 233 | 218 | 220 | 206 | 245 | WSW | |
| 3-Jan-08 | 162 | 34 | 24 | 8 | 15 | 335 | 243 | 297 | 229 | 289 | 358 | 351 | 45 | 43 | 36 | 354 | 51 | 61 | 63 | 72 | 61 | 69 | 95 | 142 | 40 | NE | |
| 4-Jan-08 | 53 | 214 | 260 | 280 | 296 | 331 | 228 | 286 | 38 | 274 | 344 | 270 | 335 | 359 | 301 | 355 | 4 | 71 | 70 | 73 | 68 | 77 | 81 | 94 | 31 | NNE | |
| 5-Jan-08 | 58 | 46 | 350 | 326 | 233 | 229 | 256 | 252 | 291 | 244 | 255 | 262 | 269 | 266 | 274 | 312 | 335 | 317 | 274 | 220 | 194 | 258 | 2 | 214 | 275 | W | |
| 6-Jan-08 | 212 | 30 | 5 | 292 | 290 | 223 | 319 | 234 | 269 | 287 | 308 | 338 | 336 | 341 | 336 | 346 | 341 | 288 | 268 | 268 | 277 | 284 | 276 | 259 | 301 | WNW | |
| 7-Jan-08 | 255 | 266 | 264 | 281 | 329 | 274 | 331 | 327 | 307 | 247 | 245 | 312 | 325 | 302 | 339 | 3 | 35 | 352 | 304 | 292 | 311 | 293 | 321 | 305 | 299 | WNW | |
| 8-Jan-08 | 269 | 284 | 247 | 277 | 249 | 211 | 308 | 251 | 248 | 220 | 266 | 276 | 309 | 295 | 304 | 11 | 76 | 95 | 117 | 80 | 139 | 182 | 279 | 78 | 263 | W | |
| 9-Jan-08 | 76 | 210 | 63 | 75 | 24 | 49 | 47 | 64 | 84 | 100 | 140 | 118 | 270 | 287 | 333 | 256 | 85 | 39 | 40 | 20 | 37 | 314 | 296 | 277 | 44 | NE | |
| 10-Jan-08 | 262 | 300 | 223 | 314 | 348 | 279 | 304 | 288 | 204 | 233 | 270 | 218 | 243 | 218 | 249 | 351 | 329 | 147 | 52 | 64 | 65 | 345 | 313 | 331 | 282 | WNW | |
| 11-Jan-08 | 277 | 276 | 239 | 270 | 290 | 272 | 269 | 239 | 247 | 253 | 257 | 250 | 256 | 257 | 264 | 323 | 335 | 326 | 253 | 254 | 294 | 206 | 59 | 249 | 265 | W | |
| 12-Jan-08 | 23 | 282 | 199 | 216 | 277 | 19 | 357 | 324 | 322 | 317 | 320 | 359 | 352 | 27 | 318 | 303 | 288 | 289 | 262 | 211 | 276 | 208 | 301 | 144 | 303 | WNW | |
| 13-Jan-08 | 229 | 131 | 341 | 196 | 171 | 54 | 232 | 167 | 214 | 205 | 198 | 182 | 171 | 168 | 73 | 63 | 69 | 56 | 32 | 326 | 6 | 265 | 259 | 201 | 176 | S | |
| 14-Jan-08 | 30 | 253 | 296 | 218 | 253 | 312 | 214 | 319 | 230 | 16 | 173 | 359 | 256 | 288 | 283 | 310 | 324 | 286 | 282 | 282 | 285 | 286 | 321 | 283 | 293 | WNW | |
| 15-Jan-08 | 292 | 310 | 315 | 257 | 267 | 280 | 272 | 318 | 313 | 299 | 291 | 277 | 283 | 277 | 273 | 271 | 259 | 253 | 254 | 250 | 250 | 245 | 242 | 231 | 270 | W | |
| 16-Jan-08 | 281 | 195 | 89 | 250 | 255 | 124 | 56 | 280 | 274 | 270 | 266 | 260 | 269 | 269 | 265 | 264 | 265 | 265 | 265 | 269 | 268 | 267 | 264 | 266 | 266 | 265 | W |
| 17-Jan-08 | 266 | 268 | 331 | 344 | 303 | 318 | 291 | 284 | 294 | 289 | 284 | 289 | 331 | 306 | 350 | 7 | 298 | 31 | 345 | 346 | 16 | 93 | 102 | 82 | 313 | NW | |
| 18-Jan-08 | 14 | 355 | 10 | 7 | 308 | 341 | 348 | 346 | 321 | 318 | 337 | 349 | 2 | 325 | 320 | 358 | 14 | 61 | 59 | 48 | 35 | 65 | 68 | 67 | 13 | NNE | |
| 19-Jan-08 | 76 | 71 | 67 | 70 | 70 | 67 | 71 | 66 | 61 | 62 | 60 | 68 | 75 | 76 | 81 | 82 | 89 | 94 | 73 | 4 | 241 | 277 | 277 | 280 | 69 | ENE | |
| 20-Jan-08 | 252 | 313 | 220 | 261 | 290 | 253 | 269 | 261 | 240 | 240 | 249 | 255 | 266 | 292 | 278 | 319 | 289 | 312 | 345 | 340 | 300 | 280 | 271 | 248 | 272 | W | |
| 21-Jan-08 | 204 | 211 | 221 | 248 | 265 | 214 | 270 | 282 | 277 | 279 | 273 | 278 | 270 | 269 | 274 | 274 | 258 | 331 | 300 | 286 | 283 | 274 | 278 | 297 | 274 | W | |
| 22-Jan-08 | 276 | 282 | 283 | 298 | 301 | 284 | 298 | 284 | 261 | 274 | 285 | 287 | 302 | 272 | 259 | 241 | 14 | 99 | 53 | 359 | 299 | 277 | 301 | 298 | 287 | WNW | |
| 23-Jan-08 | 275 | 278 | 38 | 232 | 274 | 315 | 244 | 302 | 252 | 317 | 339 | 254 | 317 | 252 | 277 | 314 | 345 | 359 | 335 | 274 | 172 | 352 | 238 | 44 | 300 | WNW | |
| 24-Jan-08 | 26 | 43 | 71 | 78 | 64 | 87 | 76 | 68 | 87 | 85 | 74 | 86 | 93 | 84 | 66 | 74 | 83 | 94 | 99 | 98 | 107 | 151 | 217 | 234 | 86 | E | |
| 25-Jan-08 | 240 | 255 | 253 | 245 | 267 | 256 | 219 | 195 | 206 | 226 | 211 | 228 | 235 | 210 | 249 | 290 | 308 | 290 | 271 | 265 | 254 | 235 | 85 | 154 | 243 | WSW | |
| 26-Jan-08 | 168 | 204 | 202 | 168 | 207 | 207 | 213 | 212 | 98 | 53 | 232 | 200 | 51 | 147 | 28 | 53 | 52 | 338 | 340 | 328 | 328 | 330 | 335 | 334 | 322 | NW | |
| 27-Jan-08 | 336 | 334 | 329 | 333 | 336 | 337 | 334 | 333 | 333 | 337 | 336 | 339 | 338 | 347 | 24 | 4 | 31 | 39 | 25 | 353 | 317 | 321 | 333 | 335 | 341 | NNW | |
| 28-Jan-08 | 339 | 305 | 309 | 301 | 308 | 247 | 306 | 283 | 276 | 272 | 273 | 268 | 295 | 285 | 267 | 296 | 316 | 48 | 29 | 323 | 332 | 28 | 346 | 296 | 297 | WNW | |
| 29-Jan-08 | 332 | 277 | 277 | 287 | 305 | 221 | 190 | 162 | 89 | 57 | 39 | 300 | 16 | 355 | 357 | 347 | 356 | 55 | 119 | 278 | 277 | 298 | 290 | 247 | 321 | NW | |
| 30-Jan-08 | 221 | 241 | 271 | 244 | 207 | 199 | 216 | 207 | 179 | 201 | 220 | 217 | 163 | 145 | 61 | 61 | 61 | 60 | 58 | 56 | 50 | 39 | 22 | 39 | 128 | SE | |
| 31-Jan-08 | 61 | 61 | 7 | 238 | 268 | 257 | 315 | 7 | 71 | 76 | 52 | 66 | 53 | 42 | 20 | 64 | 59 | 63 | 68 | 58 | 61 | 88 | 82 | 69 | 53 | NE | |
| Hourly Avg | 284 | 284 | 305 | 287 | 294 | 296 | 291 | 290 | 282 | 287 | 288 | 289 | 306 | 295 | 308 | 330 | 343 | 347 | 312 | 299 | 291 | 280 | 296 | 277 | | | |

PASZA - Evergreen Park Standard Deviation of Wind Direction Monthly Summary

Station: Evergreen Park
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| |
|--|
| |
| |

Determined by the Yamartino 15-min interval calculation

| | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|------|-----|-----|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 744 hrs | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 100.0% | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 |
| | 93.4 | 79.6 | 48.2 | 27.4 | 14.4 | 7.3 | 4.8 |

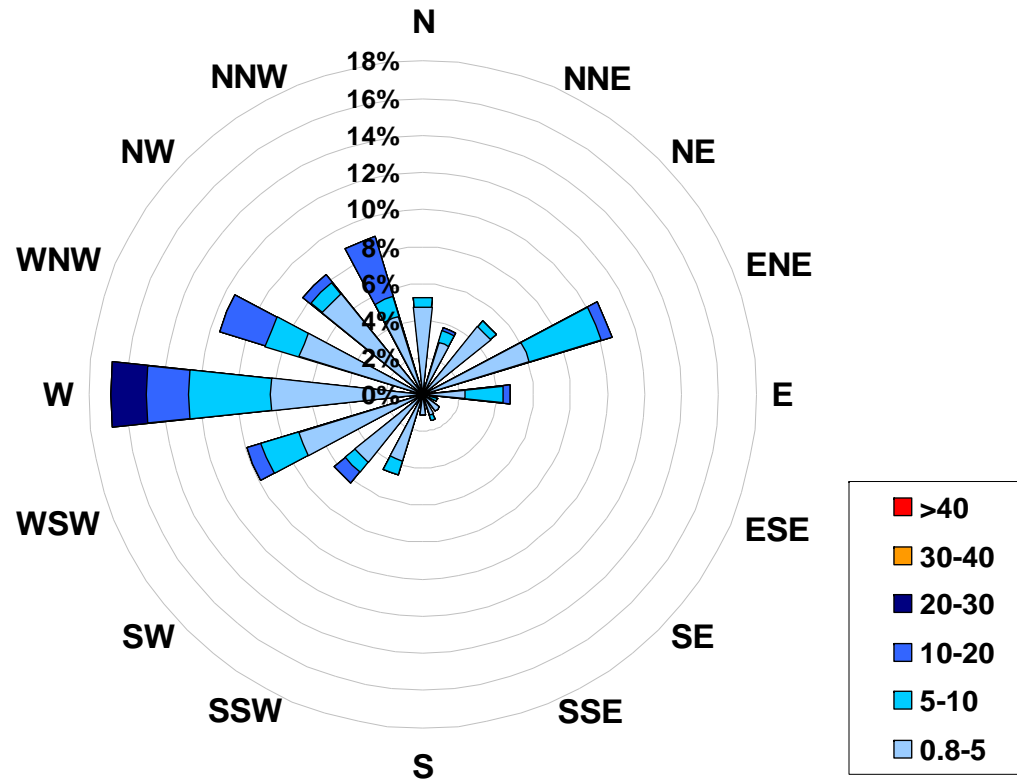
Status Flag Characters

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

Day Mountain Standard Time

| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 23:00 | 0:00 | Daily Maximum |
|------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|---------------|
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | |
| 1-Jan-08 | 70 | 70 | 75 | 41 | 80 | 64 | 20 | 12 | 20 | 34 | 12 | 22 | 13 | 12 | 21 | 19 | 16 | 45 | 38 | 47 | 14 | 55 | 18 | 14 | | 79.8 | |
| 2-Jan-08 | 18 | 26 | 27 | 19 | 34 | 24 | 20 | 70 | 35 | 43 | 45 | 24 | 16 | 58 | 53 | 68 | 47 | 70 | 3 | 3 | 3 | 8 | 5 | 69 | | 70.3 | |
| 3-Jan-08 | 57 | 54 | 70 | 92 | 72 | 62 | 46 | 77 | 67 | 68 | 39 | 29 | 19 | 14 | 15 | 17 | 30 | 16 | 14 | 24 | 21 | 37 | 45 | 95 | | 95.5 | |
| 4-Jan-08 | 73 | 73 | 49 | 41 | 65 | 75 | 51 | 48 | 82 | 63 | 36 | 49 | 36 | 39 | 33 | 43 | 20 | 13 | 38 | 9 | 14 | 14 | 16 | 71 | | 82.4 | |
| 5-Jan-08 | 22 | 31 | 16 | 30 | 67 | 37 | 24 | 19 | 62 | 60 | 24 | 14 | 12 | 17 | 27 | 26 | 19 | 26 | 65 | 60 | 94 | 79 | 65 | 49 | | 93.6 | |
| 6-Jan-08 | 73 | 38 | 35 | 74 | 41 | 12 | 43 | 65 | 18 | 30 | 22 | 22 | 11 | 17 | 25 | 18 | 15 | 24 | 14 | 21 | 14 | 18 | 13 | 13 | | 73.7 | |
| 7-Jan-08 | 7 | 8 | 7 | 20 | 18 | 27 | 36 | 68 | 29 | 10 | 17 | 42 | 26 | 47 | 13 | 27 | 16 | 37 | 55 | 55 | 32 | 20 | 26 | 33 | | 67.7 | |
| 8-Jan-08 | 50 | 54 | 40 | 53 | 80 | 72 | 39 | 36 | 41 | 89 | 33 | 43 | 39 | 49 | 46 | 26 | 58 | 25 | 49 | 16 | 50 | 54 | 44 | 90 | | 89.6 | |
| 9-Jan-08 | 33 | 43 | 48 | 32 | 67 | 32 | 34 | 44 | 87 | 52 | 40 | 61 | 48 | 42 | 50 | 44 | 86 | 30 | 57 | 85 | 52 | 37 | 28 | 45 | | 86.5 | |
| 10-Jan-08 | 64 | 60 | 43 | 35 | 52 | 26 | 29 | 45 | 71 | 36 | 35 | 88 | 31 | 11 | 26 | 47 | 56 | 45 | 80 | 60 | 40 | 36 | 57 | 75 | | 88.2 | |
| 11-Jan-08 | 51 | 37 | 39 | 33 | 27 | 33 | 40 | 25 | 14 | 52 | 34 | 29 | 20 | 33 | 41 | 41 | 22 | 36 | 39 | 63 | 63 | 62 | 95 | 79 | | 94.8 | |
| 12-Jan-08 | 51 | 58 | 74 | 62 | 50 | 53 | 30 | 41 | 30 | 31 | 39 | 36 | 31 | 41 | 49 | 37 | 23 | 69 | 29 | 56 | 81 | 42 | 70 | 93 | | 92.6 | |
| 13-Jan-08 | 65 | 84 | 61 | 88 | 95 | 92 | 68 | 83 | 29 | 79 | 88 | 57 | 28 | 61 | 35 | 15 | 11 | 27 | 69 | 68 | 80 | 58 | 55 | 72 | | 94.7 | |
| 14-Jan-08 | 96 | 59 | 77 | 65 | 44 | 84 | 51 | 53 | 66 | 84 | 87 | 61 | 30 | 47 | 34 | 17 | 12 | 16 | 10 | 8 | 7 | 9 | 16 | 11 | | 95.6 | |
| 15-Jan-08 | 12 | 14 | 21 | 11 | 7 | 8 | 14 | 24 | 16 | 22 | 27 | 12 | 11 | 10 | 6 | 9 | 8 | 5 | 3 | 4 | 5 | 5 | 5 | 5 | | 26.7 | |
| 16-Jan-08 | 57 | 34 | 57 | 8 | 69 | 63 | 46 | 18 | 8 | 10 | 6 | 7 | 8 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | | 68.9 | |
| 17-Jan-08 | 5 | 11 | 28 | 27 | 12 | 14 | 15 | 10 | 15 | 13 | 11 | 12 | 16 | 28 | 14 | 25 | 55 | 16 | 21 | 13 | 47 | 24 | 28 | 24 | | 54.5 | |
| 18-Jan-08 | 54 | 61 | 51 | 25 | 34 | 13 | 16 | 18 | 57 | 66 | 39 | 14 | 23 | 41 | 45 | 30 | 32 | 15 | 14 | 14 | 16 | 11 | 12 | 16 | | 66.2 | |
| 19-Jan-08 | 15 | 14 | 10 | 12 | 11 | 10 | 14 | 10 | 10 | 14 | 16 | 19 | 25 | 20 | 18 | 14 | 10 | 13 | 68 | 36 | 32 | 31 | 36 | | 67.6 | | |
| 20-Jan-08 | 19 | 40 | 20 | 58 | 41 | 18 | 13 | 10 | 7 | 9 | 7 | 10 | 11 | 16 | 16 | 34 | 44 | 34 | 21 | 24 | 26 | 42 | 30 | 32 | | 58.4 | |
| 21-Jan-08 | 43 | 35 | 31 | 78 | 46 | 77 | 42 | 14 | 8 | 11 | 8 | 9 | 8 | 8 | 7 | 10 | 22 | 55 | 17 | 10 | 9 | 12 | 9 | 14 | | 78.1 | |
| 22-Jan-08 | 12 | 10 | 9 | 16 | 16 | 16 | 22 | 10 | 19 | 57 | 48 | 62 | 93 | 32 | 18 | 35 | 45 | 25 | 38 | 16 | 35 | 21 | 16 | 27 | | 93.2 | |
| 23-Jan-08 | 24 | 31 | 71 | 44 | 49 | 30 | 40 | 28 | 48 | 63 | 56 | 27 | 36 | 15 | 23 | 29 | 13 | 21 | 26 | 35 | 89 | 64 | 77 | 72 | | 88.6 | |
| 24-Jan-08 | 27 | 19 | 43 | 7 | 9 | 19 | 12 | 10 | 11 | 11 | 11 | 17 | 16 | 20 | 13 | 14 | 14 | 15 | 17 | 14 | 17 | 46 | 30 | 13 | | 46.1 | |
| 25-Jan-08 | 11 | 8 | 12 | 8 | 13 | 12 | 25 | 7 | 13 | 21 | 12 | 22 | 37 | 20 | 39 | 35 | 47 | 52 | 58 | 7 | 5 | 89 | 53 | 87 | | 89.0 | |
| 26-Jan-08 | 76 | 20 | 13 | 58 | 31 | 24 | 24 | 96 | 62 | 73 | 77 | 27 | 68 | 74 | 80 | 95 | 69 | 35 | 11 | 12 | 11 | 11 | 8 | 9 | | 96.0 | |
| 27-Jan-08 | 7 | 10 | 10 | 8 | 8 | 8 | 8 | 10 | 9 | 9 | 8 | 9 | 8 | 22 | 18 | 21 | 13 | 13 | 13 | 22 | 23 | 16 | 9 | 9 | | 23.0 | |
| 28-Jan-08 | 18 | 13 | 17 | 11 | 8 | 28 | 15 | 23 | 18 | 8 | 7 | 6 | 29 | 33 | 11 | 29 | 48 | 18 | 41 | 34 | 33 | 27 | 15 | 36 | | 48.2 | |
| 29-Jan-08 | 13 | 55 | 39 | 50 | 47 | 16 | 83 | 60 | 83 | 31 | 21 | 65 | 27 | 17 | 31 | 29 | 50 | 42 | 98 | 47 | 18 | 17 | 19 | 20 | | 98.3 | |
| 30-Jan-08 | 16 | 14 | 21 | 18 | 22 | 18 | 14 | 23 | 20 | 20 | 27 | 83 | 47 | 78 | 26 | 16 | 15 | 14 | 19 | 22 | 23 | 18 | 49 | 39 | | 83.0 | |
| 31-Jan-08 | 36 | 37 | 36 | 39 | 50 | 30 | 33 | 75 | 43 | 44 | 26 | 45 | 30 | 24 | 19 | 30 | 20 | 24 | 44 | 20 | 19 | 35 | 54 | 48 | | 75.5 | |
| Hourly Max | 96 | 84 | 77 | 92 | 95 | 92 | 83 | 96 | 87 | 89 | 88 | 88 | 93 | 78 | 80 | 95 | 86 | 70 | 98 | 85 | 94 | 89 | 95 | 95 | | | |

1-hr Average Wind Rose (in km/hr) Located at the Evergreen Park Site for January 2008



Calms: 0%

| Frequency Distribution of Wind in km/hr | | | Frequency (hrs) |
|---|----|----|-----------------|
| Range | | | |
| 0.8 | < | 5 | 495 |
| 5 | to | 10 | 150 |
| 10 | to | 20 | 85 |
| 20 | to | 30 | 14 |
| 30 | to | 40 | 0 |
| | > | 40 | 0 |
| Total Non-Zero Values | | | 744 |

PASZA
Smoky Heights Station
Monthly Summary Tables, Graphs and
Roses

PASZA - Smoky Heights Sulphur Dioxide Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

HOURLY AVERAGE TABLE

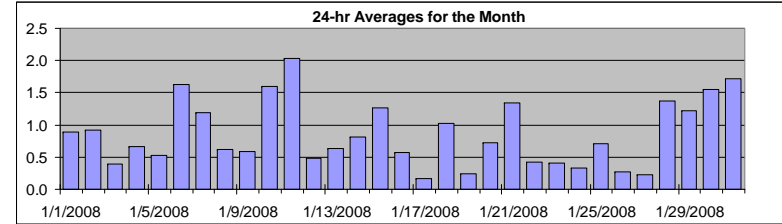
Sulphur Dioxide (SO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: Alberta Environment: 1-hr 172 ppb 24-hr 57 ppb

Summary

| | | | | |
|------------------------------|---------|--------|-------|-------|
| Number of 1-hr Exceedances: | 0 | | | |
| Number of 24-hr Exceedances: | 0 | | | |
| Maximum 1-hr Average: | 8.3 ppb | 28-Jan | 20:00 | 21:00 |
| Maximum 24-hr Average: | 2.0 ppb | 11-Jan | | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 33 hrs | Operational Time: | 709 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 4.4 | 2.7 | 1.1 | 0.5 | 0.3 | 0.1 | 0.0 | 0.9 ppb | 0.5 ppb |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum |
|------------|------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | | |
| 1-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 0.9 | 2.0 |
| 2-Jan-08 | 2 | 2 | 2 | 2 | 1 | A | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.9 | 2.0 |
| 3-Jan-08 | 0 | 0 | 0 | 1 | A | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0.4 | 0.9 |
| 4-Jan-08 | 0 | 1 | 1 | A | 2 | 4 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 3.9 |
| 5-Jan-08 | 0 | 0 | A | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0.5 | 1.3 |
| 6-Jan-08 | 1 | A | 3 | 1 | 3 | 3 | 2 | 1 | 1 | 1 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1.6 | 3.3 |
| 7-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8 | 6 | 2 | 1 | A | 1.2 | 7.5 |
| 8-Jan-08 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 1 | A | 1 | 0.6 | 1.6 |
| 9-Jan-08 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | A | 1 | 2 | 0.6 | 1.8 |
| 10-Jan-08 | 1 | 1 | 1 | 1 | 2 | 6 | 6 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | A | 2 | 3 | 3 | 1.6 | 6.0 |
| 11-Jan-08 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | A | 1 | 1 | 1 | 0 | 2.0 | 4.4 |
| 12-Jan-08 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | A | 1 | 1 | 1 | 1 | 0.5 | 1.4 |
| 13-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 0.6 | 1.4 |
| 14-Jan-08 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 2.2 |
| 15-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 4 | A | 3 | 3 | 2 | 4 | 2 | 3 | 1 | 0 | 1.3 | 3.7 |
| 16-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | A | 1 | 2 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0.6 | 2.2 |
| 17-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | C | C | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.5 |
| 18-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 3 | 3 | 1 | 0 | 0 | 0 | 3 | 5 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 5.5 |
| 19-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0.2 | 1.3 |
| 20-Jan-08 | 1 | 1 | 1 | A | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0.7 | 1.5 |
| 21-Jan-08 | 1 | 1 | A | 0 | 0 | 2 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 4 | 2 | 2 | 3 | 1 | 1 | 3 | 3 | 1 | 1 | 1.3 | 3.9 |
| 22-Jan-08 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.0 |
| 23-Jan-08 | A | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | A | 0.4 | 0.7 |
| 24-Jan-08 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 0.3 | 0.9 |
| 25-Jan-08 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 0 | 0 | 0.7 | 2.2 |
| 26-Jan-08 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.3 | 1.2 |
| 27-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | A | 0 | 0 | 0 | 1 | 0.2 | 0.7 |
| 28-Jan-08 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | A | 4 | 8 | 3 | 3 | 2 | 1.4 | 8.3 |
| 29-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 2 | 2 | 2 | 2 | 2 | 2 | 1.2 | 2.2 |
| 30-Jan-08 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | A | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1.6 | 2.4 |
| 31-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | A | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1.7 | 2.8 |
| Hourly Avg | 0.7 | 0.6 | 0.8 | 0.8 | 0.9 | 1.1 | 1.1 | 0.9 | 0.7 | 0.6 | 0.6 | 0.8 | 0.9 | 0.9 | 1.2 | 0.7 | 0.8 | 0.8 | 0.8 | 1.1 | 1.1 | 1.0 | 0.8 | 0.8 | | |
| Hourly Max | 2.2 | 1.9 | 2.9 | 4.2 | 4.4 | 6.0 | 5.7 | 2.9 | 3.4 | 2.1 | 2.4 | 3.3 | 3.0 | 5.0 | 5.5 | 2.1 | 3.2 | 3.0 | 2.2 | 7.5 | 8.3 | 3.0 | 2.7 | 2.9 | | |

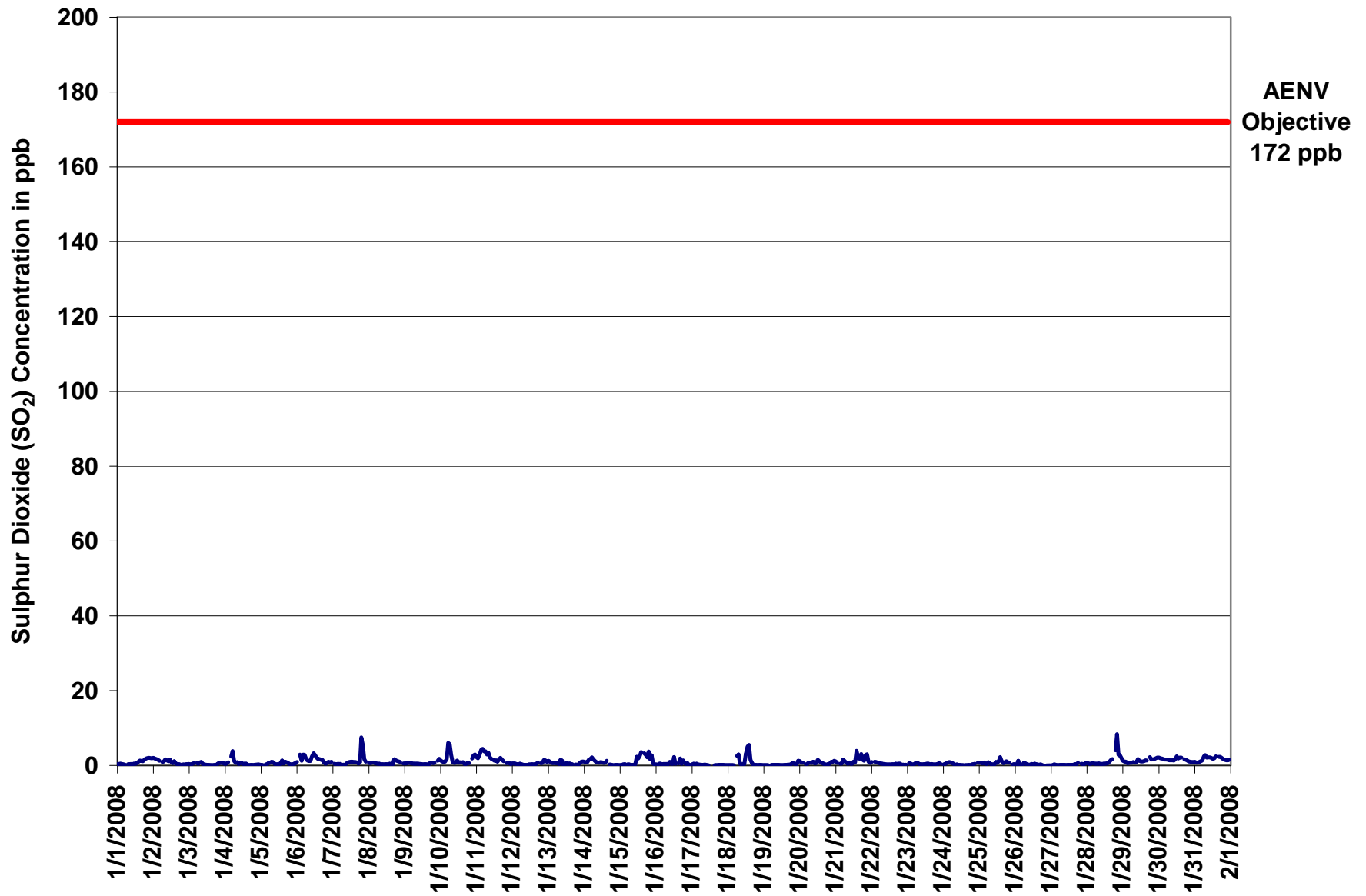


Figure 27. PASZA - Smoky Heights Sulphur Dioxide 1-hr Average Monthly Trend

Station: Smoky Heights
 Station Owner: PASAA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

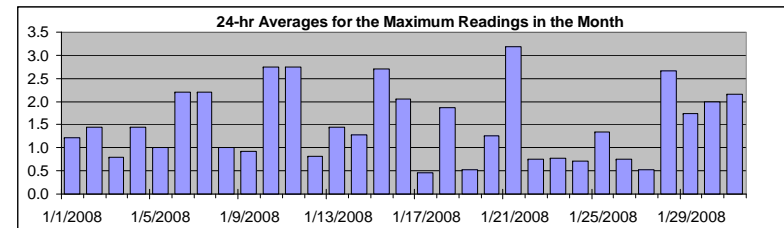
Sulphur Dioxide (SO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|------|-----|--------|-------------|
| Maximum 1-hr Value: | 16.9 | ppb | 28-Jan | 19:00 20:00 |
| Maximum 24-hr Value: | 3.2 | ppb | 21-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 33 hrs | Operational Time: | 709 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 11.1 | 4.2 | 1.6 | 1.0 | 0.6 | 0.3 | 0.2 | 1.5 ppb | 1.0 ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24-hour Average | Daily Maximum | |
|------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|------------------|------|
| 1-Jan-08 | 1 | 1 | 1 | 1 | 1 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1.2 | 2.4 | |
| 2-Jan-08 | 2 | 2 | 2 | 2 | 2 | A | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1.5 | 3.3 |
| 3-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0.8 | 1.5 | |
| 4-Jan-08 | 1 | 1 | 1 | A | 8 | 7 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1.4 | 7.7 |
| 5-Jan-08 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.0 | 2.9 | |
| 6-Jan-08 | 1 | A | 4 | 2 | 4 | 4 | 2 | 2 | 2 | 2 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2.2 | 4.1 | |
| 7-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 14 | 14 | 3 | 1 | A | 2.2 | 13.9 | |
| 8-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | A | 1.0 | 2.4 | |
| 9-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 2 | 0.9 | 2.4 | |
| 10-Jan-08 | 2 | 2 | 1 | 1 | 5 | 14 | 9 | 5 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 3 | 3 | 3 | 2.7 | 14.3 | |
| 11-Jan-08 | 3 | 2 | 5 | 5 | 5 | 5 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 3 | 2 | 2 | A | 1 | 1 | 1 | 2.7 | 5.3 | |
| 12-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 2 | 2 | 0.8 | 2.3 | |
| 13-Jan-08 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0 | 1 | 1 | 1 | 1 | 1.5 | 10.1 | |
| 14-Jan-08 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | A | 1 | 0 | 0 | 0 | 0 | 0 | 1.3 | 3.1 | |
| 15-Jan-08 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 7 | 3 | 4 | 5 | A | 4 | 3 | 3 | 10 | 5 | 10 | 2 | 2.7 | 10.1 | |
| 16-Jan-08 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 12 | 1 | A | 5 | 11 | 1 | 3 | 2 | 1 | 1 | 1 | 0 | 2.1 | 11.8 |
| 17-Jan-08 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | C | C | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.9 | |
| 18-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 7 | 5 | 1 | 0 | 1 | 1 | 5 | 6 | 7 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1.9 | 7.4 | |
| 19-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 0.5 | 1.9 | |
| 20-Jan-08 | 2 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 2 | 2 | 1.2 | 2.2 | |
| 21-Jan-08 | 1 | 1 | A | 1 | 1 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 4 | 1 | 11 | 3 | 6 | 4 | 3 | 2 | 9 | 11 | 2 | 3.2 | 11.2 | |
| 22-Jan-08 | 2 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0.8 | 1.6 | |
| 23-Jan-08 | 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 | 1.1 | |
| 24-Jan-08 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | A | 0.7 | 1.7 | |
| 25-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 2 | 1 | 2 | 4 | 4 | 1 | 1 | 2 | 1 | 1 | A | 0 | 2 | 1.3 | 4.3 |
| 26-Jan-08 | 1 | 1 | 4 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0.8 | 4.2 | |
| 27-Jan-08 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | A | 1 | 1 | 1 | 0.5 | 1.1 | |
| 28-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | A | 17 | 16 | 4 | 3 | 2.7 | 16.9 | |
| 29-Jan-08 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | A | 3 | 2 | 2 | 2 | 3 | 3 | 1.7 | 3.1 | |
| 30-Jan-08 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 2 | 3 | 2 | A | 2 | 2 | 2 | 1 | 1 | 1 | 2.0 | 4.0 | |
| 31-Jan-08 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | A | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2.2 | 3.4 | |
| Hourly Avg | 1.1 | 1.0 | 1.3 | 1.2 | 1.6 | 2.0 | 1.8 | 1.4 | 1.4 | 1.1 | 1.0 | 1.4 | 1.8 | 1.4 | 2.0 | 1.4 | 1.6 | 1.3 | 1.2 | 2.3 | 2.3 | 1.9 | 1.3 | 1.3 | | |
| Hourly Max | 2.7 | 2.3 | 4.6 | 5.0 | 7.7 | 14.3 | 9.0 | 5.4 | 10.1 | 3.7 | 4.0 | 6.9 | 11.8 | 5.9 | 11.1 | 4.6 | 10.7 | 4.2 | 3.1 | 16.9 | 16.2 | 11.2 | 3.4 | 3.5 | | |

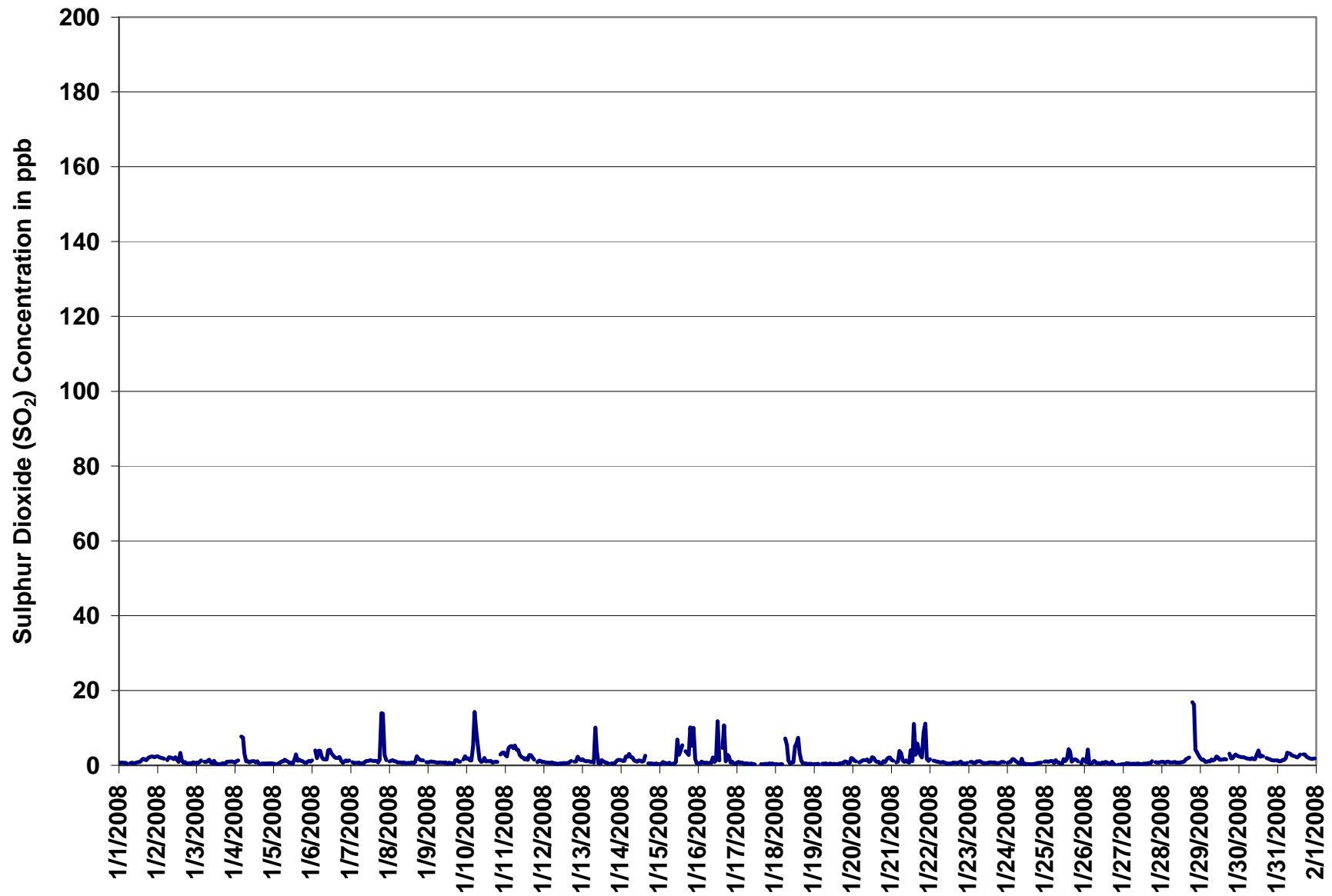
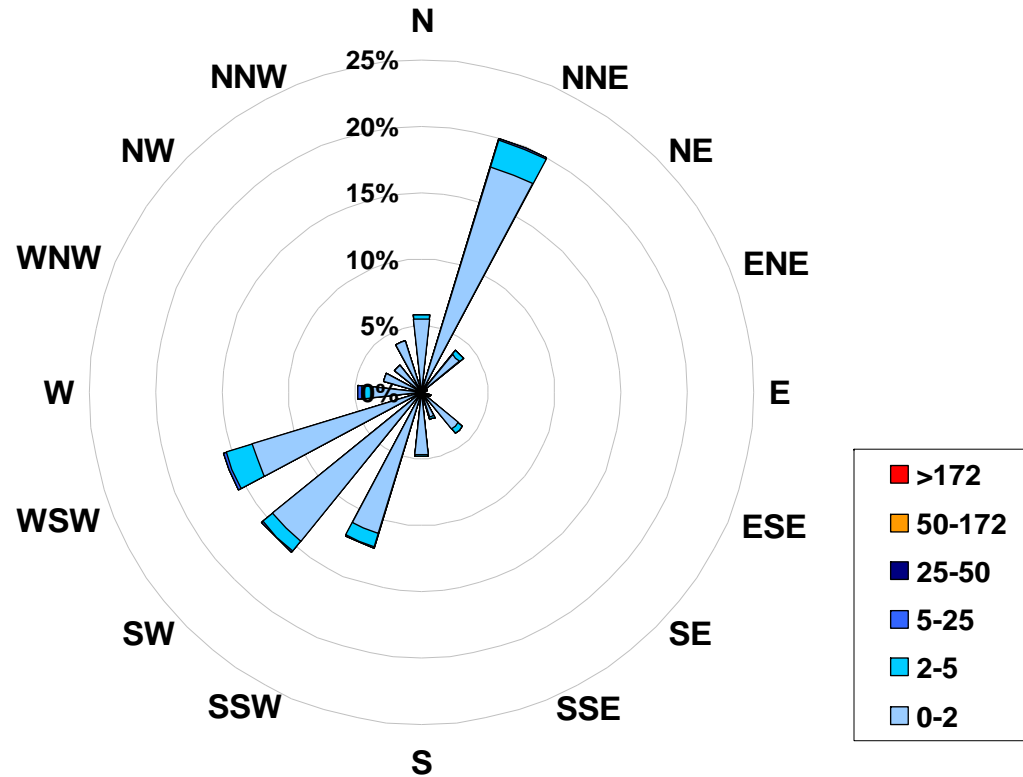


Figure 28. PASZA - Smoky Heights Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Smoky Heights Site for January 2008



Calms: 0%

| Frequency Distribution of SO ₂ in ppb | | | Frequency (hrs) |
|--|----|-----|-----------------|
| Range | | | |
| 0.0 | < | 2 | 643 |
| 2 | to | 5 | 59 |
| 5 | to | 25 | 7 |
| 25 | to | 50 | 0 |
| 50 | to | 172 | 0 |
| | > | 172 | 0 |
| Total Non-Zero Values | | | 709 |

PASZA - Smoky Heights Total Reduced Sulphur Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

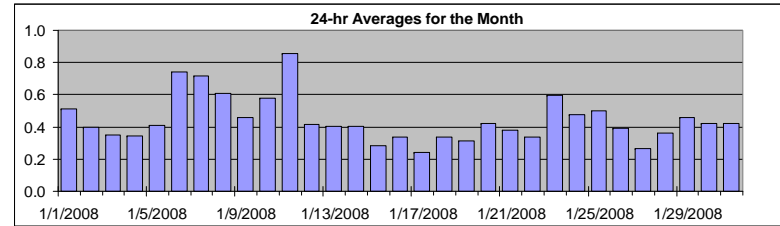
HOURLY AVERAGE TABLE

Total Reduced Sulphur (TRS)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | | |
|-----------------------|-----|-----|--------|-------------|
| Maximum 1-hr Average: | 1.2 | ppb | 11-Jan | 16:00 17:00 |
| Maximum 24-hr Value: | 0.9 | ppb | 11-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 33 hrs | Operational Time: | 709 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 0.9 | 0.8 | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 | 0.4 ppb | 0.4 ppb |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|-----------------|---------------|-----|
| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | | | |
| 1-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.1 |
| 2-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.6 |
| 3-Jan-08 | 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 | 0.5 |
| 4-Jan-08 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.5 |
| 5-Jan-08 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.4 | 0.6 |
| 6-Jan-08 | 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 | 0.7 | 1.0 |
| 7-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | A | 0.7 | 1.1 | |
| 8-Jan-08 | 1 | 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 | 0.7 |
| 9-Jan-08 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | A | 1 | 1 | 1 | 0.5 | 0.6 |
| 10-Jan-08 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0.6 | 0.9 |
| 11-Jan-08 | 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 | 0.9 | 1.2 |
| 12-Jan-08 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 0 | 0 | 0 | 0.4 | 0.9 |
| 13-Jan-08 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.7 |
| 14-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.6 |
| 15-Jan-08 | 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 | 0.3 | 0.4 |
| 16-Jan-08 | 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 | 0.3 | 0.5 |
| 17-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.4 |
| 18-Jan-08 | 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 | 0.3 | 0.5 |
| 19-Jan-08 | 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 | 0.4 |
| 20-Jan-08 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0.4 | 0.5 |
| 21-Jan-08 | 0 | 0 | A | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.7 |
| 22-Jan-08 | 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 | 0.3 | 0.4 |
| 23-Jan-08 | A | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | A | 0 | 0.6 | 0.8 |
| 24-Jan-08 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.5 | 0.8 |
| 25-Jan-08 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0.5 | 0.7 |
| 26-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0.4 | 0.5 |
| 27-Jan-08 | 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 | 0.3 | 0.4 |
| 28-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 1 | 1 | 0 | 0 | 0.4 | 0.8 |
| 29-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | A | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0.5 | 0.5 |
| 30-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.5 |
| 31-Jan-08 | 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 | 0.4 | 0.5 |
| Hourly Avg | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| Hourly Max | 0.8 | 0.9 | 0.9 | 1.1 | 1.1 | 0.9 | 1.0 | 0.9 | 0.9 | 0.9 | 0.8 | 0.9 | 1.0 | 0.9 | 0.9 | 1.1 | 1.2 | 0.9 | 0.9 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 | | | |

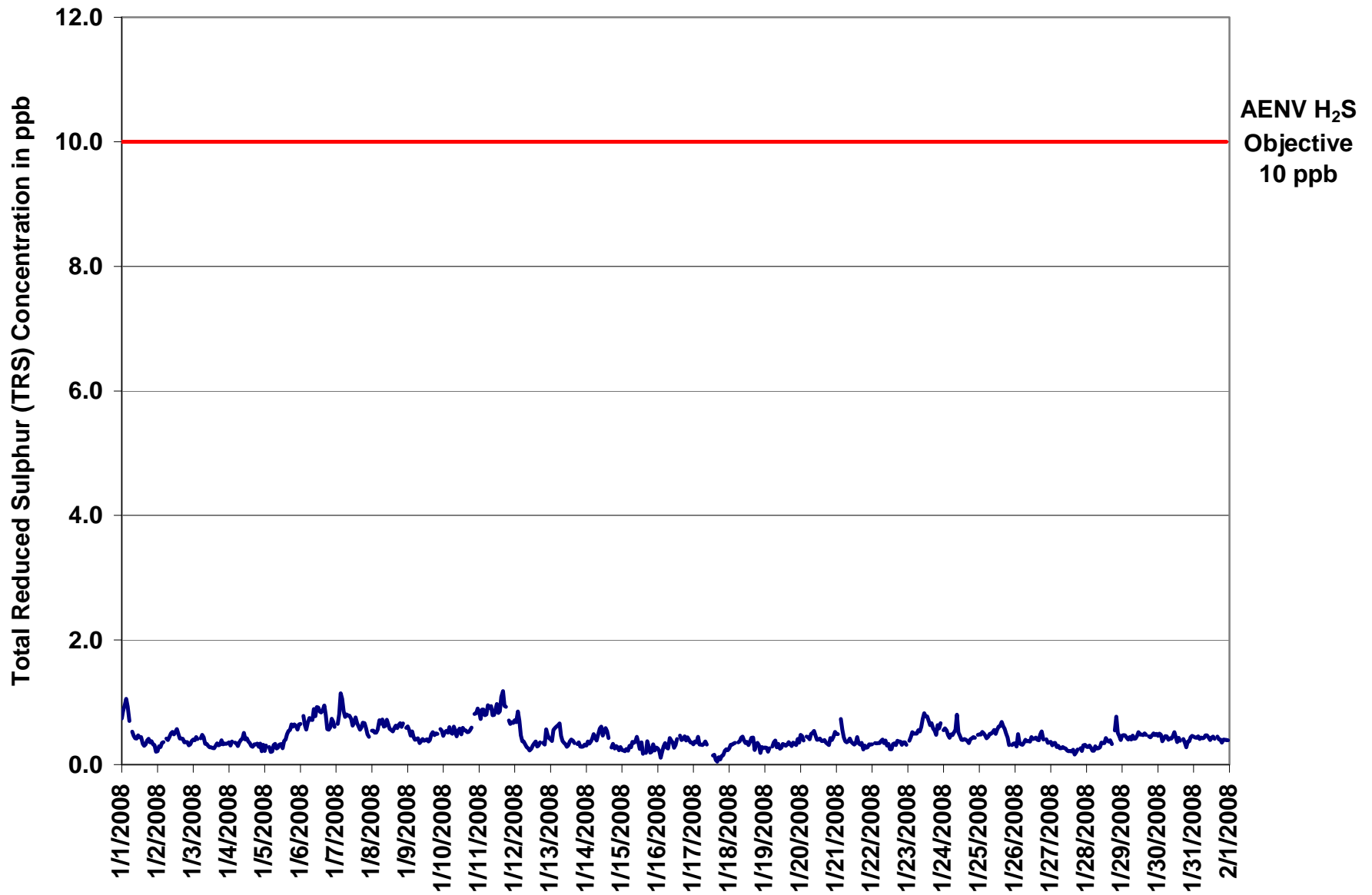


Figure 29. PASZA - Smoky Heights Total Reduced Sulphur 1-hr Average Monthly Trend

Station: Smoky Heights
 Station Owner: PASAA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

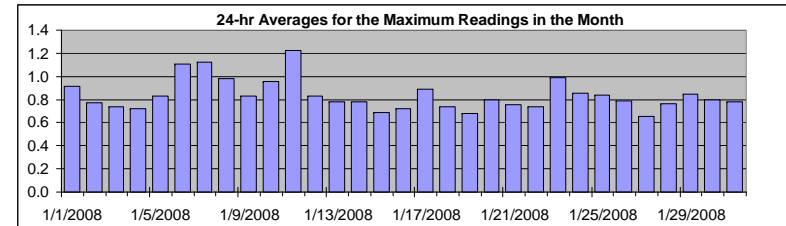
Total Reduced Sulphur (TRS)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-----|-----|--------|-------------|
| Maximum 1-hr Value: | 4.3 | ppb | 17-Jan | 13:00 14:00 |
| Maximum 24-hr Value: | 1.2 | ppb | 11-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 33 hrs | Operational Time: | 709 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 1.4 | 1.2 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.8 ppb | 0.8 ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum | |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|--|
| 1-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.4 | |
| 2-Jan-08 | 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 | 1.0 | |
| 3-Jan-08 | 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 | 1.0 | |
| 4-Jan-08 | 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 | |
| 5-Jan-08 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.3 | |
| 6-Jan-08 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.1 | 1.3 | |
| 7-Jan-08 | A | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1.1 | 1.7 | |
| 8-Jan-08 | 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 | 1.1 | |
| 9-Jan-08 | 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 | |
| 10-Jan-08 | 1 | 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 | 1.3 | |
| 11-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1.2 | 1.5 | |
| 12-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.3 | |
| 13-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.1 | |
| 14-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.1 | |
| 15-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.2 | |
| 16-Jan-08 | 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 | 0.9 | |
| 17-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | C | C | A | 4 | 2 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0.9 | 4.3 | |
| 18-Jan-08 | 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 | 1.0 | |
| 19-Jan-08 | 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 | |
| 20-Jan-08 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.0 | |
| 21-Jan-08 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0.8 | 1.1 | |
| 22-Jan-08 | 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 | 0.9 | |
| 23-Jan-08 | A | 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 | 1.3 | |
| 24-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0.9 | 1.8 | |
| 25-Jan-08 | 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 | |
| 26-Jan-08 | 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 | 1.0 | |
| 27-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0.7 | 0.8 | |
| 28-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.4 | |
| 29-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 0.9 | |
| 30-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.0 | |
| 31-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 0.9 | |
| Hourly Avg | 0.8 | 0.8 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.8 | 0.9 | 0.8 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | | |
| Hourly Max | 1.2 | 1.4 | 1.4 | 1.7 | 1.4 | 1.2 | 1.3 | 1.2 | 1.3 | 1.8 | 1.1 | 1.3 | 1.3 | 4.3 | 2.4 | 1.5 | 1.5 | 1.5 | 1.3 | 1.3 | 1.4 | 1.1 | 1.3 | 1.3 | | | |

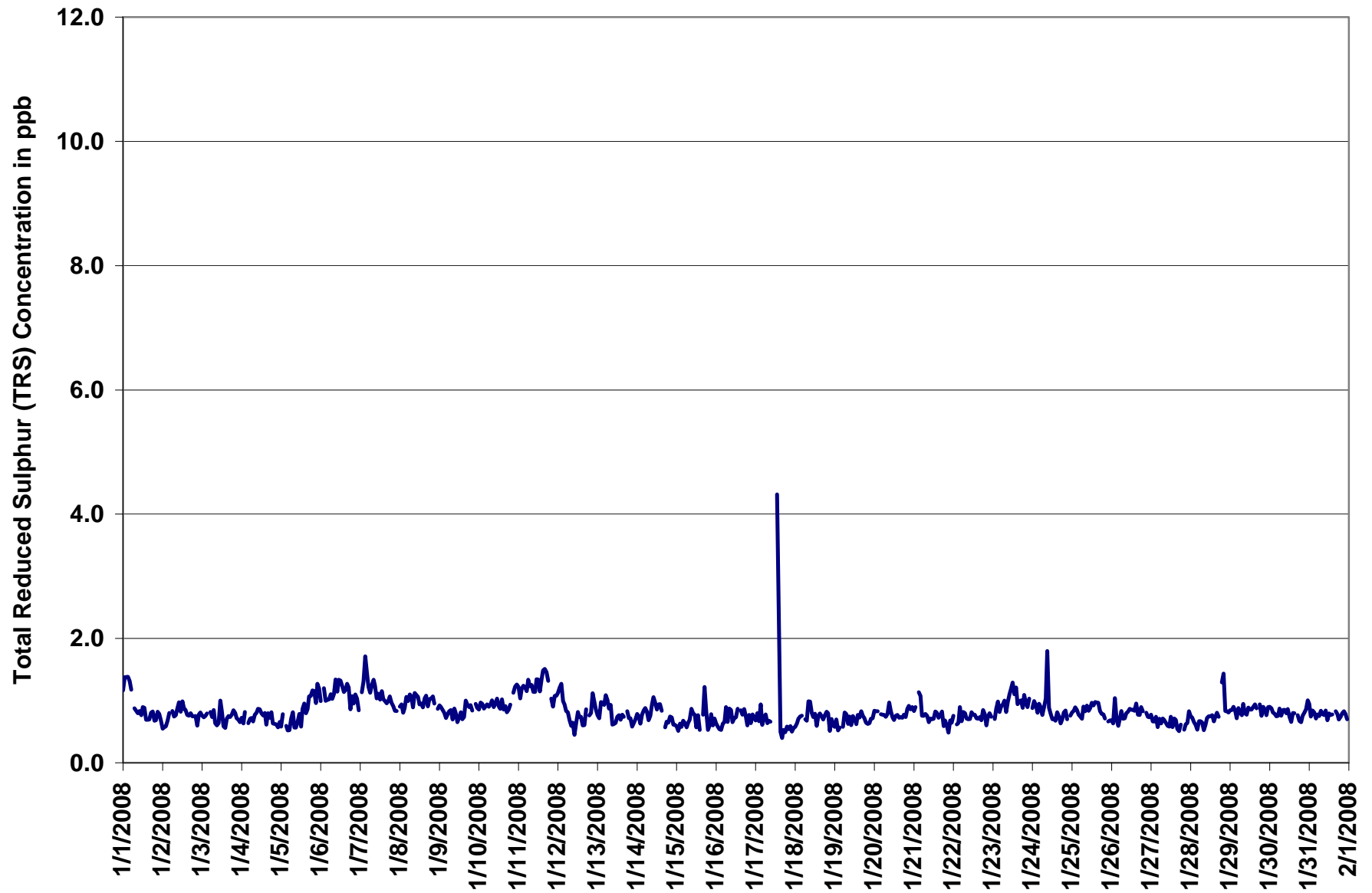
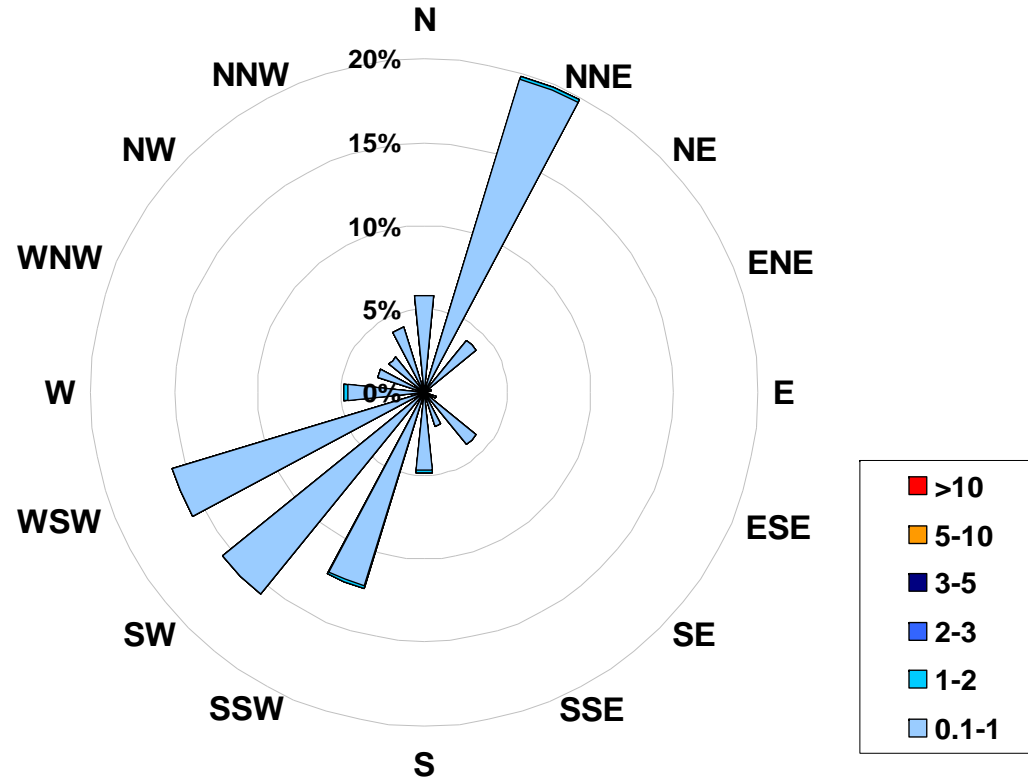


Figure 30. PASZA - Smoky Heights Total Reduced Sulphur Instantaneous (30 Second) Maximum Value Monthly Trend

**1-hr Average Concentration Rose for Total Reduced Sulphur (in ppb)
Located at the Smoky Heights Site for January 2008**



Calms: 0%

| Frequency Distribution of TRS in ppb | | | Frequency (hrs) |
|--------------------------------------|----|----|-----------------|
| Range | | | |
| 0.1 | < | 1 | 704 |
| 1 | to | 2 | 5 |
| 2 | to | 3 | 0 |
| 3 | to | 5 | 0 |
| 5 | to | 10 | 0 |
| | > | 10 | 0 |
| Total Non-Zero Values | | | 709 |

PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

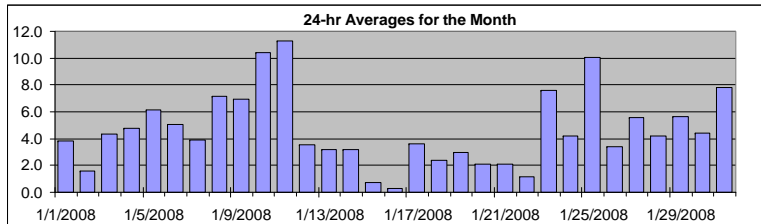
HOURLY AVERAGE TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | | |
|--------------------------------------|------|-------------------|--------|------------|
| Number of 24-hr Exceedances (draft): | 0 | | | |
| Maximum 1-hr Average: | 65.4 | µg/m ³ | 23-Jan | 23:00 0:00 |
| Maximum 24-hr Value: | 11.3 | µg/m ³ | 11-Jan | |



| | | | | | | | | | | |
|-------------------|-------|------|-------------------------|---------|-----|-----|-----|------------------|---|--|
| AIC Time: | 0 hrs | | Operational Time: | 739 hrs | | | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 99.3% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average / Median | Geomean | |
| | 22.9 | 15.3 | 6.0 | 3.3 | 1.1 | 0.0 | 0.0 | 4.6 | 3 µg/m ³ 3.7 µg/m ³ | |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|---------------|---------------|
| | Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | | | 23:00 0:00 |
| 1-Jan-08 | 7 | 9 | 9 | 21 | 4 | 17 | 4 | 1 | 4 | 3 | 1 | 0 | 0 | 5 | 0 | 0 | 0 | D | D | 0 | 0 | 0 | 0 | 0 | 3.8 | 20.7 | |
| 2-Jan-08 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 0 | 2 | 3 | 3 | 2 | 6 | 5 | 1 | 0 | 1 | 1 | 2 | 3 | 0 | 0 | 5 | 1.6 | 6.4 | |
| 3-Jan-08 | 9 | 15 | 8 | 0 | 4 | 7 | 3 | 4 | 2 | 6 | 4 | 4 | 2 | 0 | 0 | 0 | 2 | 17 | 5 | 4 | 1 | 2 | 2 | 1 | 4.3 | 16.6 | |
| 4-Jan-08 | 3 | 3 | 4 | 3 | 3 | 4 | 2 | 3 | 3 | 6 | 3 | 2 | 4 | 3 | 0 | 3 | 31 | 16 | 0 | 4 | 1 | 3 | 9 | 4.8 | 30.8 | | |
| 5-Jan-08 | 2 | 5 | 2 | 3 | 2 | 2 | 4 | 7 | 4 | 4 | 3 | 4 | 4 | 2 | 4 | 8 | 5 | 5 | 9 | 13 | 9 | 19 | 5 | 25 | 6.2 | 24.9 | |
| 6-Jan-08 | 5 | 16 | 7 | 3 | 3 | 2 | 3 | 2 | 3 | 7 | 9 | 4 | 2 | 3 | 7 | 10 | 7 | 2 | 2 | 3 | 2 | 9 | 10 | 1 | 5.1 | 15.7 | |
| 7-Jan-08 | 3 | 3 | 3 | 3 | 2 | 3 | 1 | 1 | 2 | 2 | 6 | 5 | 3 | 4 | 6 | 8 | 6 | 4 | 5 | 4 | 6 | 4 | 6 | 4 | 3.9 | 8.4 | |
| 8-Jan-08 | 2 | 6 | 6 | 6 | 5 | 6 | 6 | 8 | 7 | 9 | 22 | 18 | 5 | 5 | 5 | 7 | 8 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7.2 | 22.3 | |
| 9-Jan-08 | 11 | 8 | 7 | 7 | 6 | 6 | 5 | 5 | 6 | 5 | 6 | 6 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 10 | 7.0 | 11.1 | | |
| 10-Jan-08 | 9 | 8 | 7 | 7 | 6 | 6 | 11 | 10 | 9 | 9 | 11 | 11 | 9 | 10 | 12 | 11 | 13 | 12 | 11 | 12 | 13 | 13 | 14 | 14 | 10.4 | 14.5 | |
| 11-Jan-08 | 13 | 10 | 12 | 14 | 14 | 16 | 16 | 15 | 14 | 13 | 9 | 11 | 11 | 10 | 9 | 18 | 17 | 13 | 6 | 9 | 6 | 6 | 4 | 7 | 11.3 | 17.7 | |
| 12-Jan-08 | 5 | 4 | 8 | 5 | 2 | 0 | 3 | 1 | 2 | 2 | 3 | 6 | 4 | 1 | 17 | 0 | 0 | 2 | 3 | 3 | 3 | 4 | 4 | 3 | 3.5 | 16.8 | |
| 13-Jan-08 | 3 | 3 | 10 | 4 | 8 | 6 | 6 | 16 | 7 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 1 | 3 | 1 | 0 | 0 | 2 | 1 | 3.2 | 16.1 | |
| 14-Jan-08 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 6 | 7 | 8 | 4 | 5 | 5 | 6 | 4 | 0 | D | 0 | 0 | 4 | 4 | 1 | 1 | 3.2 | 7.5 | |
| 15-Jan-08 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 1 | 1 | 0 | 0 | 0.7 | 1.9 | |
| 16-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 3.3 | |
| 17-Jan-08 | 1 | 7 | 4 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 12 | 16 | 2 | 5 | 0 | 2 | 2 | 2 | 2 | 1 | 5 | 9 | 12 | 7 | 3.6 | 15.8 |
| 18-Jan-08 | 0 | 6 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 3 | 1 | 1 | 2 | 1 | 0 | 1 | 1 | 1 | 9 | 21 | 0 | 0 | 0 | 6 | 2.4 | 21.1 | |
| 19-Jan-08 | 3 | 1 | 0 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 15 | 6 | 3 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 3.0 | 15.2 | |
| 20-Jan-08 | 3 | 3 | 3 | 3 | 3 | 2 | 4 | 3 | 2 | 3 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 4 | 5 | 2.1 | 4.9 | |
| 21-Jan-08 | 7 | 6 | 6 | 7 | 5 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 5 | 6 | 2.1 | 6.8 | |
| 22-Jan-08 | 6 | 4 | 2 | 3 | 3 | 3 | 1 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | D | 1 | 0 | 0 | 0 | 0 | 1.2 | 5.5 | | |
| 23-Jan-08 | 1 | 1 | 3 | 5 | 5 | 3 | 4 | 4 | 4 | 11 | 12 | 13 | 5 | 7 | 5 | 6 | 4 | 0 | 0 | 1 | 11 | 7 | 3 | 65 | 7.6 | 65.4 | |
| 24-Jan-08 | 5 | 25 | 11 | 0 | 0 | 0 | 1 | 6 | 6 | 29 | 4 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 2 | 3 | 4 | 4.2 | 29.4 | |
| 25-Jan-08 | 4 | 5 | 5 | 9 | 9 | 8 | 5 | 2 | 5 | 14 | 16 | 19 | 17 | 17 | 20 | 21 | 22 | 18 | 17 | 6 | 0 | 0 | 0 | 1 | 10.0 | 22.3 | |
| 26-Jan-08 | 3 | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 2 | 0 | 2 | 3 | 2 | 6 | 17 | 11 | 4 | 1 | 3 | 2 | 3 | 7 | 8 | 5 | 3.4 | 16.6 | |
| 27-Jan-08 | 4 | 4 | 6 | 6 | 5 | 5 | 6 | 4 | 4 | 7 | 5 | 3 | 5 | 7 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 26 | 20 | 5.5 | 26.2 | | |
| 28-Jan-08 | 8 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 5 | 5 | 4 | 4 | 10 | 23 | 6 | 4 | 4 | 4 | 4 | 4 | 3 | N | 4.2 | 23.3 | |
| 29-Jan-08 | 10 | 21 | 14 | 1 | 6 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 6 | 10 | 4 | 6 | 5 | 5 | 6 | 4 | 5 | 5.6 | 21.4 | |
| 30-Jan-08 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 3 | 4 | 6 | 3 | 4 | 6 | 5 | 3 | 3 | 5 | 4.4 | 6.4 | |
| 31-Jan-08 | 21 | 9 | 57 | 7 | 3 | 2 | 3 | 2 | 3 | 4 | 4 | 5 | 4 | 4 | 6 | 5 | 6 | 5 | 7 | 5 | 7 | 7 | 6 | 6 | 7.8 | 56.7 | |
| Hourly Avg | 5.0 | 6.0 | 6.5 | 4.0 | 3.6 | 3.7 | 3.4 | 3.7 | 3.6 | 5.2 | 5.1 | 5.5 | 4.0 | 3.8 | 5.2 | 5.2 | 4.4 | 5.0 | 4.6 | 3.9 | 3.6 | 4.1 | 4.7 | 7.5 | | | |
| Hourly Max | 21.4 | 25.2 | 56.7 | 20.7 | 13.9 | 16.7 | 15.8 | 16.1 | 14.5 | 29.4 | 22.3 | 19.0 | 17.1 | 17.1 | 20.5 | 23.3 | 22.3 | 30.8 | 17.3 | 21.1 | 12.8 | 18.9 | 26.2 | 65.4 | | | |

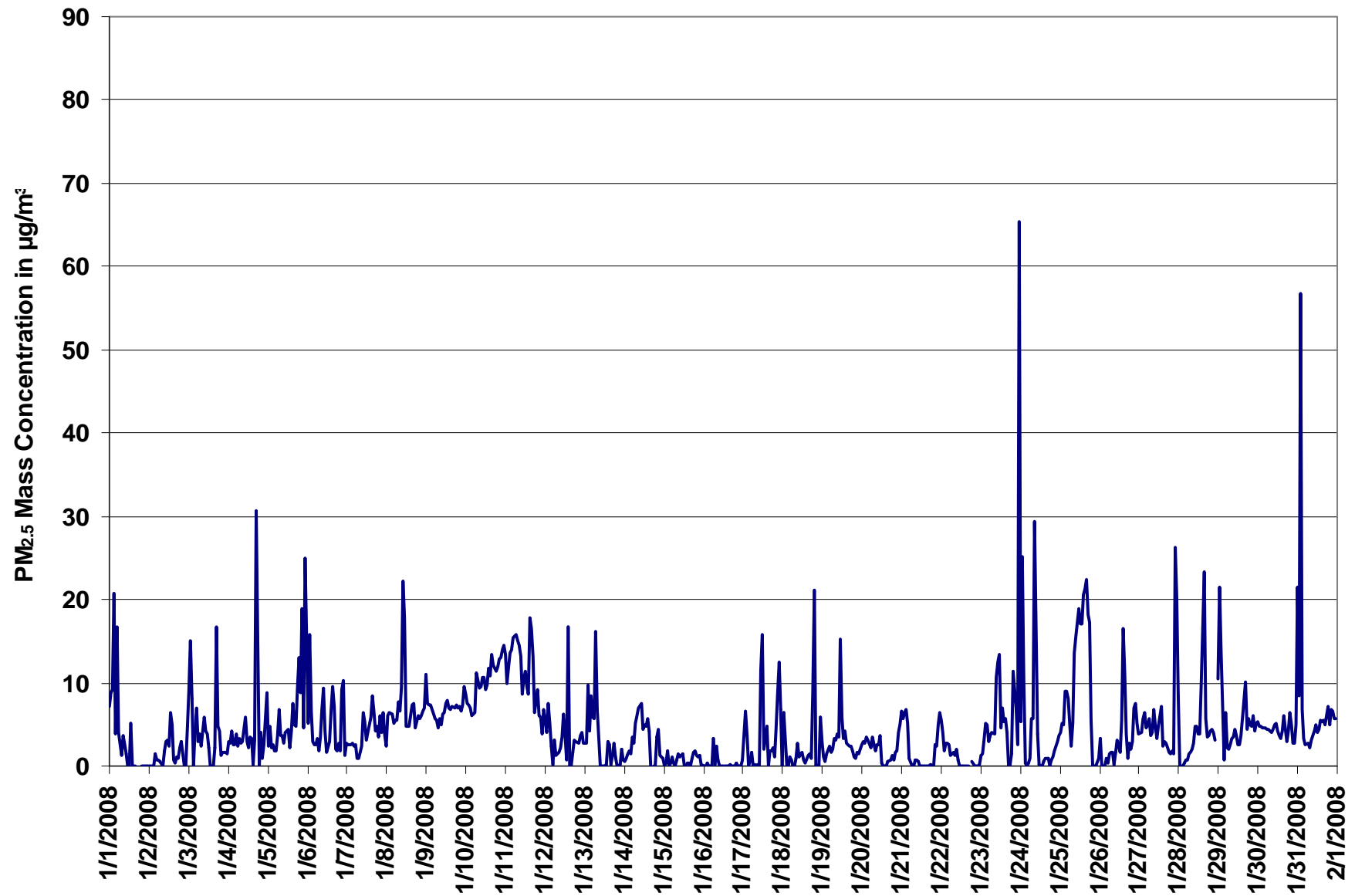


Figure 31. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Smoky Heights
 Station Owner: PASAA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

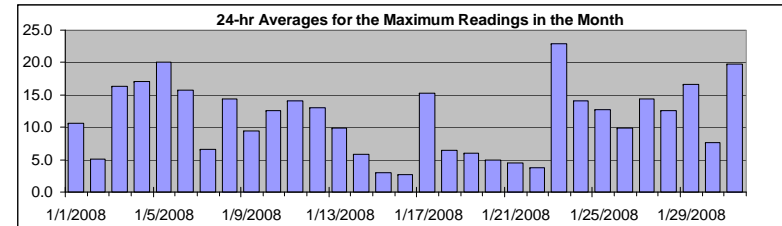
Particulate Matter (PM_{2.5})

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|-------|-------------------|--------|------------|
| Maximum 1-hr Average: | 272.8 | µg/m ³ | 23-Jan | 23:00 0:00 |
| Maximum 24-hr Value: | 22.9 | µg/m ³ | 23-Jan | |

| | | | | | | | | | |
|-------------------|-------|-------------------------|---------|-----|-----|-----|-----|------------------|---------------------|
| AIC Time: | 0 hrs | Operational Time: | 743 hrs | | | | | | |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 99.9% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average / Median | Geomean |
| | 88.6 | 35.6 | 10.7 | 6.7 | 3.7 | 1.3 | 0.0 | 11.2 | 7 µg/m ³ |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 9 | 12 | 24 | 59 | 10 | 49 | 28 | 3 | 14 | 8 | 4 | 2 | 5 | 17 | 0 | 2 | 0 | 0 | 2 | 3 | 1 | 0 | 1 | 10.6 | 59.0 | |
| 2-Jan-08 | 2 | 2 | 3 | 2 | 4 | 7 | 4 | 3 | 3 | 5 | 5 | 6 | 5 | 11 | 12 | 4 | 3 | 4 | 3 | 7 | 9 | 1 | 5 | 14 | 5.1 | 14.4 |
| 3-Jan-08 | 25 | 38 | 37 | 2 | 10 | 23 | 18 | 8 | 13 | 10 | 8 | 10 | 6 | 0 | 0 | 0 | 7 | 83 | 24 | 42 | 12 | 5 | 5 | 4 | 16.2 | 83.3 |
| 4-Jan-08 | 5 | 5 | 6 | 4 | 6 | 6 | 4 | 6 | 6 | 9 | 10 | 7 | 6 | 22 | 10 | 3 | 87 | 133 | 26 | 4 | 11 | 4 | 10 | 22 | 17.1 | 132.7 |
| 5-Jan-08 | 6 | 8 | 4 | 4 | 3 | 3 | 8 | 8 | 6 | 5 | 5 | 8 | 12 | 5 | 6 | 27 | 7 | 6 | 23 | 44 | 19 | 72 | 72 | 120 | 20.1 | 119.6 |
| 6-Jan-08 | 18 | 35 | 22 | 9 | 6 | 4 | 6 | 3 | 8 | 20 | 29 | 16 | 3 | 7 | 40 | 36 | 18 | 3 | 3 | 7 | 4 | 39 | 40 | 2 | 15.8 | 40.1 |
| 7-Jan-08 | 4 | 5 | 4 | 4 | 4 | 5 | 3 | 4 | 4 | 5 | 10 | 9 | 4 | 6 | 7 | 12 | 10 | 7 | 9 | 7 | 11 | 9 | 9 | 7 | 6.6 | 11.7 |
| 8-Jan-08 | 6 | 12 | 11 | 12 | 13 | 11 | 14 | 20 | 11 | 25 | 53 | 53 | 10 | 7 | 8 | 10 | 14 | 7 | 7 | 8 | 8 | 9 | 9 | 9 | 14.4 | 53.0 |
| 9-Jan-08 | 17 | 11 | 10 | 9 | 8 | 8 | 8 | 7 | 8 | 9 | 9 | 9 | 10 | 11 | 10 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 11 | 9.5 | 17.2 |
| 10-Jan-08 | 10 | 10 | 12 | 9 | 9 | 9 | 16 | 13 | 11 | 12 | 13 | 13 | 11 | 12 | 13 | 13 | 15 | 14 | 13 | 13 | 14 | 15 | 16 | 16 | 12.6 | 16.2 |
| 11-Jan-08 | 15 | 11 | 14 | 15 | 16 | 17 | 17 | 17 | 16 | 15 | 11 | 14 | 14 | 13 | 16 | 20 | 18 | 17 | 11 | 13 | 8 | 10 | 8 | 11 | 14.0 | 20.0 |
| 12-Jan-08 | 10 | 6 | 15 | 8 | 6 | 5 | 11 | 6 | 4 | 5 | 9 | 11 | 12 | 11 | 122 | 28 | 7 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 13.1 | 122.0 |
| 13-Jan-08 | 8 | 5 | 35 | 11 | 27 | 9 | 9 | 38 | 20 | 17 | 1 | 0 | 1 | 3 | 5 | 5 | 1 | 4 | 13 | 10 | 1 | 4 | 6 | 3 | 9.8 | 38.0 |
| 14-Jan-08 | 3 | 3 | 4 | 5 | 4 | 8 | 6 | 10 | 9 | 9 | 12 | 6 | 8 | 7 | 7 | 10 | 2 | 0 | 1 | 1 | 12 | 8 | 5 | 2 | 5.8 | 11.8 |
| 15-Jan-08 | 1 | 3 | 4 | 2 | 3 | 4 | 2 | 3 | 3 | 6 | 4 | 5 | 1 | 1 | 2 | 1 | 2 | 3 | 5 | 5 | 4 | 4 | 3 | 2 | 3.0 | 5.8 |
| 16-Jan-08 | 2 | 2 | 2 | 3 | 4 | 2 | 6 | 3 | 6 | 4 | 2 | 6 | 4 | 2 | 0 | 1 | 2 | 1 | 2 | 3 | 3 | 2 | 2 | 2 | 2.6 | 5.9 |
| 17-Jan-08 | 3 | 10 | 7 | 3 | 3 | 5 | 2 | 3 | 2 | 4 | 3 | 44 | 34 | 19 | 18 | 1 | 9 | 4 | 8 | 4 | 20 | 64 | 67 | 31 | 15.3 | 66.9 |
| 18-Jan-08 | 5 | 15 | 2 | 5 | 4 | 4 | 0 | 1 | 5 | 5 | 3 | 6 | 10 | 3 | 2 | 4 | 4 | 2 | 21 | 34 | 3 | 1 | 2 | 13 | 6.4 | 33.5 |
| 19-Jan-08 | 11 | 4 | 2 | 3 | 7 | 3 | 3 | 6 | 6 | 6 | 8 | 21 | 13 | 6 | 6 | 5 | 5 | 4 | 5 | 3 | 3 | 5 | 4 | 5 | 6.0 | 21.3 |
| 20-Jan-08 | 5 | 9 | 7 | 7 | 6 | 6 | 5 | 6 | 4 | 5 | 6 | 7 | 3 | 2 | 1 | 2 | 2 | 3 | 5 | 3 | 4 | 4 | 10 | 7 | 4.9 | 9.6 |
| 21-Jan-08 | 9 | 8 | 9 | 10 | 11 | 5 | 3 | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 2 | 6 | 5 | 7 | 9 | 4.4 | 10.5 |
| 22-Jan-08 | 8 | 8 | 3 | 6 | 5 | 4 | 3 | 5 | 4 | 4 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 7 | 2 | 7 | 2 | 3 | 3.8 | 8.2 |
| 23-Jan-08 | 3 | 5 | 10 | 10 | 8 | 5 | 8 | 8 | 7 | 19 | 20 | 24 | 13 | 10 | 10 | 13 | 10 | 7 | 6 | 13 | 35 | 18 | 13 | 273 | 22.9 | 272.8 |
| 24-Jan-08 | 18 | 67 | 29 | 5 | 2 | 2 | 4 | 26 | 29 | 84 | 33 | 4 | 1 | 2 | 2 | 3 | 3 | 3 | 0 | 2 | 3 | 4 | 5 | 5 | 14.0 | 84.1 |
| 25-Jan-08 | 7 | 8 | 7 | 11 | 11 | 9 | 8 | 5 | 12 | 17 | 18 | 21 | 19 | 20 | 23 | 23 | 24 | 21 | 20 | 15 | 1 | 2 | 2 | 3 | 12.8 | 24.1 |
| 26-Jan-08 | 8 | 0 | 0 | 2 | 3 | 2 | 3 | 4 | 3 | 2 | 4 | 5 | 3 | 16 | 95 | 27 | 9 | 6 | 8 | 5 | 6 | 10 | 10 | 7 | 9.9 | 94.7 |
| 27-Jan-08 | 6 | 7 | 9 | 8 | 7 | 7 | 8 | 6 | 7 | 12 | 8 | 6 | 17 | 28 | 8 | 5 | 5 | 5 | 4 | 4 | 3 | 4 | 83 | 89 | 14.4 | 89.5 |
| 28-Jan-08 | 26 | 1 | 3 | 2 | 3 | 4 | 4 | 6 | 5 | 6 | 8 | 7 | 7 | 8 | 28 | 110 | 13 | 6 | 7 | 10 | 10 | 8 | 6 | N | 12.6 | 109.7 |
| 29-Jan-08 | 38 | 79 | 84 | 8 | 36 | 11 | 5 | 6 | 7 | 6 | 7 | 7 | 5 | 5 | 6 | 12 | 17 | 9 | 7 | 8 | 7 | 15 | 7 | 11 | 16.7 | 83.8 |
| 30-Jan-08 | 9 | 7 | 9 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 9 | 6 | 6 | 15 | 10 | 6 | 5 | 13 | 7.6 | 15.3 |
| 31-Jan-08 | 82 | 40 | 115 | 78 | 12 | 5 | 6 | 5 | 6 | 6 | 8 | 11 | 6 | 6 | 8 | 7 | 8 | 7 | 16 | 7 | 10 | 9 | 8 | 9 | 19.7 | 114.8 |
| Hourly Avg | 12.3 | 14.0 | 16.2 | 10.5 | 8.3 | 8.0 | 7.3 | 7.9 | 7.9 | 11.3 | 10.4 | 11.3 | 8.1 | 8.7 | 15.3 | 13.0 | 10.4 | 12.4 | 8.8 | 10.0 | 8.3 | 11.5 | 14.0 | 23.7 | | |
| Hourly Max | 82.2 | 78.6 | 114.8 | 77.7 | 35.6 | 49.5 | 28.2 | 38.0 | 28.7 | 84.1 | 53.0 | 52.9 | 34.4 | 27.6 | 122.0 | 109.7 | 87.4 | 132.7 | 25.9 | 43.9 | 35.3 | 71.7 | 83.3 | 272.8 | | |

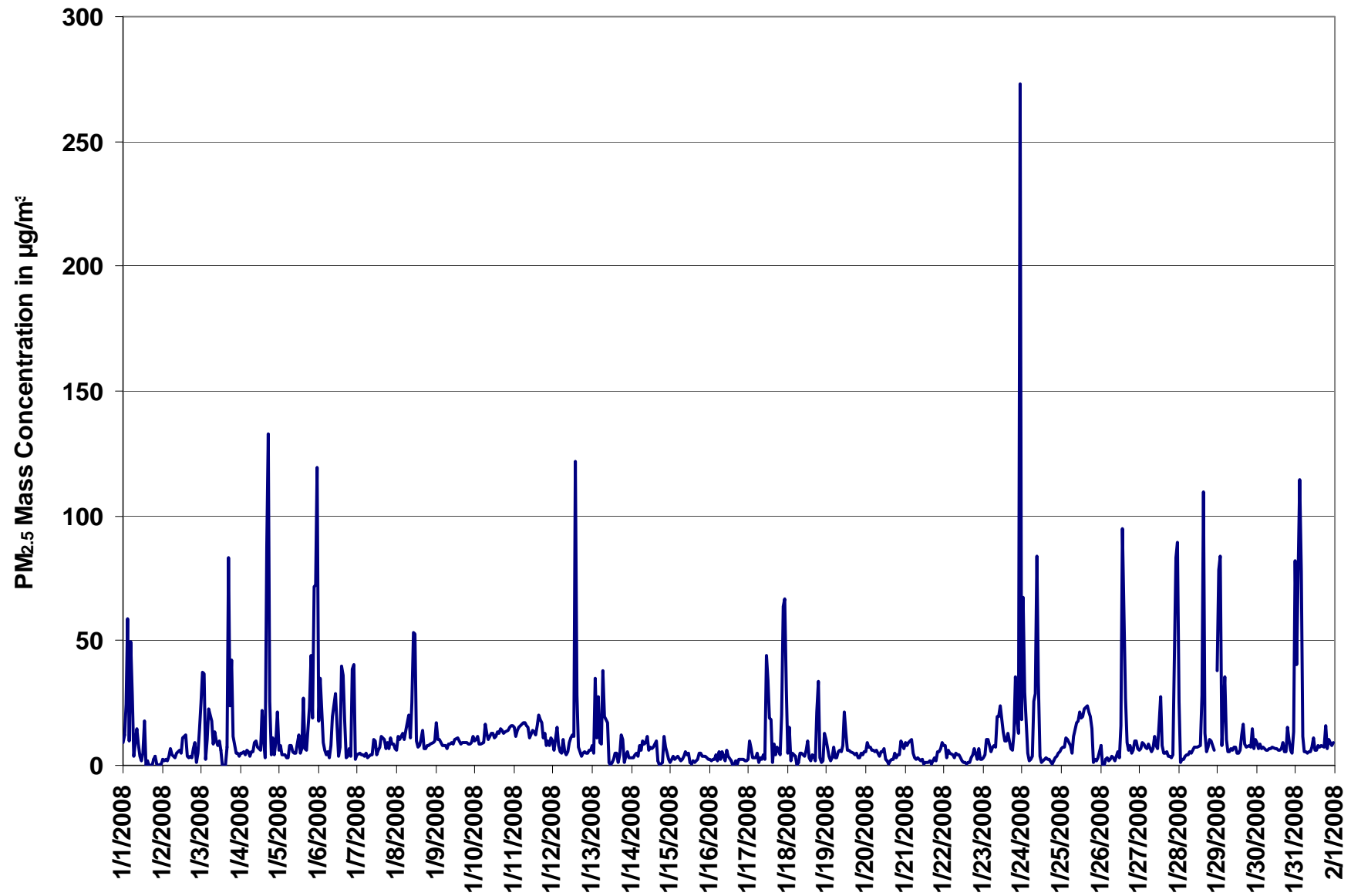
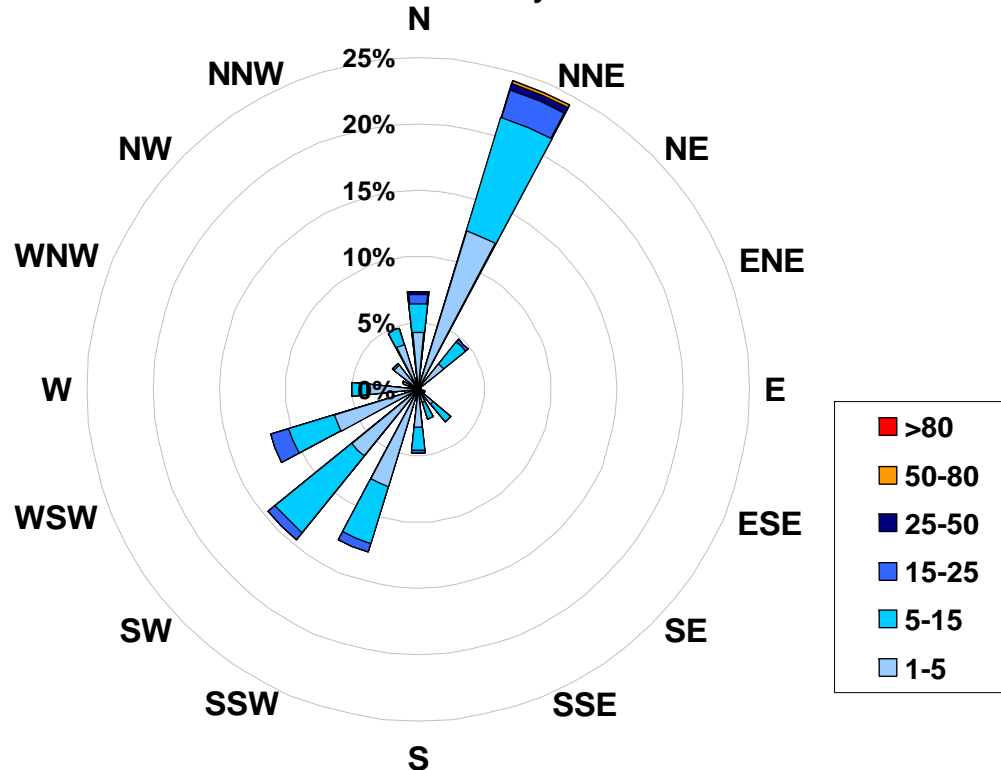


Figure 32. PASZA - Smoky Heights Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Smoky Heights Site for January 2008



Calms: 0%

| Frequency Distribution of PM _{2.5} in µg/m ³ | | | |
|--|----|----|-----------------|
| Range | | | Frequency (hrs) |
| 1.0 | < | 5 | 496 |
| 5 | to | 15 | 203 |
| 15 | to | 25 | 34 |
| 25 | to | 50 | 4 |
| 50 | to | 80 | 2 |
| | > | 80 | 0 |
| Total Non-Zero Values | | | 739 |

PASZA - Smoky Heights Temperature Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

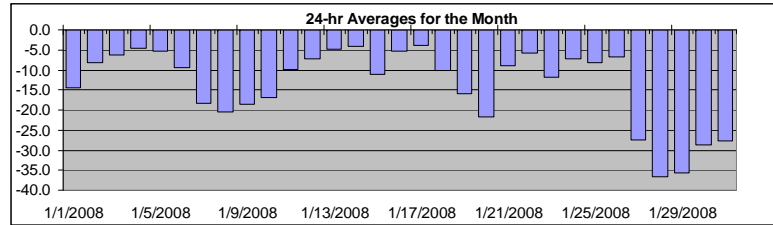
HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | |
|-----------------------|---------|--------|-------------|
| Maximum 1-hr Average: | 3.2 °C | 16-Jan | 21:00 22:00 |
| Maximum 24-hr Value: | -3.8 °C | 17-Jan | |



| | | | | | | | | | |
|-------------------|-------|-------------------------|---------|-------|-------|-------|-------|----------|----------|
| AIC Time: | 0 hrs | Operational Time: | 744 hrs | | | | | | |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 2.2 | -1.9 | -6.0 | -10.5 | -19.1 | -32.2 | -39.8 | -13.6 °C | -10.5 °C |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|--|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | |
| 1-Jan-08 | -23 | -22 | -22 | -22 | -22 | -22 | -21 | -20 | -19 | -18 | -17 | -15 | -14 | -12 | -10 | -8 | -8 | -8 | -7 | -7 | -7 | -7 | -8 | -8 | -14.4 | -6.8 | |
| 2-Jan-08 | -8 | -8 | -8 | -9 | -10 | -13 | -11 | -14 | -14 | -15 | -15 | -13 | -12 | -10 | -5 | -4 | -3 | -4 | -4 | -3 | -4 | -3 | -4 | -7 | -8.3 | -2.5 | |
| 3-Jan-08 | -9 | -9 | -9 | -8 | -10 | -9 | -10 | -10 | -10 | -9 | -6 | -5 | -3 | -2 | -3 | -5 | -5 | -5 | -5 | -4 | -4 | -3 | -4 | -5 | -6.2 | -2.3 | |
| 4-Jan-08 | -5 | -4 | -3 | -5 | -6 | -4 | -4 | -7 | -8 | -11 | -7 | -5 | -4 | -1 | -3 | -3 | -5 | -5 | -3 | -3 | -3 | -2 | -3 | -3 | -4.5 | -1.1 | |
| 5-Jan-08 | -4 | -4 | -4 | -4 | -4 | -4 | -4 | -5 | -5 | -5 | -4 | -4 | -3 | -4 | -5 | -4 | -5 | -6 | -7 | -8 | -8 | -9 | -9 | -9 | -5.3 | -2.6 | |
| 6-Jan-08 | -8 | -7 | -8 | -7 | -8 | -8 | -8 | -9 | -10 | -10 | -9 | -9 | -9 | -8 | -8 | -9 | -10 | -11 | -11 | -11 | -11 | -12 | -12 | -12 | -9.3 | -7.4 | |
| 7-Jan-08 | -13 | -15 | -16 | -17 | -18 | -19 | -21 | -22 | -23 | -21 | -20 | -19 | -18 | -16 | -12 | -13 | -17 | -19 | -18 | -20 | -19 | -20 | -20 | -21 | -18.3 | -12.2 | |
| 8-Jan-08 | -22 | -22 | -21 | -21 | -23 | -23 | -23 | -23 | -24 | -25 | -22 | -19 | -18 | -20 | -19 | -19 | -19 | -19 | -19 | -19 | -19 | -18 | -18 | -18 | -20.6 | -18.3 | |
| 9-Jan-08 | -18 | -18 | -18 | -18 | -18 | -18 | -18 | -18 | -19 | -19 | -19 | -19 | -19 | -18 | -18 | -18 | -20 | -20 | -20 | -20 | -19 | -19 | -18 | -17 | -18.7 | -16.9 | |
| 10-Jan-08 | -16 | -18 | -19 | -20 | -20 | -22 | -22 | -21 | -19 | -18 | -18 | -16 | -16 | -15 | -15 | -14 | -15 | -15 | -16 | -16 | -14 | -14 | -15 | -14 | -16.9 | -14.0 | |
| 11-Jan-08 | -12 | -11 | -11 | -10 | -10 | -10 | -10 | -10 | -10 | -10 | -11 | -11 | -10 | -8 | -7 | -6 | -7 | -9 | -11 | -10 | -10 | -10 | -11 | -10 | -9.8 | -6.0 | |
| 12-Jan-08 | -10 | -11 | -11 | -10 | -9 | -10 | -9 | -9 | -11 | -9 | -8 | -5 | -4 | -2 | -4 | -5 | -6 | -4 | -3 | -4 | -5 | -6 | -7 | -9 | -7.1 | -2.4 | |
| 13-Jan-08 | -10 | -12 | -11 | -11 | -10 | -12 | -12 | -8 | -5 | 0 | 0 | 0 | -1 | 0 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -4 | -4 | -4 | -4.8 | 0.4 | |
| 14-Jan-08 | -4 | -4 | -5 | -6 | -8 | -8 | -8 | -7 | -6 | -6 | -5 | -4 | -3 | -3 | -3 | 0 | 0 | 0 | 0 | -1 | -2 | -5 | -4 | -4 | -4.0 | 0.1 | |
| 15-Jan-08 | -4 | -5 | -7 | -7 | -7 | -9 | -12 | -14 | -15 | -14 | -14 | -13 | -12 | -11 | -10 | -10 | -12 | -15 | -15 | -13 | -13 | -11 | -11 | -12 | -11.1 | -4.2 | |
| 16-Jan-08 | -14 | -13 | -15 | -14 | -15 | -16 | -13 | -12 | -12 | -7 | -6 | -4 | -2 | -1 | -2 | -1 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | -5.2 | 3.2 | |
| 17-Jan-08 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 0 | 1 | 1 | -3 | -4 | -4 | -4 | -5 | -6 | -7 | -8 | -9 | -11 | -10 | -11 | -10 | -10 | -3.8 | 2.5 | |
| 18-Jan-08 | -10 | -11 | -12 | -13 | -11 | -10 | -11 | -15 | -15 | -13 | -11 | -10 | -9 | -8 | -8 | -8 | -8 | -8 | -8 | -8 | -8 | -8 | -9 | -10 | -10.1 | -7.7 | |
| 19-Jan-08 | -10 | -10 | -10 | -10 | -11 | -12 | -13 | -13 | -14 | -15 | -16 | -16 | -17 | -17 | -16 | -16 | -17 | -19 | -19 | -20 | -22 | -22 | -23 | -24 | -15.8 | -9.7 | |
| 20-Jan-08 | -24 | -24 | -25 | -25 | -25 | -27 | -27 | -27 | -27 | -26 | -25 | -21 | -19 | -18 | -18 | -18 | -18 | -18 | -18 | -19 | -19 | -19 | -19 | -17 | -21.7 | -17.0 | |
| 21-Jan-08 | -17 | -17 | -17 | -17 | -13 | -10 | -9 | -10 | -10 | -8 | -6 | -6 | -6 | -5 | -5 | -5 | -5 | -6 | -6 | -8 | -6 | -6 | -7 | -7 | -8.9 | -4.7 | |
| 22-Jan-08 | -7 | -4 | 0 | -2 | -3 | -3 | -4 | -5 | -5 | -5 | -4 | -4 | -4 | -5 | -5 | -5 | -6 | -9 | -10 | -10 | -9 | -10 | -11 | -11 | -5.8 | -0.5 | |
| 23-Jan-08 | -13 | -14 | -13 | -15 | -15 | -16 | -17 | -16 | -16 | -15 | -12 | -11 | -8 | -7 | -7 | -8 | -8 | -11 | -11 | -10 | -10 | -9 | -10 | -11 | -11.8 | -6.9 | |
| 24-Jan-08 | -10 | -10 | -8 | -8 | -8 | -8 | -9 | -9 | -9 | -9 | -8 | -7 | -7 | -7 | -6 | -6 | -5 | -5 | -6 | -6 | -6 | -6 | -6 | -6 | -7.3 | -5.3 | |
| 25-Jan-08 | -6 | -7 | -7 | -7 | -7 | -7 | -8 | -9 | -12 | -12 | -12 | -11 | -10 | -10 | -11 | -11 | -10 | -10 | -10 | -7 | -4 | -3 | -4 | -4 | -8.3 | -3.4 | |
| 26-Jan-08 | -3 | -4 | -4 | -3 | -4 | -5 | -5 | -5 | -4 | -5 | -6 | -5 | -4 | -3 | -3 | -4 | -4 | -6 | -9 | -12 | -14 | -16 | -17 | -18 | -6.7 | -2.7 | |
| 27-Jan-08 | -20 | -22 | -23 | -24 | -25 | -25 | -26 | -27 | -27 | -28 | -28 | -28 | -28 | -29 | -29 | -29 | -29 | -30 | -30 | -30 | -30 | -30 | -31 | -31 | -27.4 | -20.0 | |
| 28-Jan-08 | -32 | -34 | -36 | -37 | -39 | -39 | -40 | -40 | -40 | -40 | -38 | -36 | -36 | -32 | -30 | -31 | -33 | -36 | -38 | -41 | -38 | -39 | -38 | -38 | -36.7 | -29.7 | |
| 29-Jan-08 | -38 | -40 | -39 | -41 | -40 | -41 | -40 | -40 | -40 | -40 | -38 | -36 | -34 | -34 | -33 | -32 | -32 | -32 | -32 | -32 | -31 | -31 | -31 | -31 | -35.7 | -30.9 | |
| 30-Jan-08 | -31 | -31 | -31 | -31 | -31 | -31 | -31 | -31 | -31 | -31 | -30 | -29 | -28 | -27 | -26 | -26 | -26 | -26 | -27 | -27 | -27 | -27 | -28 | -29 | -28.7 | -26.1 | |
| 31-Jan-08 | -29 | -30 | -30 | -31 | -31 | -30 | -30 | -29 | -29 | -29 | -29 | -28 | -26 | -26 | -25 | -25 | -25 | -25 | -26 | -26 | -26 | -26 | -26 | -26 | -27.7 | -25.1 | |
| Hourly Avg | -13.8 | -14.1 | -14.2 | -14.6 | -14.8 | -15.0 | -15.3 | -15.6 | -15.7 | -15.2 | -14.3 | -13.3 | -12.6 | -11.7 | -11.2 | -11.2 | -11.8 | -12.4 | -12.8 | -12.9 | -12.8 | -13.0 | -13.4 | -13.7 | | | |
| Hourly Max | 2.5 | 2.3 | 0.6 | 0.9 | 1.5 | 1.4 | 0.6 | -0.5 | 0.7 | 0.6 | 0.4 | -0.1 | -0.9 | -0.3 | -1.6 | 0.1 | 1.9 | 2.9 | 2.7 | 2.8 | 3.0 | 3.2 | 2.5 | 2.0 | | | |

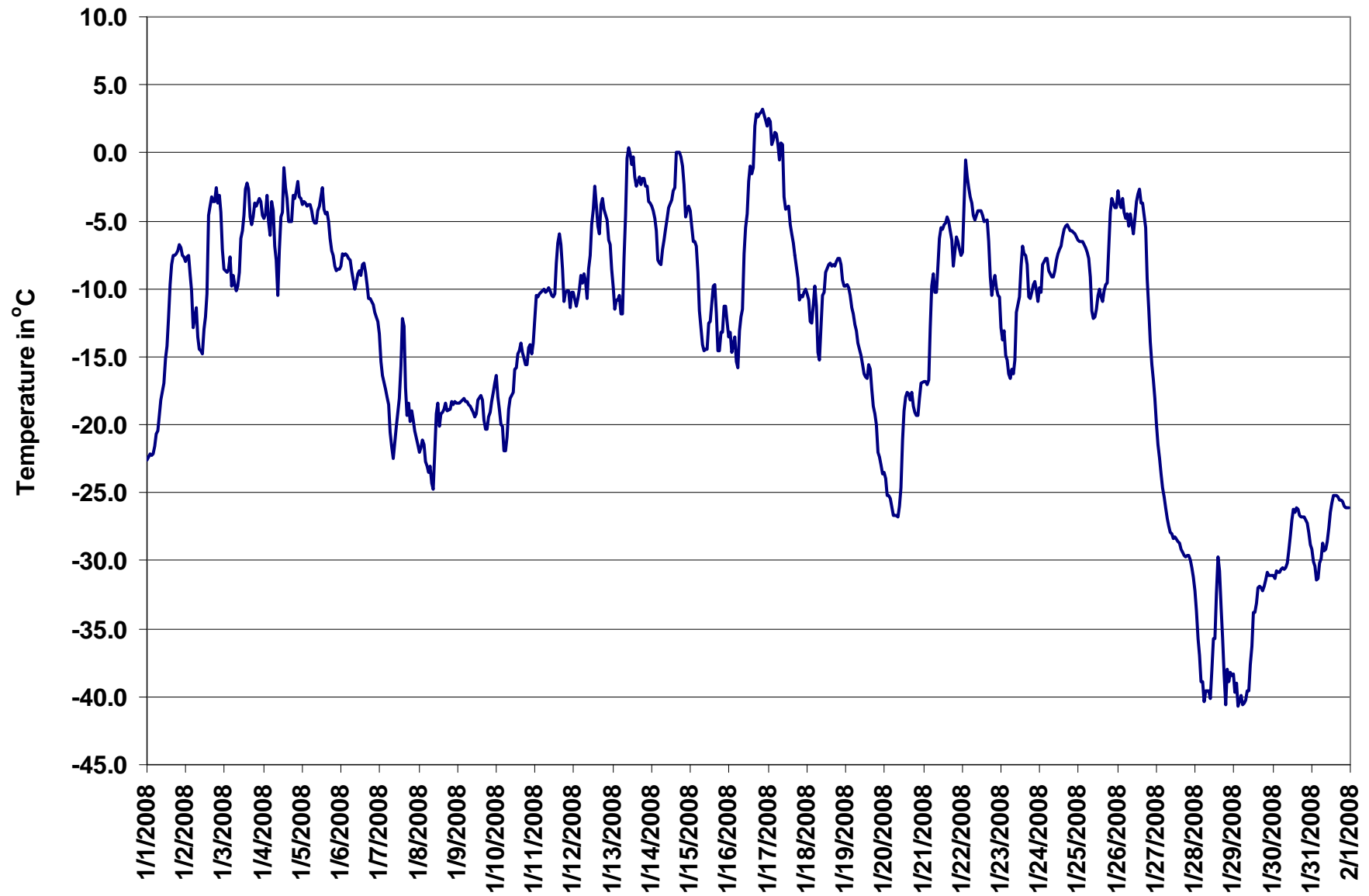


Figure 33. PASZA - Smoky Heights Temperature 1-hr Average Monthly Trend

PASZA - Smoky Heights Scalar Wind Speed Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

HOURLY AVERAGE TABLE

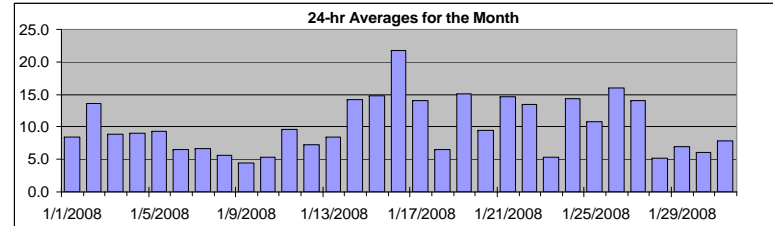
Wind Speed (WSs)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|-------|--------|-------------|
| Maximum 1-hr Average: | 36.3 | km/hr | 16-Jan | 20:00 21:00 |
| Maximum 24-hr Value: | 21.7 | km/hr | 16-Jan | |

| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|------------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 744 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 100.0% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | AverageS |
| | 30.8 | 22.0 | 13.3 | 8.8 | 5.7 | 2.8 | 1.6 | 10.1 km/hr |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hr Scalar Average | Daily Max | | |
|--------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-----------|------|------|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | | | |
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | | |
| 1-Jan-08 | 3 | 2 | 1 | 2 | 1 | 1 | 3 | 1 | 2 | 3 | 3 | 5 | 5 | 4 | 15 | 20 | 19 | 24 | 16 | 14 | 12 | 15 | 12 | 17 | | 8.4 | 23.6 | |
| 2-Jan-08 | 14 | 11 | 9 | 9 | 10 | 8 | 8 | 10 | 9 | 10 | 9 | 8 | 10 | 14 | 17 | 16 | 18 | 20 | 21 | 23 | 20 | 22 | 18 | 14 | | 13.6 | 22.6 | |
| 3-Jan-08 | 11 | 14 | 14 | 12 | 7 | 9 | 8 | 11 | 12 | 12 | 13 | 8 | 5 | 5 | 5 | 3 | 7 | 8 | 8 | 9 | 9 | 8 | 8 | 9 | | 8.9 | 14.3 | |
| 4-Jan-08 | 5 | 4 | 8 | 5 | 12 | 13 | 13 | 6 | 9 | 10 | 10 | 8 | 7 | 3 | 4 | 6 | 5 | 11 | 10 | 9 | 11 | 13 | 16 | 16 | | 9.0 | 16.5 | |
| 5-Jan-08 | 17 | 17 | 15 | 16 | 15 | 14 | 13 | 12 | 10 | 12 | 11 | 7 | 7 | 8 | 8 | 6 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | | 9.3 | 17.2 | |
| 6-Jan-08 | 2 | 7 | 8 | 7 | 9 | 11 | 8 | 5 | 4 | 4 | 6 | 9 | 9 | 4 | 3 | 6 | 6 | 8 | 8 | 6 | 7 | 8 | 8 | 5 | | 6.5 | 10.7 | |
| 7-Jan-08 | 2 | 5 | 6 | 8 | 10 | 4 | 5 | 5 | 7 | 8 | 7 | 9 | 6 | 3 | 3 | 2 | 5 | 8 | 11 | 11 | 10 | 8 | 9 | 6 | | 6.6 | 11.5 | |
| 8-Jan-08 | 7 | 9 | 6 | 2 | 2 | 2 | 3 | 4 | 3 | 2 | 4 | 4 | 6 | 7 | 9 | 8 | 9 | 10 | 7 | 7 | 8 | 6 | 6 | 5 | | 5.7 | 10.0 | |
| 9-Jan-08 | 5 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 3 | 8 | 10 | 10 | 11 | 12 | 13 | | 4.5 | 13.2 | |
| 10-Jan-08 | 11 | 10 | 9 | 10 | 6 | 3 | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 3 | 4 | 4 | 4 | 5 | 4 | 5 | 5 | 4 | 6 | 5 | | 5.4 | 11.3 | |
| 11-Jan-08 | 6 | 7 | 6 | 9 | 10 | 11 | 12 | 12 | 13 | 15 | 13 | 12 | 9 | 8 | 7 | 9 | 8 | 6 | 7 | 10 | 14 | 11 | 11 | 8 | | 9.6 | 14.5 | |
| 12-Jan-08 | 5 | 8 | 13 | 10 | 7 | 6 | 3 | 7 | 8 | 7 | 9 | 7 | 3 | 7 | 6 | 5 | 4 | 7 | 7 | 6 | 9 | 10 | 9 | 10 | | 7.2 | 13.1 | |
| 13-Jan-08 | 8 | 7 | 5 | 4 | 3 | 6 | 7 | 16 | 15 | 22 | 18 | 8 | 12 | 8 | 7 | 6 | 4 | 4 | 3 | 3 | 8 | 9 | 10 | 9 | | 8.4 | 22.0 | |
| 14-Jan-08 | 11 | 12 | 11 | 11 | 10 | 9 | 11 | 10 | 10 | 9 | 6 | 6 | 3 | 7 | 5 | 7 | 15 | 24 | 22 | 26 | 30 | 22 | 31 | 20 | 18 | | 14.2 | 30.8 |
| 15-Jan-08 | 24 | 24 | 13 | 11 | 12 | 11 | 12 | 12 | 12 | 17 | 16 | 13 | 13 | 13 | 17 | 18 | 15 | 15 | 17 | 15 | 15 | 15 | 16 | 11 | 14 | | 14.8 | 24.1 |
| 16-Jan-08 | 11 | 17 | 16 | 13 | 10 | 11 | 12 | 10 | 14 | 18 | 14 | 15 | 24 | 23 | 23 | 23 | 31 | 34 | 34 | 36 | 36 | 35 | 31 | 31 | | 21.7 | 36.3 | |
| 17-Jan-08 | 31 | 18 | 11 | 22 | 25 | 25 | 17 | 15 | 17 | 20 | 12 | 10 | 9 | 9 | 9 | 7 | 9 | 10 | 15 | 18 | 11 | 4 | 5 | 7 | | 14.0 | 31.3 | |
| 18-Jan-08 | 5 | 3 | 5 | 8 | 11 | 9 | 7 | 5 | 4 | 5 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 6 | 7 | 10 | 15 | 17 | | 6.5 | 16.8 | |
| 19-Jan-08 | 17 | 17 | 17 | 21 | 17 | 16 | 17 | 18 | 19 | 18 | 17 | 18 | 17 | 16 | 14 | 18 | 16 | 16 | 13 | 8 | 3 | 9 | 10 | 10 | | 15.1 | 20.8 | |
| 20-Jan-08 | 9 | 10 | 7 | 7 | 7 | 7 | 6 | 9 | 9 | 7 | 7 | 6 | 9 | 9 | 12 | 11 | 10 | 13 | 11 | 11 | 15 | 11 | 12 | 10 | | 9.4 | 14.7 | |
| 21-Jan-08 | 7 | 10 | 10 | 11 | 13 | 13 | 12 | 13 | 15 | 14 | 16 | 19 | 18 | 16 | 19 | 19 | 15 | 17 | 15 | 11 | 12 | 18 | 17 | 20 | | 14.6 | 19.7 | |
| 22-Jan-08 | 14 | 14 | 25 | 28 | 25 | 22 | 23 | 18 | 9 | 10 | 10 | 10 | 10 | 11 | 14 | 15 | 11 | 8 | 6 | 7 | 7 | 8 | 11 | 12 | | 13.5 | 28.3 | |
| 23-Jan-08 | 12 | 8 | 7 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 4 | 4 | 4 | 4 | 6 | 5 | 4 | 6 | 6 | 4 | 3 | 3 | 4 | 3 | | 5.3 | 12.0 | |
| 24-Jan-08 | 7 | 9 | 12 | 14 | 14 | 16 | 15 | 14 | 14 | 10 | 12 | 15 | 17 | 15 | 12 | 11 | 11 | 16 | 22 | 19 | 19 | 18 | 18 | 16 | | 14.4 | 21.9 | |
| 25-Jan-08 | 14 | 10 | 10 | 12 | 11 | 10 | 11 | 11 | 12 | 13 | 13 | 9 | 9 | 13 | 15 | 11 | 11 | 7 | 4 | 12 | 13 | 16 | 5 | 7 | | 10.8 | 15.5 | |
| 26-Jan-08 | 16 | 7 | 13 | 18 | 12 | 21 | 23 | 16 | 17 | 14 | 20 | 6 | 6 | 5 | 5 | 4 | 6 | 27 | 29 | 29 | 25 | 23 | 21 | 21 | | 16.0 | 29.2 | |
| 27-Jan-08 | 22 | 20 | 19 | 18 | 19 | 17 | 17 | 17 | 17 | 16 | 13 | 14 | 15 | 16 | 16 | 16 | 14 | 9 | 8 | 8 | 8 | 6 | 6 | 6 | | 14.0 | 22.1 | |
| 28-Jan-08 | 6 | 5 | 6 | 4 | 2 | 2 | 2 | 5 | 7 | 5 | 6 | 7 | 7 | 4 | 5 | 8 | 7 | 6 | 5 | 5 | 7 | 4 | 2 | | 5.1 | 8.1 | | |
| 29-Jan-08 | 3 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 3 | 7 | 8 | 8 | 7 | 7 | 9 | 10 | 10 | 11 | 11 | 9 | 11 | 6 | 6 | 10 | | 7.0 | 11.2 | |
| 30-Jan-08 | 8 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 5 | 3 | 5 | 8 | 7 | 10 | 12 | 11 | 9 | | 6.1 | 11.7 | |
| 31-Jan-08 | 9 | 11 | 10 | 8 | 7 | 8 | 7 | 9 | 7 | 6 | 9 | 7 | 7 | 7 | 8 | 8 | 7 | 8 | 9 | 8 | 7 | 7 | 7 | 8 | | 7.9 | 11.1 | |
| 1-hr Average | 10.4 | 9.9 | 9.9 | 10.2 | 9.8 | 9.7 | 9.5 | 9.4 | 9.4 | 9.9 | 9.8 | 8.6 | 8.7 | 8.4 | 9.2 | 9.6 | 9.9 | 11.5 | 11.6 | 11.7 | 11.5 | 11.9 | 11.0 | 11.0 | | | | |
| Hourly Max | 31.3 | 23.7 | 25.0 | 28.3 | 25.1 | 25.1 | 22.6 | 18.4 | 18.6 | 22.0 | 19.7 | 19.4 | 23.6 | 22.6 | 23.4 | 23.3 | 30.8 | 33.8 | 33.8 | 35.8 | 36.3 | 35.0 | 31.5 | 30.8 | | | | |

PASZA - Smoky Heights Vector Wind Speed Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

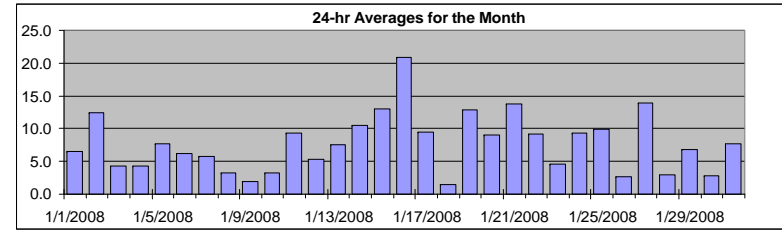
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|-------|--------|-------------|
| Maximum 1-hr Average: | 36.3 | km/hr | 16-Jan | 20:00 21:00 |
| Maximum 24-hr Value: | 20.8 | km/hr | 16-Jan | |



| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|------------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 744 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 100.0% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | AverageV |
| | 30.7 | 21.8 | 13.0 | 8.6 | 5.4 | 2.0 | 1.1 | 10.9 km/hr |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hr Vector Average | Daily Max | |
|-------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-----------|------|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 23:00 | | |
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | |
| 1-Jan-08 | 3 | 2 | 0 | 2 | 1 | 1 | 2 | 1 | 2 | 3 | 4 | 5 | 4 | 15 | 20 | 19 | 24 | 16 | 14 | 11 | 15 | 12 | 17 | | 6.5 | 23.5 | |
| 2-Jan-08 | 14 | 10 | 8 | 8 | 10 | 7 | 7 | 10 | 8 | 10 | 9 | 8 | 10 | 14 | 16 | 16 | 17 | 20 | 20 | 23 | 20 | 22 | 18 | 13 | | 12.4 | 22.6 |
| 3-Jan-08 | 10 | 14 | 14 | 12 | 7 | 7 | 7 | 10 | 11 | 12 | 13 | 8 | 5 | 5 | 4 | 3 | 7 | 8 | 8 | 9 | 9 | 7 | 8 | 9 | | 4.4 | 14.2 |
| 4-Jan-08 | 4 | 4 | 8 | 4 | 12 | 13 | 13 | 3 | 9 | 10 | 10 | 8 | 6 | 2 | 3 | 6 | 4 | 11 | 10 | 9 | 11 | 13 | 16 | 16 | | 4.2 | 16.4 |
| 5-Jan-08 | 17 | 17 | 15 | 16 | 14 | 14 | 12 | 12 | 10 | 11 | 11 | 6 | 7 | 5 | 7 | 8 | 6 | 5 | 3 | 3 | 2 | 3 | 3 | | 7.7 | 17.1 | |
| 6-Jan-08 | 2 | 7 | 8 | 7 | 9 | 11 | 8 | 4 | 3 | 4 | 6 | 9 | 9 | 4 | 3 | 6 | 6 | 8 | 8 | 6 | 7 | 8 | 8 | 5 | | 6.2 | 10.6 |
| 7-Jan-08 | 2 | 5 | 6 | 8 | 10 | 3 | 4 | 5 | 7 | 7 | 7 | 9 | 6 | 3 | 3 | 1 | 5 | 7 | 11 | 11 | 10 | 8 | 9 | 6 | | 5.8 | 11.4 |
| 8-Jan-08 | 7 | 9 | 6 | 2 | 2 | 0 | 2 | 3 | 3 | 1 | 4 | 4 | 5 | 7 | 9 | 8 | 8 | 10 | 7 | 7 | 8 | 6 | 6 | 5 | | 3.3 | 10.0 |
| 9-Jan-08 | 5 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 3 | 8 | 10 | 10 | 11 | 11 | 13 | | 2.0 | 12.9 |
| 10-Jan-08 | 11 | 10 | 8 | 10 | 6 | 2 | 3 | 4 | 4 | 4 | 4 | 2 | 4 | 3 | 4 | 3 | 4 | 5 | 4 | 4 | 5 | 4 | 6 | 4 | | 3.2 | 11.2 |
| 11-Jan-08 | 6 | 7 | 6 | 9 | 10 | 11 | 11 | 12 | 13 | 14 | 13 | 11 | 8 | 8 | 6 | 9 | 8 | 6 | 6 | 9 | 14 | 11 | 11 | 8 | | 9.3 | 14.5 |
| 12-Jan-08 | 1 | 8 | 13 | 10 | 7 | 6 | 2 | 6 | 7 | 6 | 9 | 7 | 2 | 7 | 6 | 4 | 4 | 7 | 6 | 5 | 9 | 10 | 9 | 9 | | 5.3 | 13.1 |
| 13-Jan-08 | 8 | 7 | 1 | 3 | 1 | 5 | 5 | 15 | 13 | 22 | 17 | 7 | 11 | 6 | 7 | 6 | 4 | 3 | 1 | 2 | 8 | 9 | 9 | 9 | | 7.6 | 21.9 |
| 14-Jan-08 | 11 | 12 | 10 | 11 | 10 | 9 | 10 | 10 | 10 | 8 | 6 | 6 | 7 | 5 | 7 | 14 | 23 | 22 | 26 | 30 | 22 | 31 | 19 | 17 | | 10.6 | 30.6 |
| 15-Jan-08 | 23 | 24 | 13 | 11 | 11 | 11 | 11 | 12 | 12 | 17 | 16 | 13 | 13 | 13 | 17 | 18 | 15 | 15 | 17 | 15 | 15 | 16 | 11 | 14 | | 13.0 | 23.6 |
| 16-Jan-08 | 10 | 17 | 16 | 13 | 10 | 11 | 12 | 10 | 14 | 17 | 14 | 14 | 24 | 23 | 23 | 23 | 31 | 34 | 34 | 36 | 36 | 35 | 31 | 31 | | 20.8 | 36.3 |
| 17-Jan-08 | 31 | 15 | 10 | 22 | 25 | 25 | 17 | 15 | 17 | 19 | 12 | 10 | 9 | 9 | 8 | 7 | 8 | 10 | 15 | 18 | 11 | 3 | 4 | 6 | | 9.5 | 31.2 |
| 18-Jan-08 | 3 | 2 | 5 | 8 | 11 | 9 | 7 | 5 | 4 | 5 | 6 | 6 | 4 | 4 | 4 | 4 | 3 | 4 | 5 | 5 | 7 | 10 | 15 | 17 | | 1.5 | 16.8 |
| 19-Jan-08 | 17 | 17 | 17 | 21 | 17 | 16 | 17 | 18 | 19 | 18 | 17 | 18 | 17 | 16 | 14 | 18 | 16 | 16 | 13 | 8 | 2 | 9 | 10 | 10 | | 12.9 | 20.8 |
| 20-Jan-08 | 8 | 10 | 7 | 7 | 7 | 7 | 6 | 9 | 9 | 7 | 7 | 6 | 9 | 9 | 12 | 11 | 10 | 13 | 11 | 11 | 15 | 11 | 11 | 10 | | 9.1 | 14.5 |
| 21-Jan-08 | 7 | 10 | 10 | 11 | 13 | 13 | 12 | 13 | 14 | 13 | 16 | 19 | 18 | 16 | 19 | 18 | 15 | 17 | 15 | 11 | 12 | 18 | 17 | 19 | | 13.8 | 19.3 |
| 22-Jan-08 | 13 | 13 | 25 | 28 | 25 | 21 | 23 | 16 | 6 | 9 | 10 | 10 | 10 | 10 | 13 | 15 | 11 | 7 | 6 | 6 | 7 | 8 | 11 | 12 | | 9.2 | 28.3 |
| 23-Jan-08 | 12 | 8 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 4 | 3 | 3 | 4 | 6 | 3 | 3 | 4 | 6 | 3 | 2 | 2 | 2 | 3 | | 4.6 | 11.7 |
| 24-Jan-08 | 7 | 9 | 12 | 14 | 14 | 16 | 15 | 14 | 13 | 10 | 12 | 14 | 17 | 15 | 11 | 11 | 10 | 16 | 22 | 19 | 19 | 18 | 18 | 16 | | 9.3 | 21.7 |
| 25-Jan-08 | 14 | 9 | 10 | 12 | 11 | 10 | 11 | 11 | 12 | 13 | 13 | 9 | 9 | 12 | 15 | 11 | 10 | 7 | 3 | 12 | 13 | 15 | 4 | 7 | | 9.9 | 15.3 |
| 26-Jan-08 | 16 | 7 | 12 | 17 | 12 | 21 | 23 | 16 | 17 | 13 | 20 | 5 | 6 | 4 | 3 | 3 | 2 | 27 | 29 | 29 | 25 | 23 | 21 | 21 | | 2.6 | 29.1 |
| 27-Jan-08 | 22 | 20 | 19 | 18 | 19 | 17 | 17 | 16 | 17 | 15 | 13 | 14 | 14 | 16 | 16 | 15 | 14 | 9 | 8 | 8 | 8 | 6 | 6 | 6 | | 13.9 | 22.0 |
| 28-Jan-08 | 6 | 5 | 6 | 3 | 1 | 1 | 2 | 5 | 6 | 5 | 6 | 7 | 7 | 7 | 3 | 4 | 8 | 7 | 6 | 5 | 5 | 7 | 4 | 2 | | 3.0 | 8.1 |
| 29-Jan-08 | 2 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 2 | 7 | 8 | 7 | 7 | 7 | 9 | 10 | 10 | 11 | 11 | 9 | 11 | 6 | 6 | 10 | | 6.9 | 11.1 |
| 30-Jan-08 | 8 | 4 | 5 | 4 | 5 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 5 | 5 | 3 | 5 | 8 | 7 | 10 | 12 | 11 | 10 | 9 | | 2.9 | 11.6 |
| 31-Jan-08 | 9 | 11 | 10 | 8 | 7 | 8 | 7 | 9 | 6 | 6 | 9 | 7 | 7 | 7 | 8 | 8 | 7 | 8 | 9 | 8 | 7 | 7 | 7 | 8 | | 7.7 | 11.1 |
| 1-hr Vector | 3.2 | 2.7 | 3.5 | 4.4 | 4.4 | 4.1 | 3.9 | 3.7 | 4.2 | 4.2 | 3.8 | 3.0 | 2.4 | 2.0 | 2.5 | 2.5 | 3.1 | 3.0 | 3.3 | 3.1 | 3.1 | 4.6 | 3.2 | 2.9 | | | |
| Hourly Max | 31.2 | 23.6 | 24.9 | 28.3 | 25.1 | 24.9 | 22.6 | 18.4 | 18.6 | 21.9 | 19.7 | 19.3 | 23.5 | 22.6 | 23.3 | 23.2 | 30.7 | 33.8 | 33.8 | 35.7 | 36.3 | 34.9 | 31.5 | 30.7 | | | |

PASZA - Smoky Heights Wind Direction Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|------|------|-----|---------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 744 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 100.0% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average |
| | 355.4 | 342.3 | 249.3 | 212.2 | 39.4 | 15.3 | 5.7 | 269 deg |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | WD Sector |
|------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------|
| | Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | | |
| 1-Jan-08 | 192 | 219 | 277 | 19 | 339 | 358 | 23 | 31 | 355 | 21 | 25 | 28 | 26 | 44 | 131 | 133 | 138 | 135 | 134 | 133 | 135 | 141 | 138 | 140 | 128 | SE |
| 2-Jan-08 | 147 | 156 | 167 | 218 | 253 | 253 | 224 | 217 | 222 | 215 | 212 | 213 | 192 | 188 | 210 | 227 | 229 | 232 | 237 | 226 | 217 | 226 | 238 | 224 | 217 | SW |
| 3-Jan-08 | 240 | 233 | 248 | 245 | 231 | 240 | 261 | 258 | 246 | 231 | 219 | 239 | 232 | 255 | 251 | 309 | 23 | 23 | 8 | 19 | 18 | 11 | 24 | 26 | 267 | W |
| 4-Jan-08 | 341 | 311 | 269 | 283 | 251 | 260 | 229 | 212 | 264 | 235 | 247 | 266 | 228 | 307 | 290 | 290 | 3 | 24 | 14 | 12 | 12 | 25 | 23 | 18 | 309 | NW |
| 5-Jan-08 | 21 | 17 | 13 | 4 | 6 | 356 | 347 | 336 | 333 | 332 | 336 | 6 | 25 | 210 | 255 | 31 | 46 | 44 | 346 | 334 | 8 | 5 | 349 | 45 | 359 | N |
| 6-Jan-08 | 7 | 13 | 18 | 356 | 354 | 7 | 10 | 32 | 45 | 29 | 27 | 28 | 30 | 37 | 26 | 19 | 20 | 29 | 5 | 349 | 354 | 4 | 355 | 313 | 12 | NNE |
| 7-Jan-08 | 153 | 252 | 262 | 267 | 270 | 204 | 214 | 211 | 206 | 214 | 226 | 229 | 255 | 249 | 126 | 166 | 260 | 237 | 245 | 256 | 242 | 256 | 249 | 198 | 238 | WSW |
| 8-Jan-08 | 182 | 221 | 240 | 217 | 130 | 124 | 261 | 25 | 31 | 20 | 25 | 26 | 46 | 34 | 31 | 26 | 14 | 25 | 41 | 39 | 38 | 39 | 36 | 39 | 32 | NNE |
| 9-Jan-08 | 25 | 26 | 24 | 32 | 34 | 29 | 21 | 40 | 150 | 119 | 157 | 150 | 130 | 158 | 255 | 199 | 205 | 218 | 223 | 224 | 216 | 226 | 221 | 224 | 218 | SW |
| 10-Jan-08 | 235 | 220 | 219 | 243 | 235 | 265 | 29 | 24 | 40 | 70 | 262 | 193 | 133 | 140 | 188 | 161 | 135 | 195 | 201 | 195 | 223 | 230 | 217 | 191 | 210 | SSW |
| 11-Jan-08 | 220 | 210 | 213 | 213 | 216 | 222 | 209 | 201 | 218 | 216 | 222 | 230 | 235 | 246 | 220 | 175 | 197 | 211 | 240 | 219 | 207 | 227 | 215 | 253 | 218 | SW |
| 12-Jan-08 | 244 | 174 | 182 | 193 | 227 | 249 | 251 | 241 | 214 | 213 | 252 | 258 | 259 | 24 | 27 | 331 | 253 | 248 | 216 | 208 | 220 | 244 | 222 | 210 | 227 | SW |
| 13-Jan-08 | 202 | 205 | 209 | 240 | 234 | 227 | 198 | 217 | 218 | 252 | 256 | 239 | 203 | 196 | 175 | 211 | 233 | 271 | 127 | 256 | 256 | 257 | 236 | 217 | 227 | SW |
| 14-Jan-08 | 212 | 222 | 213 | 207 | 214 | 212 | 201 | 194 | 207 | 202 | 220 | 219 | 226 | 205 | 223 | 299 | 303 | 283 | 291 | 295 | 305 | 288 | 315 | 294 | 265 | W |
| 15-Jan-08 | 306 | 318 | 294 | 300 | 295 | 254 | 255 | 253 | 258 | 259 | 258 | 252 | 249 | 248 | 244 | 243 | 250 | 262 | 262 | 254 | 248 | 230 | 191 | 198 | 260 | W |
| 16-Jan-08 | 209 | 250 | 244 | 230 | 225 | 244 | 227 | 214 | 205 | 207 | 211 | 232 | 247 | 249 | 256 | 260 | 255 | 252 | 252 | 255 | 259 | 258 | 254 | 256 | 246 | WSW |
| 17-Jan-08 | 263 | 359 | 346 | 279 | 297 | 296 | 291 | 275 | 299 | 327 | 50 | 14 | 8 | 18 | 33 | 33 | 25 | 34 | 25 | 25 | 27 | 319 | 351 | 15 | 332 | NNW |
| 18-Jan-08 | 78 | 8 | 258 | 265 | 252 | 252 | 255 | 208 | 190 | 234 | 252 | 254 | 240 | 222 | 211 | 207 | 160 | 106 | 24 | 18 | 20 | 26 | 30 | 19 | 295 | WNW |
| 19-Jan-08 | 22 | 22 | 23 | 26 | 21 | 26 | 21 | 23 | 23 | 26 | 24 | 15 | 17 | 17 | 9 | 17 | 19 | 25 | 21 | 37 | 184 | 257 | 255 | 252 | 18 | NNE |
| 20-Jan-08 | 239 | 206 | 206 | 200 | 197 | 202 | 199 | 212 | 208 | 210 | 223 | 230 | 229 | 237 | 236 | 243 | 232 | 219 | 205 | 227 | 248 | 218 | 228 | 189 | 220 | SW |
| 21-Jan-08 | 169 | 193 | 193 | 196 | 215 | 227 | 232 | 231 | 223 | 231 | 234 | 246 | 243 | 248 | 255 | 246 | 247 | 243 | 245 | 240 | 243 | 253 | 247 | 258 | 237 | WSW |
| 22-Jan-08 | 251 | 306 | 316 | 317 | 320 | 324 | 309 | 319 | 271 | 310 | 315 | 283 | 283 | 238 | 188 | 188 | 203 | 220 | 217 | 205 | 215 | 235 | 236 | 227 | 280 | W |
| 23-Jan-08 | 228 | 222 | 227 | 207 | 199 | 186 | 193 | 198 | 212 | 197 | 206 | 161 | 201 | 175 | 181 | 173 | 217 | 238 | 217 | 201 | 129 | 216 | 277 | 108 | 204 | SSW |
| 24-Jan-08 | 32 | 20 | 14 | 17 | 25 | 31 | 24 | 19 | 28 | 19 | 26 | 29 | 26 | 34 | 42 | 72 | 97 | 133 | 120 | 116 | 124 | 133 | 141 | 150 | 65 | ENE |
| 25-Jan-08 | 158 | 184 | 228 | 238 | 217 | 216 | 237 | 232 | 255 | 252 | 254 | 247 | 232 | 241 | 243 | 246 | 245 | 242 | 196 | 222 | 228 | 229 | 194 | 212 | 230 | SW |
| 26-Jan-08 | 266 | 188 | 183 | 195 | 184 | 198 | 203 | 201 | 218 | 211 | 196 | 210 | 190 | 176 | 1 | 217 | 283 | 339 | 354 | 25 | 29 | 16 | 11 | 348 | 271 | W |
| 27-Jan-08 | 344 | 348 | 349 | 343 | 346 | 346 | 341 | 345 | 349 | 356 | 352 | 345 | 355 | 355 | 351 | 348 | 346 | 344 | 330 | 340 | 346 | 349 | 6 | 12 | 348 | NNW |
| 28-Jan-08 | 17 | 317 | 277 | 297 | 285 | 285 | 219 | 230 | 261 | 196 | 180 | 177 | 177 | 129 | 132 | 252 | 267 | 261 | 271 | 272 | 263 | 261 | 269 | 306 | 247 | WSW |
| 29-Jan-08 | 346 | 28 | 12 | 358 | 25 | 25 | 24 | 4 | 360 | 30 | 28 | 31 | 26 | 26 | 26 | 16 | 15 | 23 | 13 | 11 | 20 | 27 | 37 | 26 | 21 | NNE |
| 30-Jan-08 | 23 | 44 | 24 | 172 | 190 | 171 | 161 | 160 | 178 | 178 | 182 | 127 | 128 | 113 | 124 | 143 | 12 | 37 | 25 | 21 | 20 | 24 | 25 | 21 | 58 | ENE |
| 31-Jan-08 | 18 | 18 | 13 | 17 | 12 | 11 | 16 | 17 | 46 | 40 | 32 | 33 | 34 | 31 | 20 | 16 | 18 | 12 | 22 | 38 | 44 | 42 | 39 | 27 | 25 | NNE |
| Hourly Avg | 269 | 290 | 282 | 276 | 279 | 276 | 268 | 257 | 252 | 255 | 256 | 270 | 264 | 258 | 247 | 260 | 276 | 283 | 288 | 285 | 273 | 265 | 270 | 263 | | |

PASZA - Smoky Heights Standard Deviation of Wind Direction Monthly Summary

Station: Smoky Heights
 Station Owner: PASAA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| |
|--|
| |
| |

Determined by the Yamartino 15-min interval calculation

| | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 744 hrs | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 100.0% | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 |
| | 78.5 | 50.9 | 17.1 | 9.7 | 6.4 | 3.6 | 2.6 |

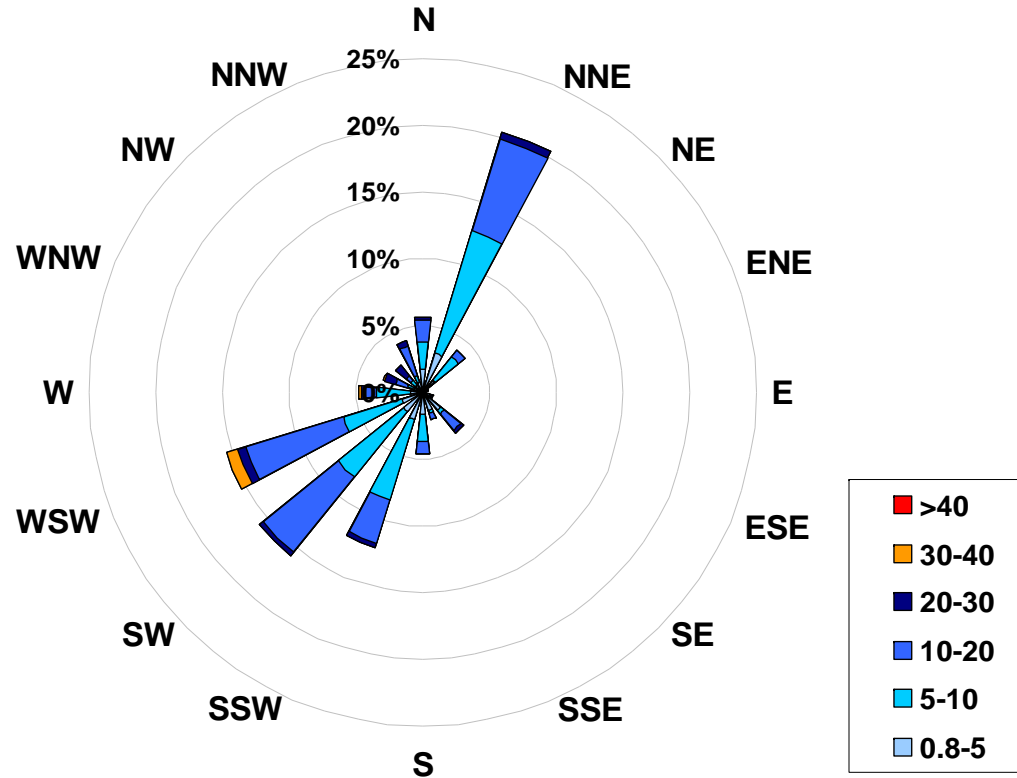
Status Flag Characters

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

Day Mountain Standard Time

| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 23:00 | 0:00 | Daily Maximum |
|------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|---------------|
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | |
| 1-Jan-08 | 19 | 10 | 77 | 26 | 29 | 23 | 14 | 39 | 15 | 16 | 19 | 5 | 7 | 31 | 10 | 5 | 5 | 4 | 6 | 15 | 27 | 6 | 7 | 6 | | 76.8 | |
| 2-Jan-08 | 8 | 7 | 20 | 27 | 9 | 18 | 20 | 20 | 21 | 10 | 18 | 14 | 10 | 6 | 22 | 9 | 9 | 7 | 8 | 2 | 7 | 7 | 8 | 18 | | 27.4 | |
| 3-Jan-08 | 24 | 7 | 7 | 6 | 21 | 48 | 45 | 12 | 15 | 9 | 7 | 13 | 18 | 10 | 21 | 40 | 12 | 8 | 10 | 7 | 8 | 14 | 7 | 7 | | 48.4 | |
| 4-Jan-08 | 20 | 35 | 22 | 43 | 12 | 12 | 11 | 66 | 16 | 17 | 18 | 12 | 44 | 67 | 18 | 16 | 32 | 7 | 6 | 11 | 8 | 8 | 7 | 6 | | 66.7 | |
| 5-Jan-08 | 6 | 4 | 6 | 6 | 9 | 9 | 9 | 7 | 6 | 10 | 12 | 29 | 14 | 58 | 36 | 10 | 14 | 10 | 47 | 46 | 51 | 80 | 32 | 30 | | 79.7 | |
| 6-Jan-08 | 69 | 8 | 16 | 11 | 9 | 7 | 10 | 26 | 50 | 15 | 9 | 7 | 8 | 12 | 14 | 6 | 8 | 7 | 17 | 14 | 13 | 7 | 11 | 21 | | 69.0 | |
| 7-Jan-08 | 51 | 17 | 13 | 7 | 7 | 27 | 19 | 12 | 7 | 14 | 6 | 12 | 7 | 60 | 19 | 54 | 9 | 11 | 7 | 7 | 6 | 8 | 12 | 28 | | 60.3 | |
| 8-Jan-08 | 9 | 6 | 21 | 34 | 40 | 91 | 41 | 34 | 14 | 78 | 14 | 15 | 17 | 11 | 5 | 16 | 22 | 3 | 8 | 4 | 4 | 5 | 5 | 6 | | 91.4 | |
| 9-Jan-08 | 11 | 9 | 7 | 7 | 11 | 22 | 27 | 18 | 79 | 16 | 25 | 19 | 14 | 38 | 16 | 39 | 11 | 7 | 3 | 6 | 5 | 6 | 6 | 13 | | 78.7 | |
| 10-Jan-08 | 7 | 12 | 24 | 8 | 12 | 66 | 22 | 16 | 23 | 29 | 58 | 72 | 21 | 23 | 18 | 30 | 14 | 14 | 11 | 14 | 24 | 10 | 6 | 23 | | 72.2 | |
| 11-Jan-08 | 15 | 12 | 15 | 4 | 8 | 5 | 12 | 9 | 6 | 4 | 5 | 5 | 8 | 6 | 38 | 7 | 15 | 15 | 25 | 24 | 8 | 9 | 9 | 24 | | 37.8 | |
| 12-Jan-08 | 88 | 6 | 5 | 9 | 14 | 23 | 89 | 10 | 10 | 15 | 3 | 11 | 73 | 6 | 9 | 40 | 25 | 12 | 32 | 26 | 11 | 12 | 13 | 19 | | 88.8 | |
| 13-Jan-08 | 17 | 18 | 88 | 43 | 86 | 38 | 64 | 26 | 33 | 7 | 27 | 19 | 12 | 33 | 8 | 18 | 12 | 32 | 89 | 58 | 24 | 13 | 12 | 11 | | 89.3 | |
| 14-Jan-08 | 9 | 5 | 14 | 9 | 9 | 16 | 18 | 13 | 7 | 14 | 15 | 12 | 14 | 18 | 17 | 15 | 12 | 6 | 7 | 4 | 13 | 6 | 19 | 14 | | 18.6 | |
| 15-Jan-08 | 15 | 5 | 11 | 12 | 16 | 9 | 9 | 10 | 6 | 3 | 3 | 4 | 5 | 4 | 2 | 2 | 5 | 3 | 5 | 6 | 5 | 7 | 9 | 9 | | 16.4 | |
| 16-Jan-08 | 9 | 8 | 6 | 5 | 9 | 11 | 11 | 14 | 8 | 3 | 6 | 15 | 4 | 4 | 5 | 6 | 2 | 3 | 4 | 3 | 2 | 3 | 2 | 3 | | 15.3 | |
| 17-Jan-08 | 6 | 31 | 21 | 9 | 4 | 6 | 9 | 13 | 15 | 25 | 10 | 13 | 9 | 6 | 9 | 10 | 22 | 8 | 6 | 3 | 15 | 47 | 36 | 30 | | 47.3 | |
| 18-Jan-08 | 51 | 59 | 26 | 12 | 6 | 5 | 9 | 12 | 21 | 13 | 5 | 3 | 15 | 10 | 10 | 23 | 41 | 16 | 17 | 6 | 3 | 4 | 5 | 3 | | 58.8 | |
| 19-Jan-08 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 5 | 4 | 9 | 5 | 3 | 21 | 59 | 10 | 6 | 4 | | 58.7 | |
| 20-Jan-08 | 22 | 6 | 8 | 6 | 10 | 5 | 10 | 4 | 4 | 5 | 5 | 7 | 5 | 5 | 5 | 6 | 6 | 8 | 9 | 6 | 10 | 16 | 17 | 8 | | 22.0 | |
| 21-Jan-08 | 19 | 9 | 10 | 6 | 15 | 11 | 6 | 7 | 9 | 4 | 4 | 4 | 12 | 6 | 8 | 5 | 6 | 7 | 5 | 10 | 10 | 5 | 8 | 11 | | 19.3 | |
| 22-Jan-08 | 18 | 36 | 6 | 4 | 7 | 6 | 6 | 43 | 49 | 28 | 11 | 16 | 16 | 25 | 13 | 11 | 15 | 22 | 26 | 11 | 12 | 8 | 3 | 4 | | 49.0 | |
| 23-Jan-08 | 11 | 11 | 16 | 13 | 10 | 11 | 12 | 14 | 8 | 16 | 19 | 50 | 24 | 6 | 9 | 40 | 41 | 44 | 15 | 40 | 54 | 59 | 69 | 29 | | 68.7 | |
| 24-Jan-08 | 14 | 14 | 4 | 3 | 5 | 4 | 7 | 7 | 11 | 8 | 7 | 8 | 3 | 7 | 12 | 13 | 16 | 6 | 7 | 5 | 5 | 4 | 5 | | | 15.8 | |
| 25-Jan-08 | 7 | 8 | 9 | 5 | 7 | 8 | 9 | 4 | 7 | 8 | 6 | 11 | 13 | 15 | 11 | 8 | 9 | 16 | 50 | 18 | 7 | 9 | 39 | 22 | | 49.7 | |
| 26-Jan-08 | 13 | 12 | 18 | 7 | 13 | 4 | 4 | 5 | 9 | 20 | 3 | 36 | 8 | 69 | 67 | 67 | 66 | 7 | 12 | 4 | 5 | 4 | 10 | 8 | | 68.8 | |
| 27-Jan-08 | 7 | 8 | 11 | 7 | 6 | 8 | 6 | 9 | 9 | 9 | 11 | 8 | 10 | 11 | 10 | 9 | 8 | 11 | 7 | 7 | 7 | 9 | 10 | 11 | | 11.5 | |
| 28-Jan-08 | 10 | 27 | 8 | 31 | 63 | 63 | 31 | 10 | 12 | 23 | 5 | 5 | 5 | 6 | 61 | 55 | 7 | 5 | 5 | 10 | 8 | 4 | 9 | 16 | | 63.5 | |
| 29-Jan-08 | 30 | 8 | 10 | 21 | 9 | 8 | 9 | 26 | 39 | 13 | 7 | 5 | 4 | 4 | 4 | 9 | 7 | 9 | 4 | 6 | 7 | 11 | 12 | 9 | | 38.8 | |
| 30-Jan-08 | 9 | 12 | 25 | 46 | 8 | 11 | 11 | 19 | 10 | 8 | 15 | 13 | 27 | 18 | 25 | 28 | 30 | 6 | 7 | 7 | 5 | 5 | 4 | 4 | | 46.4 | |
| 31-Jan-08 | 4 | 3 | 3 | 7 | 7 | 10 | 9 | 14 | 9 | 9 | 5 | 19 | 9 | 8 | 8 | 8 | 15 | 9 | 15 | 8 | 9 | 9 | 8 | 7 | | 18.7 | |
| Hourly Max | 88 | 59 | 88 | 46 | 86 | 91 | 89 | 66 | 79 | 78 | 58 | 72 | 73 | 69 | 67 | 67 | 66 | 44 | 89 | 58 | 59 | 80 | 69 | 30 | | | |

1-hr Average Wind Rose (in km/hr) Located at the Smoky Heights Site for January 2008



Calms: 0%

| Frequency Distribution of Wind in km/hr | | | |
|---|----|----|-----------------|
| Range | | | Frequency (hrs) |
| 0.8 | < | 5 | 151 |
| 5 | to | 10 | 279 |
| 10 | to | 20 | 266 |
| 20 | to | 30 | 37 |
| 30 | to | 40 | 10 |
| | > | 40 | 0 |
| Total Non-Zero Values | | | 744 |

PASZA
Beaverlodge Station
Monthly Summary Tables, Graphs and
Roses

PASZA - Beaverlodge AQI Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

Air Quality Index (AQI)

Monitoring Dates: January 1, 2008 to February 1, 2008

Alberta's Air Quality Index

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

Summary

| | |
|------------------------------------|-----|
| Number of 1-hr Good Readings: | 685 |
| Number of 1-hr Fair Readings: | 0 |
| Number of 1-hr Poor Readings: | 0 |
| Number of 1-hr Very Poor Readings: | 0 |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 |
| 1-Jan-08 | 16 | 16 | 14 | 13 | N | 15 | 10 | 7 | 12 | 9 | 11 | 11 | N | 12 | 11 | 10 | 8 | 8 | 9 | 9 | 7 | 8 | 8 | 7 |
| 2-Jan-08 | 5 | 5 | 6 | 7 | N | 7 | 9 | 7 | 6 | 8 | 7 | 13 | 15 | 16 | 19 | 20 | 20 | 19 | 19 | 19 | 19 | 19 | 19 | 18 |
| 3-Jan-08 | 19 | 19 | 19 | 19 | N | 18 | 18 | 17 | 17 | 17 | 18 | 18 | 19 | 16 | 17 | 13 | 16 | 16 | 12 | 17 | 16 | 17 | 12 | 14 |
| 4-Jan-08 | 12 | 11 | 11 | 11 | N | 14 | 11 | 12 | 14 | 17 | N | N | N | N | N | 2 | 1 | 17 | 20 | 19 | 19 | 19 | 19 | 19 |
| 5-Jan-08 | 19 | 18 | 18 | 18 | N | 12 | 12 | 13 | 13 | 13 | 13 | 12 | 13 | 12 | 12 | 12 | 10 | 9 | 10 | 9 | 10 | 9 | 9 | 6 |
| 6-Jan-08 | 7 | 7 | 7 | 7 | N | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 9 | 9 | 10 | 10 | 9 | 9 | 9 | 8 | 6 | 7 |
| 7-Jan-08 | 8 | 9 | 10 | 10 | N | 9 | 8 | 8 | 8 | 6 | 7 | 10 | 9 | 8 | 7 | 10 | 10 | 11 | 6 | 6 | 5 | 7 | 5 | 6 |
| 8-Jan-08 | 6 | 6 | 5 | 6 | N | 6 | 7 | 6 | 8 | 10 | 11 | 14 | 12 | 11 | 11 | 12 | 11 | 11 | 12 | 11 | 11 | 8 | 6 | 7 |
| 9-Jan-08 | 8 | 8 | 8 | 10 | N | 9 | 8 | 8 | 6 | 7 | 8 | 9 | 8 | 9 | 8 | 8 | 8 | 8 | 10 | 9 | 9 | 8 | 8 | 8 |
| 10-Jan-08 | 7 | 8 | 8 | 8 | N | 8 | 8 | 9 | 10 | 10 | 9 | 10 | 10 | 11 | 12 | 12 | 11 | 11 | 10 | 11 | 10 | 12 | 11 | 11 |
| 11-Jan-08 | 13 | 12 | 11 | 11 | N | 12 | 12 | 12 | 9 | 5 | 5 | 8 | 9 | 11 | 13 | 12 | 9 | 6 | 6 | 12 | 18 | 17 | 17 | 17 |
| 12-Jan-08 | 16 | 17 | 16 | 16 | N | 16 | 16 | N | 13 | 13 | 11 | 11 | 9 | 7 | 9 | 7 | 7 | 8 | 8 | 7 | 7 | 8 | 8 | 6 |
| 13-Jan-08 | 6 | 12 | N | 20 | N | 21 | 21 | 20 | 20 | 19 | 20 | 20 | 18 | 18 | 20 | 20 | 18 | 19 | 17 | 18 | 16 | 14 | 14 | 11 |
| 14-Jan-08 | 13 | 12 | 13 | 13 | N | 13 | 15 | 14 | 15 | 15 | 11 | 15 | 14 | 11 | 13 | 19 | N | N | 21 | 20 | 20 | 20 | 20 | 20 |
| 15-Jan-08 | 19 | 19 | 19 | 18 | N | 17 | 17 | 16 | 15 | 16 | 17 | 18 | 19 | 19 | 19 | 19 | 18 | 18 | 16 | 16 | 17 | 17 | 15 | 17 |
| 16-Jan-08 | 18 | 19 | 19 | 19 | N | 19 | 18 | 17 | 17 | 16 | 18 | 19 | 19 | 20 | 20 | 20 | 20 | 21 | 21 | 21 | 21 | 21 | 21 | 21 |
| 17-Jan-08 | 21 | 21 | 20 | 20 | N | 19 | 18 | 20 | 20 | 20 | 21 | 21 | 20 | 19 | 16 | 16 | 15 | 17 | 20 | 20 | 18 | 19 | 18 | 19 |
| 18-Jan-08 | 16 | 11 | 13 | 14 | N | 12 | 12 | 7 | 5 | 7 | 8 | 11 | 7 | 8 | 7 | 5 | 7 | 7 | 6 | 6 | 7 | 6 | 6 | 6 |
| 19-Jan-08 | 12 | 14 | 14 | 16 | N | 18 | 17 | 17 | 17 | 17 | 17 | 17 | 18 | 17 | 16 | 15 | 13 | 11 | 12 | 11 | 10 | 11 | 11 | 12 |
| 20-Jan-08 | 12 | 13 | 13 | 12 | N | 10 | 9 | 11 | 11 | 11 | 12 | 13 | 14 | 14 | 15 | 15 | 15 | 14 | 14 | 15 | 15 | 14 | 11 | 14 |
| 21-Jan-08 | 14 | 16 | 16 | 16 | N | 16 | 15 | 16 | 16 | 17 | 16 | 16 | 17 | 16 | 17 | 17 | 17 | 16 | 15 | 16 | 16 | 17 | 17 | 18 |
| 22-Jan-08 | 17 | 13 | 19 | 18 | N | 18 | 19 | 18 | 17 | 18 | 17 | 18 | 19 | 19 | 15 | 16 | 18 | 17 | 18 | 17 | 14 | 14 | 14 | 14 |
| 23-Jan-08 | N | 12 | 13 | 13 | N | 17 | 19 | N | 19 | 20 | 20 | 18 | 20 | 19 | 20 | 20 | 20 | 19 | 19 | 19 | 18 | 18 | 15 | 15 |
| 24-Jan-08 | 19 | 19 | 19 | 19 | N | 20 | 19 | 19 | 18 | 17 | 16 | 17 | 17 | 18 | 18 | 18 | 18 | 17 | 17 | 16 | 14 | 13 | 13 | 11 |
| 25-Jan-08 | 10 | 11 | 13 | 13 | N | 13 | 12 | 11 | 10 | 9 | 10 | 10 | 10 | 10 | 12 | 18 | 20 | 21 | 21 | 21 | 21 | 21 | 20 | 20 |
| 26-Jan-08 | 20 | 20 | 21 | 21 | N | 21 | 20 | 20 | 21 | 18 | 18 | 19 | 20 | 20 | 20 | 20 | 15 | 14 | 15 | 15 | 15 | 16 | 16 | 16 |
| 27-Jan-08 | 16 | 16 | 16 | 16 | N | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 15 | 15 | 16 | 14 | 15 | 15 | 14 | 10 |
| 28-Jan-08 | 11 | N | 11 | 8 | N | 8 | N | 6 | 6 | 7 | 11 | 11 | 11 | 11 | 13 | 12 | 11 | 11 | 13 | 15 | 14 | 13 | 11 | N |
| 29-Jan-08 | N | N | N | N | N | N | N | N | N | N | N | N | N | N | 10 | 11 | 10 | 9 | 8 | 10 | 10 | 8 | 8 | 8 |
| 30-Jan-08 | 9 | 8 | 9 | 10 | N | 10 | 11 | 10 | 9 | 10 | 11 | 11 | 11 | 11 | 11 | 10 | 9 | 6 | 5 | 7 | 6 | 5 | 8 | 5 |
| 31-Jan-08 | 6 | 5 | 8 | 8 | N | 7 | 7 | 6 | 7 | 7 | 7 | 8 | 9 | 10 | 10 | 10 | 10 | 9 | 9 | 10 | 9 | 7 | 7 | 8 |

PASZA - Beaverlodge Sulphur Dioxide Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

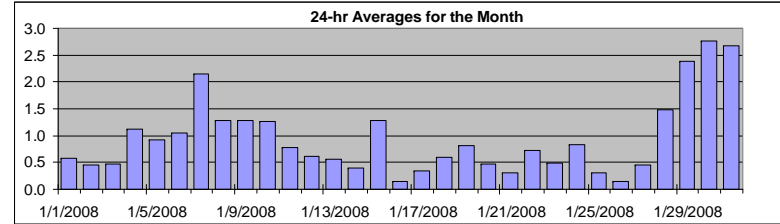
HOURLY AVERAGE TABLE

Sulphur Dioxide (SO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: Alberta Environment: 1-hr 172 ppb 24-hr 57 ppb

| | | | | |
|------------------------------|---------|--------|------|------|
| Number of 1-hr Exceedances: | 0 | | | |
| Number of 24-hr Exceedances: | 0 | | | |
| Maximum 1-hr Average: | 7.2 ppb | 15-Jan | 8:00 | 9:00 |
| Maximum 24-hr Average: | 2.8 ppb | 30-Jan | | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 31 hrs | Operational Time: | 710 hrs | | | | | | |
| Calibration Time: | 3 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 4.4 | 2.9 | 1.3 | 0.7 | 0.3 | 0.1 | 0.1 | 0.9 ppb | 0.7 ppb |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum |
|------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|-----------------|---------------|
| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | | |
| 1-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1.0 |
| 2-Jan-08 | 1 | 0 | 0 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.0 |
| 3-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.5 | 1.0 |
| 4-Jan-08 | 2 | 2 | 2 | 2 | A | 1 | 1 | 1 | 1 | 1 | C | C | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1.1 | 2.5 |
| 5-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.9 |
| 6-Jan-08 | 1 | 1 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1.0 | 2.0 | |
| 7-Jan-08 | 2 | 2 | 2 | 2 | A | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2.1 | 3.4 | |
| 8-Jan-08 | 2 | 1 | 1 | 1 | A | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.3 | 1.8 | |
| 9-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1.3 | 1.7 | |
| 10-Jan-08 | 1 | 1 | 2 | 1 | A | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1.3 | 1.7 | |
| 11-Jan-08 | 1 | 1 | 2 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.8 | 1.6 | |
| 12-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1.3 | |
| 13-Jan-08 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 1 | 1 | 1 | 0.6 | 3.6 | |
| 14-Jan-08 | 2 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.6 | |
| 15-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 4 | 7 | 7 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.3 | 7.2 | |
| 16-Jan-08 | 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 | |
| 17-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0.3 | 1.4 | |
| 18-Jan-08 | 0 | 0 | 0 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.9 | |
| 19-Jan-08 | 1 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 3 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 3.0 | |
| 20-Jan-08 | 1 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0.5 | 1.0 | |
| 21-Jan-08 | 1 | 1 | 0 | 0 | A | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.1 | |
| 22-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0.7 | 1.2 | |
| 23-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0.5 | 1.4 | |
| 24-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0.8 | 1.5 | |
| 25-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.5 | |
| 26-Jan-08 | 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 | |
| 27-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0.5 | 0.8 | |
| 28-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1.5 | 3.6 | |
| 29-Jan-08 | 5 | 3 | 4 | 3 | A | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 5 | 6 | 2.4 | 5.5 |
| 30-Jan-08 | 3 | 4 | 4 | 3 | A | 4 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2.8 | 4.5 | |
| 31-Jan-08 | 2 | 2 | 2 | 2 | A | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2.7 | 3.9 | |
| Hourly Avg | 1.1 | 1.0 | 1.0 | 0.9 | N | 0.9 | 0.9 | 1.0 | 1.1 | 1.0 | 1.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 1.1 | 1.1 | | | |
| Hourly Max | 4.5 | 4.5 | 3.6 | 3.4 | 0.0 | 3.7 | 2.7 | 4.5 | 7.2 | 6.8 | 5.7 | 3.4 | 3.9 | 3.4 | 3.4 | 3.0 | 2.9 | 3.1 | 3.6 | 3.0 | 2.8 | 2.9 | 5.1 | 5.5 | | |

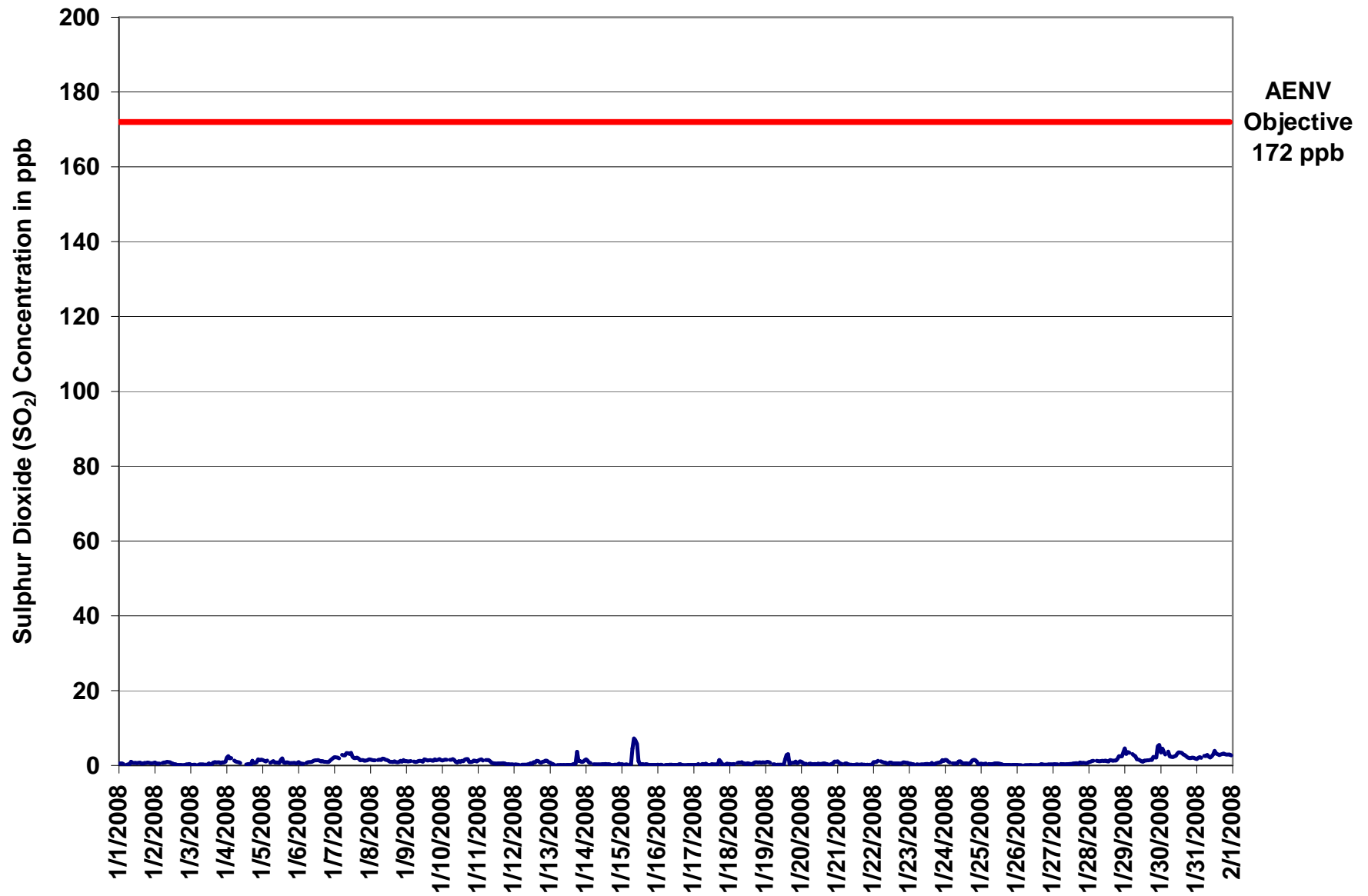


Figure 34. PASZA - Beaverlodge Sulphur Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

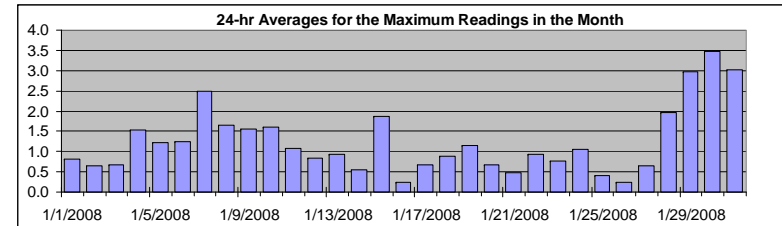
Sulphur Dioxide (SO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-----|-----|--------|-----------|
| Maximum 1-hr Value: | 9.2 | ppb | 15-Jan | 8:00 9:00 |
| Maximum 24-hr Value: | 3.5 | ppb | 30-Jan | |

| | | | | | | | | | | | |
|-------------------|--------|-----|-----|-----|-----|-------------------------|---------|---------|-----|--------|-----|
| AIC Time: | 31 hrs | | | | | Operational Time: | 710 hrs | | | | |
| Calibration Time: | 3 hrs | | | | | AMD Operational Uptime: | 100.0% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | | Median | |
| | 6.7 | 3.4 | 1.6 | 0.9 | 0.4 | 0.2 | 0.1 | 1.2 | ppb | 0.9 | ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 1 | 1 | 2 | 0 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 2.2 |
| 2-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0.7 | 1.3 |
| 3-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 1.4 |
| 4-Jan-08 | 3 | 3 | 2 | 2 | A | 2 | 1 | 1 | 1 | 1 | C | C | C | 0 | 1 | 1 | 0 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 1.5 | 2.8 |
| 5-Jan-08 | 2 | 2 | 1 | 1 | A | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 3 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.2 | 2.6 |
| 6-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1.3 | 2.3 |
| 7-Jan-08 | 2 | 2 | 2 | 2 | A | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2.5 | 4.0 |
| 8-Jan-08 | 2 | 2 | 2 | 2 | A | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1.7 | 3.1 |
| 9-Jan-08 | 2 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 1.5 | 2.7 |
| 10-Jan-08 | 2 | 2 | 2 | 2 | A | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1.6 | 2.1 |
| 11-Jan-08 | 2 | 3 | 2 | 1 | A | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1.1 | 2.9 |
| 12-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 0.8 | 1.8 |
| 13-Jan-08 | 1 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 2 | 1 | 1 | 1 | 2 | 0.9 | 6.4 |
| 14-Jan-08 | 2 | 2 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0.6 | 1.8 |
| 15-Jan-08 | 1 | 0 | 0 | 1 | A | 0 | 1 | 9 | 9 | 8 | 6 | 4 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.9 | 9.2 |
| 16-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.6 |
| 17-Jan-08 | 0 | 0 | 0 | 1 | A | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 1 | 0 | 0.7 | 5.1 |
| 18-Jan-08 | 1 | 0 | 1 | 0 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 2.4 |
| 19-Jan-08 | 1 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 5 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1.2 | 5.2 |
| 20-Jan-08 | 1 | 1 | 0 | 1 | A | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 0.7 | 1.6 |
| 21-Jan-08 | 2 | 1 | 1 | 0 | A | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.5 | 1.6 |
| 22-Jan-08 | 1 | 1 | 1 | 2 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.7 |
| 23-Jan-08 | 1 | 1 | 1 | 0 | A | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | 0.8 | 3.4 |
| 24-Jan-08 | 2 | 2 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1.1 | 2.1 |
| 25-Jan-08 | 1 | 0 | 1 | 1 | A | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.7 |
| 26-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.5 |
| 27-Jan-08 | 0 | 0 | 0 | 0 | A | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0.7 | 2.4 |
| 28-Jan-08 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 7 | 2.0 | 6.7 |
| 29-Jan-08 | 8 | 3 | 4 | 4 | A | 4 | 4 | 4 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 7 | 6 | 3.0 | 7.7 |
| 30-Jan-08 | 4 | 8 | 9 | 4 | A | 4 | 3 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3.5 | 8.7 |
| 31-Jan-08 | 2 | 2 | 2 | 2 | A | 3 | 3 | 3 | 3 | 2 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3.0 | 4.2 |
| Hourly Avg | 1.5 | 1.4 | 1.4 | 1.1 | N | 1.2 | 1.2 | 1.3 | 1.4 | 1.3 | 1.2 | 1.2 | 1.1 | 1.1 | 1.1 | 1.0 | 1.3 | 1.3 | 1.1 | 1.1 | 1.2 | 1.4 | 1.5 | | | |
| Hourly Max | 7.7 | 8.5 | 8.7 | 4.1 | 0.0 | 4.3 | 3.6 | 8.6 | 9.2 | 7.9 | 6.3 | 3.7 | 4.2 | 3.7 | 3.6 | 5.2 | 3.2 | 5.1 | 6.4 | 3.2 | 3.1 | 3.4 | 6.8 | 6.7 | | |

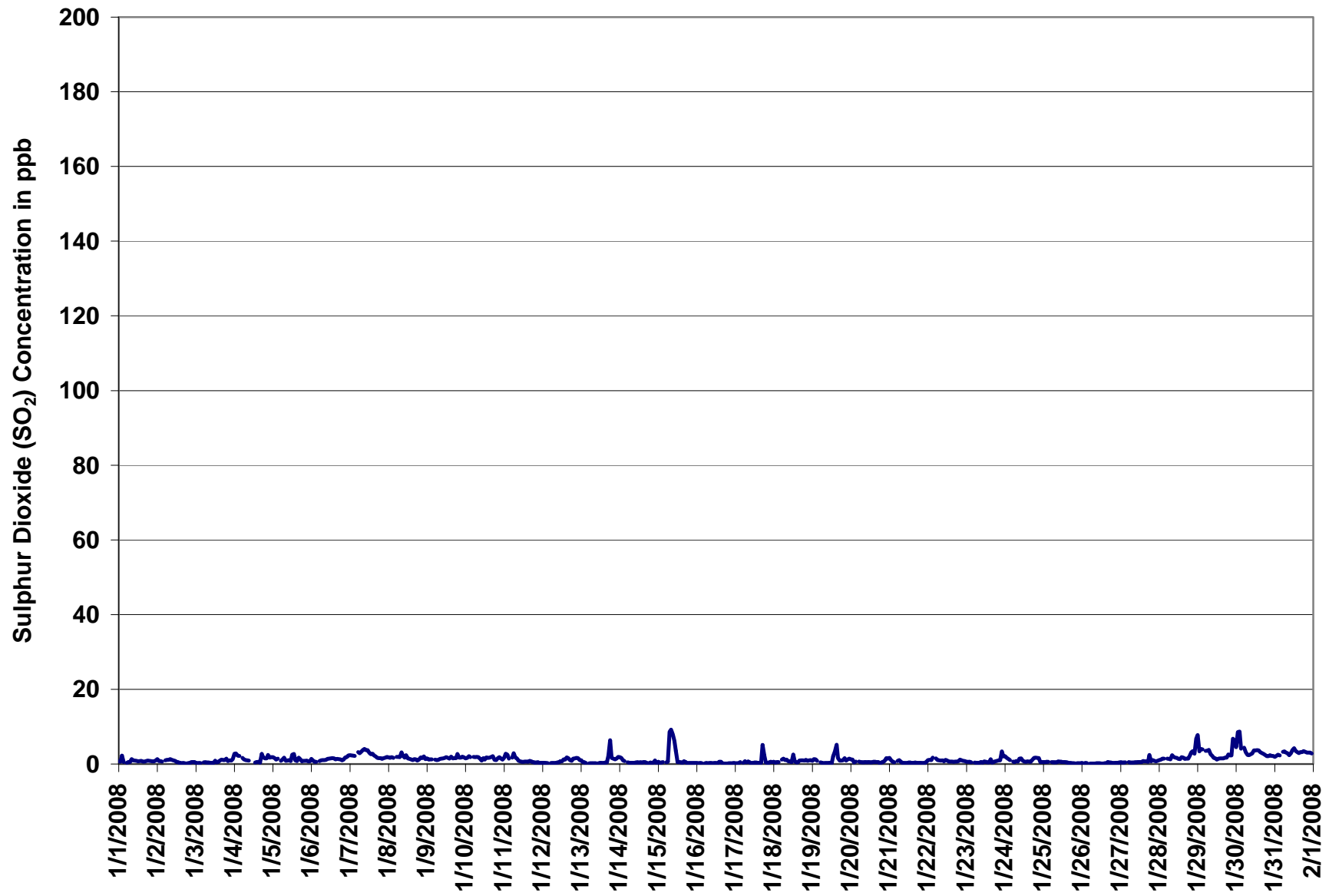
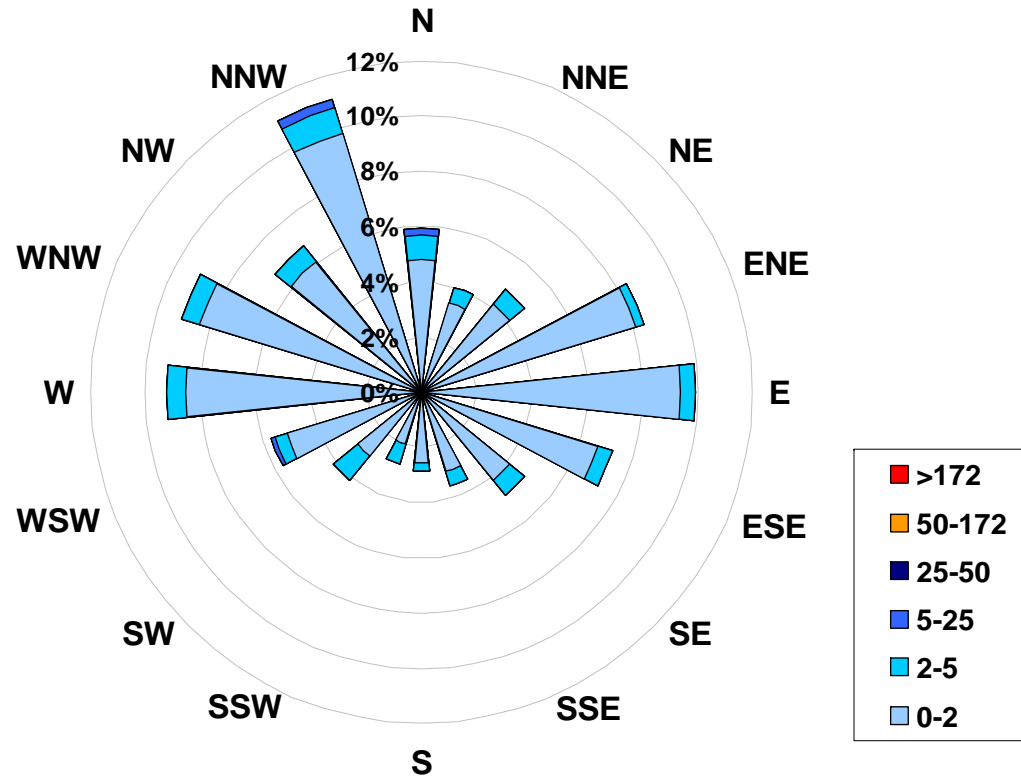


Figure 35. PASZA - Beaverlodge Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Beaverlodge Site for January 2008



Calms: 0%

| Frequency Distribution of SO ₂ in ppb | | | Frequency (hrs) |
|--|----|-----|-----------------|
| Range | | | |
| 0.0 | < | 2 | 631 |
| 2 | to | 5 | 74 |
| 5 | to | 25 | 5 |
| 25 | to | 50 | 0 |
| 50 | to | 172 | 0 |
| | > | 172 | 0 |
| Total Non-Zero Values | | | 710 |

PASZA - Beaverlodge Nitrogen Dioxide Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

HOURLY AVERAGE TABLE

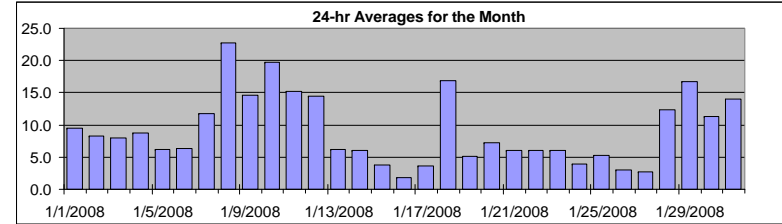
Nitrogen Dioxide (NO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | | |
|------------------------------|------|-----|--------|-------------|
| Number of 1-hr Exceedances: | 0 | | | |
| Number of 24-hr Exceedances: | 0 | | | |
| Maximum 1-hr Average: | 32.0 | ppb | 12-Jan | 17:00 18:00 |
| Maximum 24-hr Average: | 22.7 | ppb | 8-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 32 hrs | Operational Time: | 708 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 28.7 | 23.9 | 12.1 | 7.0 | 3.7 | 1.3 | 0.9 | 9.1 ppb | 7.0 ppb |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum |
|------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|-----------------|---------------|
| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | | |
| 1-Jan-08 | 5 | 5 | 6 | 7 | A | 4 | 13 | 16 | 9 | 13 | 9 | 8 | 4 | 6 | 8 | 10 | 14 | 16 | 11 | 10 | 12 | 10 | 9 | 11 | 9.4 | 16.0 |
| 2-Jan-08 | 18 | 15 | 13 | 12 | A | 12 | 10 | 12 | 16 | 12 | 16 | 8 | 7 | 7 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 8.3 | 18.5 |
| 3-Jan-08 | 3 | 3 | 4 | 3 | A | 4 | 4 | 6 | 7 | 7 | 4 | 5 | 4 | 11 | 9 | 17 | 11 | 12 | 19 | 8 | 9 | 8 | 16 | 11 | 8.0 | 18.8 |
| 4-Jan-08 | 11 | 12 | 11 | 11 | A | 10 | 15 | 13 | 9 | 10 | C | C | C | A | 10 | 6 | 11 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 8.8 | 15.4 |
| 5-Jan-08 | 3 | 4 | 4 | 3 | A | 12 | 10 | 8 | 7 | 6 | 6 | 5 | 4 | 4 | 5 | 5 | 7 | 8 | 6 | 7 | 6 | 6 | 6 | 11 | 6.1 | 11.9 |
| 6-Jan-08 | 10 | 7 | 7 | 7 | A | 7 | 6 | 6 | 6 | 6 | 5 | 4 | 4 | 3 | 5 | 6 | 5 | 5 | 7 | 6 | 7 | 8 | 11 | 9 | 6.3 | 11.2 |
| 7-Jan-08 | 7 | 5 | 4 | 4 | A | 5 | 6 | 6 | 8 | 11 | 9 | 3 | 6 | 7 | 11 | 12 | 23 | 27 | 23 | 20 | 19 | 20 | 16 | 16 | 11.7 | 26.5 |
| 8-Jan-08 | 17 | 16 | 18 | 20 | A | 21 | 24 | 23 | 26 | 23 | 17 | 20 | 26 | 21 | 22 | 24 | 26 | 28 | 27 | 27 | 28 | 23 | 21 | 23 | 22.7 | 28.2 |
| 9-Jan-08 | 25 | 22 | 22 | 23 | A | 10 | 10 | 9 | 11 | 10 | 7 | 6 | 6 | 6 | 7 | 8 | 12 | 17 | 17 | 22 | 25 | 22 | 20 | 20 | 14.6 | 24.7 |
| 10-Jan-08 | 18 | 17 | 20 | 20 | A | 21 | 20 | 22 | 25 | 21 | 14 | 15 | 13 | 15 | 16 | 17 | 21 | 22 | 21 | 22 | 24 | 25 | 23 | 23 | 19.7 | 24.6 |
| 11-Jan-08 | 23 | 23 | 23 | 23 | A | 22 | 22 | 22 | 22 | 20 | 14 | 11 | 10 | 9 | 8 | 11 | 15 | 25 | 20 | 13 | 3 | 4 | 3 | 3 | 15.3 | 24.9 |
| 12-Jan-08 | 3 | 3 | 3 | 3 | A | 4 | 4 | 9 | 6 | 7 | 12 | 9 | 12 | 21 | 14 | 20 | 27 | 32 | 32 | 31 | 29 | 16 | 16 | 19 | 14.4 | 32.0 |
| 13-Jan-08 | 19 | 9 | 6 | 3 | A | 2 | 2 | 3 | 3 | 6 | 3 | 4 | 8 | 7 | 4 | 3 | 6 | 5 | 6 | 4 | 8 | 9 | 9 | 13 | 6.2 | 18.9 |
| 14-Jan-08 | 10 | 9 | 8 | 8 | A | 7 | 6 | 8 | 6 | 5 | 13 | 8 | 9 | 14 | 10 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 6.0 | 14.3 |
| 15-Jan-08 | 2 | 3 | 2 | 3 | A | 4 | 5 | 7 | 8 | 7 | 4 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 6 | 6 | 4 | 4 | 7 | 4 | 3.7 | 8.4 |
| 16-Jan-08 | 2 | 2 | 1 | 1 | A | 2 | 4 | 4 | 4 | 6 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.9 | 5.8 |
| 17-Jan-08 | 1 | 1 | 1 | 1 | A | 5 | 6 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 7 | 8 | 10 | 6 | 3 | 2 | 5 | 3 | 3 | 3 | 3.7 | 9.6 |
| 18-Jan-08 | 5 | 9 | 5 | 4 | A | 6 | 5 | 16 | 23 | 14 | 13 | 6 | 17 | 14 | 15 | 18 | 29 | 29 | 26 | 26 | 28 | 29 | 25 | 24 | 16.8 | 29.4 |
| 19-Jan-08 | 8 | 6 | 3 | 3 | A | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 3 | 6 | 7 | 11 | 9 | 12 | 12 | 11 | 9 | 7 | 5.2 | 11.9 |
| 20-Jan-08 | 7 | 6 | 6 | 8 | A | 12 | 12 | 8 | 8 | 7 | 6 | 6 | 5 | 6 | 6 | 6 | 5 | 7 | 7 | 5 | 6 | 7 | 13 | 8 | 7.2 | 13.4 |
| 21-Jan-08 | 7 | 5 | 4 | 5 | A | 6 | 9 | 7 | 6 | 5 | 6 | 6 | 5 | 8 | 5 | 5 | 6 | 8 | 10 | 7 | 6 | 5 | 5 | 3 | 6.0 | 10.1 |
| 22-Jan-08 | 3 | 13 | 2 | 3 | A | 2 | 2 | 5 | 7 | 4 | 6 | 4 | 3 | 3 | 11 | 10 | 5 | 7 | 5 | 6 | 11 | 9 | 9 | 9 | 6.0 | 12.5 |
| 23-Jan-08 | 11 | 11 | 9 | 9 | A | 6 | 4 | 3 | 5 | 4 | 3 | 8 | 5 | 6 | 3 | 4 | 3 | 5 | 4 | 4 | 5 | 6 | 10 | 11 | 6.1 | 11.1 |
| 24-Jan-08 | 4 | 3 | 2 | 2 | A | 1 | 2 | 2 | 2 | 3 | 4 | 4 | 3 | 3 | 2 | 2 | 3 | 4 | 5 | 5 | 8 | 8 | 7 | 9 | 3.9 | 8.9 |
| 25-Jan-08 | 9 | 7 | 6 | 8 | A | 6 | 7 | 6 | 8 | 7 | 7 | 6 | 8 | 8 | 9 | 5 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 5.3 | 9.5 |
| 26-Jan-08 | 3 | 3 | 2 | 1 | A | 1 | 3 | 2 | 2 | 7 | 8 | 5 | 3 | 3 | 4 | 3 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 3.0 | 8.0 |
| 27-Jan-08 | 1 | 1 | 1 | 2 | A | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 3 | 4 | 3 | 5 | 5 | 4 | 5 | 14 | 2.7 | 14.4 |
| 28-Jan-08 | 11 | 19 | 11 | 15 | A | 16 | 24 | 24 | 25 | 19 | 9 | 13 | 12 | 9 | 8 | 9 | 11 | 11 | 6 | 4 | 4 | 6 | 9 | 10 | 12.4 | 25.0 |
| 29-Jan-08 | 13 | 14 | 13 | 20 | A | 22 | 25 | 27 | 31 | 26 | 22 | 18 | 13 | 12 | 12 | 9 | 11 | 14 | 14 | 11 | 11 | 14 | 15 | 14 | 16.7 | 31.1 |
| 30-Jan-08 | 11 | 12 | 11 | 9 | A | 9 | 7 | 9 | 11 | 8 | 6 | 7 | 6 | 6 | 7 | 8 | 12 | 21 | 20 | 13 | 17 | 18 | 12 | 18 | 11.3 | 21.4 |
| 31-Jan-08 | 24 | 21 | 19 | 24 | A | 19 | 23 | 18 | 24 | 20 | 16 | 11 | 8 | 6 | 7 | 8 | 7 | 8 | 9 | 8 | 8 | 13 | 12 | 10 | 14.1 | 24.1 |
| Hourly Avg | 9.5 | 9.2 | 8.0 | 8.5 | N | 8.4 | 9.5 | 9.9 | 10.7 | 9.7 | 8.2 | 7.0 | 7.0 | 7.4 | 7.5 | 8.2 | 9.6 | 11.5 | 10.7 | 9.6 | 10.1 | 9.7 | 9.9 | 10.2 | | |
| Hourly Max | 24.7 | 23.1 | 22.9 | 24.0 | 0.0 | 22.4 | 25.4 | 27.5 | 31.1 | 25.6 | 22.4 | 20.3 | 26.0 | 21.4 | 22.5 | 24.3 | 28.9 | 32.0 | 31.7 | 30.7 | 28.7 | 29.4 | 25.3 | 23.9 | | |

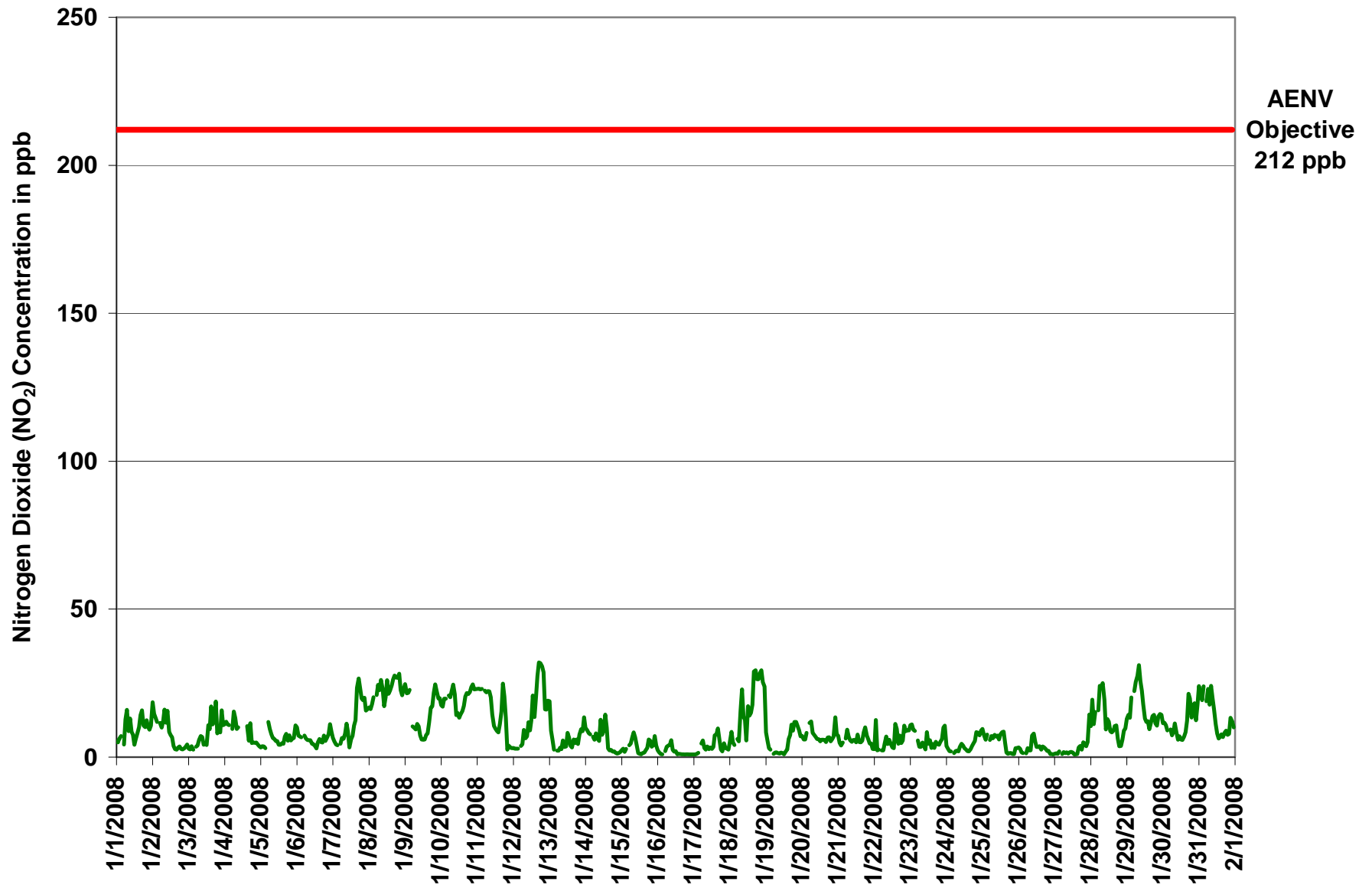


Figure 36. PASZA - Beaverlodge Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Beaverlodge
 Station Owner: PASZA

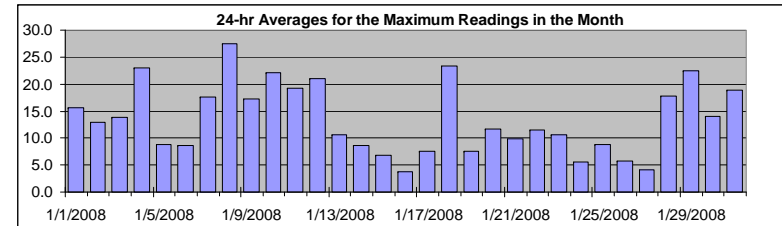
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitrogen Dioxide (NO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-------|-----|-------|------------|
| Maximum 1-hr Value: | 171.2 | ppb | 4-Jan | 9:00 10:00 |
| Maximum 24-hr Value: | 27.5 | ppb | 8-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|------|-----|-----|-----|----------|----------|
| AIC Time: | 32 hrs | Operational Time: | 708 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 36.0 | 31.0 | 18.6 | 10.7 | 5.9 | 1.9 | 1.9 | 13.4 ppb | 10.7 ppb |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 11 | 7 | 12 | 17 | A | 6 | 32 | 29 | 12 | 21 | 16 | 16 | 7 | 8 | 19 | 13 | 19 | 24 | 17 | 15 | 21 | 14 | 11 | 17 | 15.7 | 31.7 |
| 2-Jan-08 | 29 | 21 | 20 | 16 | A | 15 | 12 | 17 | 23 | 22 | 25 | 14 | 13 | 10 | 7 | 4 | 4 | 9 | 11 | 5 | 6 | 5 | 6 | 6 | 12.9 | 29.5 |
| 3-Jan-08 | 5 | 3 | 9 | 3 | A | 8 | 8 | 10 | 12 | 22 | 6 | 7 | 6 | 21 | 26 | 20 | 17 | 23 | 25 | 21 | 12 | 17 | 27 | 13 | 13.8 | 27.3 |
| 4-Jan-08 | 13 | 13 | 13 | 13 | A | 25 | 34 | 30 | 14 | 171 | C | C | C | C | A | 15 | 17 | 19 | 10 | 8 | 6 | 5 | 5 | 4 | 23.0 | 171.2 |
| 5-Jan-08 | 4 | 4 | 5 | 4 | A | 16 | 12 | 9 | 8 | 8 | 7 | 7 | 5 | 6 | 6 | 6 | 10 | 15 | 11 | 11 | 8 | 13 | 10 | 19 | 8.8 | 18.6 |
| 6-Jan-08 | 16 | 13 | 10 | 8 | A | 8 | 7 | 7 | 7 | 8 | 6 | 6 | 4 | 4 | 7 | 8 | 7 | 6 | 15 | 13 | 8 | 11 | 13 | 12 | 8.7 | 15.7 |
| 7-Jan-08 | 7 | 6 | 5 | 5 | A | 7 | 10 | 15 | 12 | 26 | 18 | 4 | 8 | 13 | 26 | 23 | 34 | 31 | 32 | 25 | 24 | 27 | 21 | 28 | 17.6 | 34.2 |
| 8-Jan-08 | 25 | 25 | 25 | 26 | A | 26 | 28 | 26 | 34 | 28 | 24 | 32 | 31 | 27 | 26 | 26 | 29 | 29 | 28 | 28 | 33 | 26 | 27 | 26 | 27.5 | 33.8 |
| 9-Jan-08 | 27 | 24 | 23 | 24 | A | 17 | 12 | 10 | 13 | 13 | 9 | 7 | 8 | 7 | 8 | 12 | 16 | 20 | 21 | 29 | 28 | 26 | 23 | 22 | 17.2 | 29.5 |
| 10-Jan-08 | 20 | 20 | 29 | 21 | A | 29 | 22 | 27 | 28 | 26 | 16 | 19 | 15 | 16 | 16 | 19 | 23 | 24 | 23 | 24 | 25 | 26 | 25 | 24 | 22.1 | 29.3 |
| 11-Jan-08 | 24 | 26 | 25 | 24 | A | 24 | 24 | 24 | 25 | 22 | 18 | 13 | 13 | 12 | 11 | 22 | 32 | 34 | 25 | 23 | 6 | 6 | 5 | 5 | 19.1 | 33.7 |
| 12-Jan-08 | 7 | 3 | 3 | 4 | A | 5 | 6 | 24 | 9 | 26 | 22 | 14 | 17 | 37 | 22 | 33 | 33 | 34 | 35 | 36 | 33 | 25 | 24 | 32 | 20.9 | 37.2 |
| 13-Jan-08 | 29 | 11 | 8 | 8 | A | 5 | 4 | 8 | 5 | 13 | 7 | 7 | 17 | 10 | 5 | 5 | 10 | 10 | 9 | 10 | 10 | 18 | 13 | 25 | 10.6 | 28.6 |
| 14-Jan-08 | 11 | 11 | 9 | 9 | A | 8 | 8 | 13 | 9 | 7 | 18 | 11 | 15 | 23 | 18 | 5 | 4 | 6 | 4 | 5 | 3 | 2 | 2 | 3 | 8.7 | 22.6 |
| 15-Jan-08 | 4 | 5 | 3 | 4 | A | 7 | 6 | 9 | 17 | 12 | 7 | 3 | 3 | 3 | 3 | 6 | 6 | 15 | 10 | 9 | 8 | 12 | 7 | 6.9 | 16.7 | |
| 16-Jan-08 | 5 | 4 | 2 | 2 | A | 4 | 6 | 8 | 11 | 11 | 7 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 3.7 | 11.0 |
| 17-Jan-08 | 1 | 2 | 2 | 2 | A | 18 | 17 | 5 | 9 | 9 | 4 | 6 | 9 | 11 | 11 | 12 | 19 | 9 | 5 | 3 | 10 | 4 | 4 | 3 | 7.5 | 18.5 |
| 18-Jan-08 | 7 | 10 | 7 | 12 | A | 8 | 10 | 45 | 46 | 28 | 19 | 11 | 31 | 22 | 17 | 21 | 33 | 31 | 30 | 31 | 31 | 30 | 30 | 28 | 23.3 | 46.2 |
| 19-Jan-08 | 16 | 14 | 4 | 3 | A | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 7 | 12 | 12 | 13 | 13 | 15 | 14 | 15 | 11 | 9 | 7.6 | 15.7 |
| 20-Jan-08 | 18 | 7 | 8 | 20 | A | 31 | 16 | 10 | 10 | 9 | 7 | 8 | 6 | 7 | 7 | 11 | 7 | 10 | 10 | 6 | 9 | 9 | 32 | 12 | 11.6 | 32.3 |
| 21-Jan-08 | 14 | 9 | 5 | 6 | A | 17 | 16 | 8 | 9 | 9 | 11 | 10 | 8 | 14 | 8 | 7 | 9 | 14 | 15 | 10 | 7 | 6 | 14 | 4 | 9.9 | 17.0 |
| 22-Jan-08 | 4 | 34 | 4 | 6 | A | 3 | 3 | 7 | 22 | 7 | 13 | 11 | 8 | 6 | 17 | 21 | 7 | 14 | 9 | 9 | 16 | 11 | 16 | 21 | 11.5 | 33.5 |
| 23-Jan-08 | 15 | 15 | 13 | 10 | A | 7 | 6 | 8 | 12 | 5 | 5 | 21 | 10 | 18 | 5 | 8 | 6 | 7 | 6 | 8 | 14 | 16 | 18 | 16 | 10.7 | 20.6 |
| 24-Jan-08 | 6 | 3 | 3 | 3 | A | 2 | 3 | 5 | 3 | 6 | 6 | 5 | 4 | 4 | 3 | 3 | 4 | 5 | 6 | 7 | 14 | 14 | 10 | 12 | 5.6 | 13.7 |
| 25-Jan-08 | 12 | 10 | 10 | 24 | A | 10 | 10 | 8 | 10 | 8 | 10 | 8 | 12 | 12 | 14 | 16 | 3 | 2 | 4 | 3 | 2 | 3 | 9 | 6 | 8.8 | 24.4 |
| 26-Jan-08 | 5 | 5 | 6 | 4 | A | 6 | 6 | 4 | 7 | 10 | 9 | 10 | 7 | 5 | 8 | 4 | 15 | 6 | 5 | 3 | 4 | 2 | 2 | 2 | 5.8 | 15.3 |
| 27-Jan-08 | 2 | 3 | 2 | 3 | A | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 5 | 5 | 6 | 8 | 6 | 5 | 11 | 18 | 4.2 | 17.7 |
| 28-Jan-08 | 12 | 25 | 17 | 23 | A | 28 | 30 | 29 | 30 | 36 | 26 | 25 | 18 | 11 | 11 | 11 | 15 | 13 | 9 | 4 | 7 | 10 | 10 | 12 | 17.8 | 36.0 |
| 29-Jan-08 | 17 | 19 | 23 | 32 | A | 28 | 42 | 40 | 40 | 31 | 29 | 21 | 17 | 19 | 14 | 13 | 13 | 19 | 18 | 15 | 13 | 19 | 20 | 19 | 22.5 | 41.5 |
| 30-Jan-08 | 16 | 14 | 12 | 10 | A | 11 | 9 | 11 | 13 | 10 | 7 | 9 | 7 | 7 | 9 | 10 | 18 | 26 | 27 | 14 | 24 | 24 | 15 | 25 | 14.1 | 26.5 |
| 31-Jan-08 | 27 | 25 | 32 | 32 | A | 29 | 34 | 29 | 28 | 25 | 18 | 15 | 9 | 8 | 8 | 9 | 8 | 10 | 14 | 14 | 12 | 19 | 19 | 11 | 18.8 | 34.3 |
| Hourly Avg | 13.1 | 12.4 | 11.1 | 12.0 | N | 13.1 | 14.0 | 15.4 | 15.5 | 20.3 | 12.3 | 10.8 | 10.4 | 11.4 | 11.2 | 12.0 | 13.9 | 15.3 | 14.6 | 13.3 | 13.3 | 13.4 | 14.2 | 14.1 | | |
| Hourly Max | 29.5 | 33.5 | 32.5 | 31.8 | 0.0 | 30.8 | 41.5 | 44.6 | 46.2 | 171.2 | 29.5 | 32.3 | 31.5 | 37.2 | 25.7 | 33.4 | 34.2 | 34.4 | 35.0 | 35.7 | 33.4 | 30.5 | 32.3 | 31.8 | | |

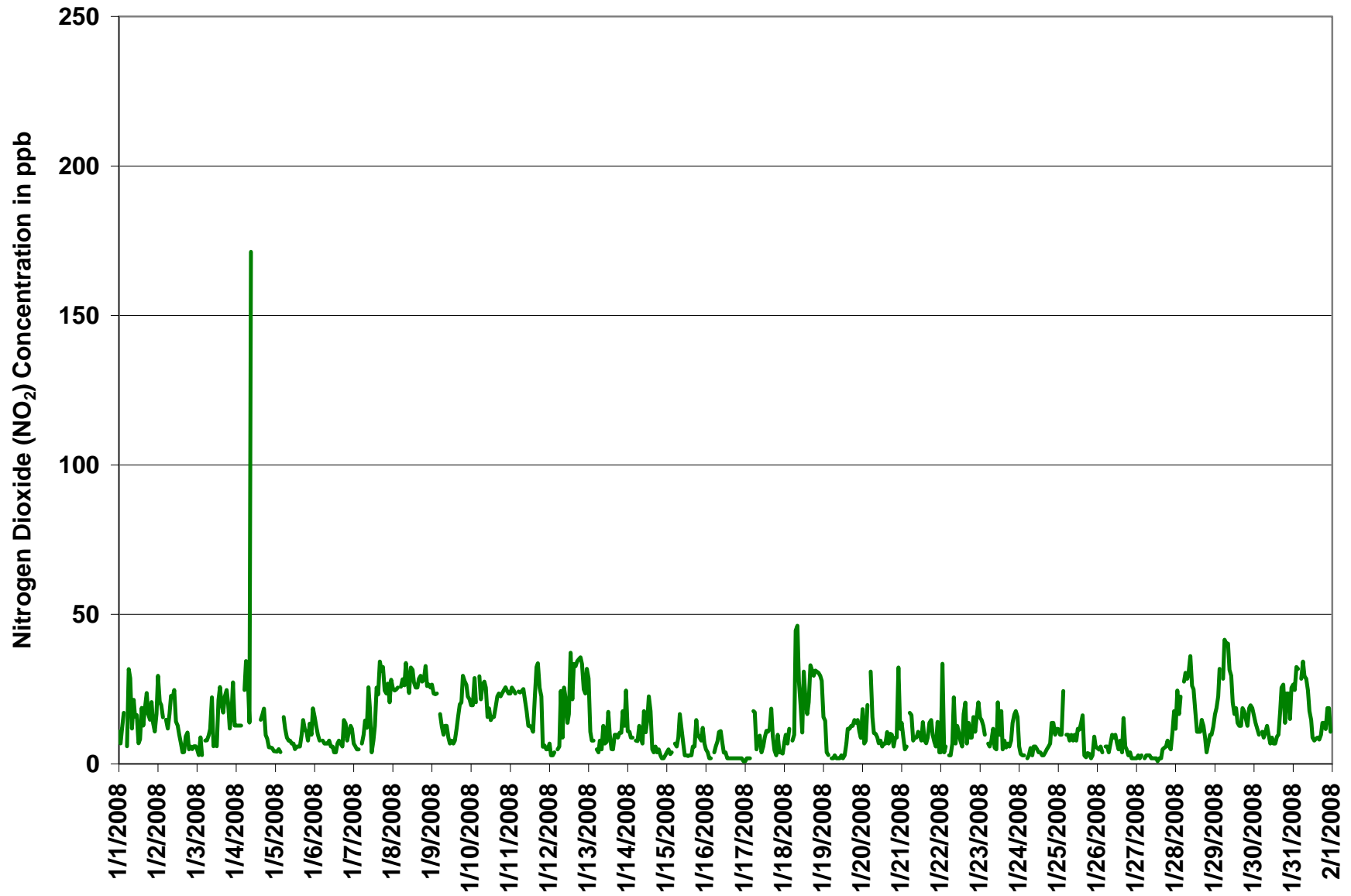
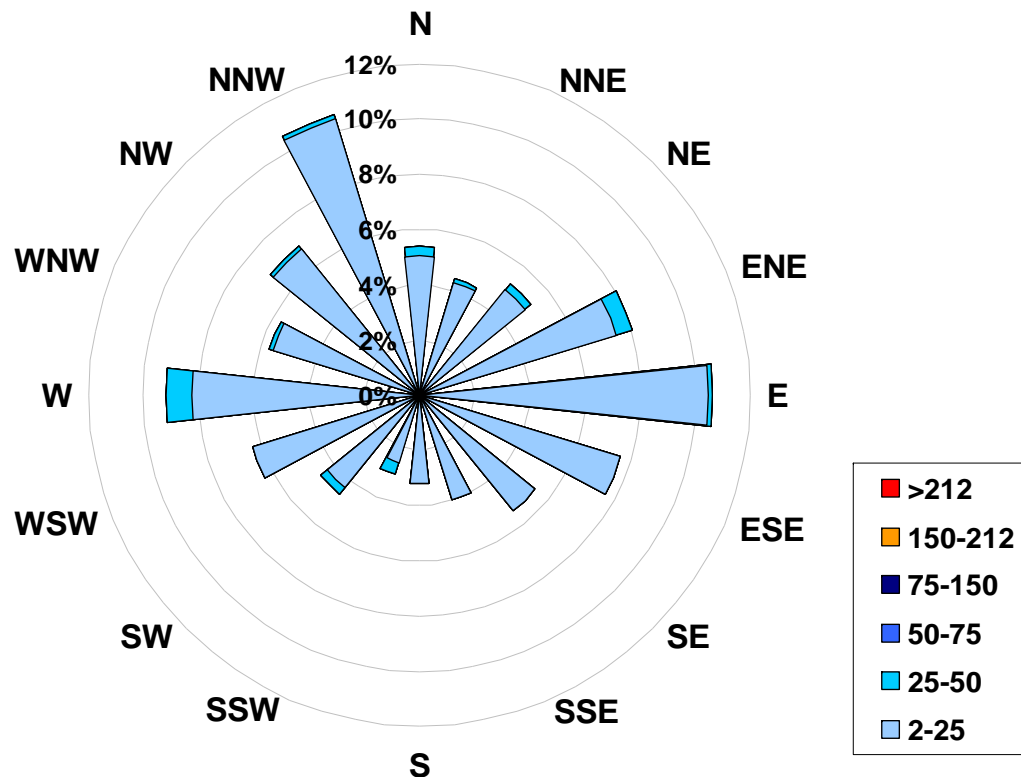


Figure 37. PASZA - Beaverlodge Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Beaverlodge Site for January 2008



Calms: 0%

| Frequency Distribution of NO ₂ in ppb | | | Frequency (hrs) |
|--|--------|--|-----------------|
| Range | | | |
| 2.0 | < 25 | | 691 |
| 25 | to 50 | | 16 |
| 50 | to 75 | | 1 |
| 75 | to 150 | | 0 |
| 150 | to 212 | | 0 |
| | > 212 | | 0 |
| Total Non-Zero Values | | | 708 |

PASZA - Beaverlodge Nitric Oxide Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

HOURLY AVERAGE TABLE

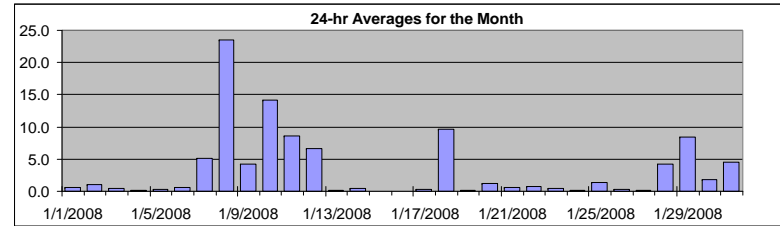
Nitric Oxide (NO)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | | |
|------------------------|------|-----|-------|-------------|
| Maximum 1-hr Average: | 73.1 | ppb | 8-Jan | 12:00 13:00 |
| Maximum 24-hr Average: | 23.5 | ppb | 8-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 32 hrs | Operational Time: | 708 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 34.8 | 19.0 | 2.3 | 0.0 | 0.0 | 3.2 | 0.0 | ppb | 0.0 ppb |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|-----------------|---------------|-----|
| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | | | |
| 1-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 1 | 0 | 0 | 1 | 2 | 3 | 1 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 2.6 |
| 2-Jan-08 | 4 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 11 | 3 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 10.8 | |
| 3-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 3.8 | |
| 4-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | C | C | C | C | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1.4 | |
| 5-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.3 | |
| 6-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 3.3 | |
| 7-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 12 | 5 | 2 | 6 | 8 | 14 | 8 | 23 | 24 | 8 | 0 | 0 | 3 | 0 | 1 | 5.1 | 23.7 | |
| 8-Jan-08 | 4 | 2 | 2 | 8 | A | 9 | 15 | 11 | 36 | 21 | 17 | 40 | 73 | 42 | 40 | 35 | 29 | 33 | 31 | 22 | 44 | 15 | 6 | 5 | 23.5 | 73.1 | |
| 9-Jan-08 | 11 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 4 | 5 | 5 | 3 | 2 | 0 | 0 | 14 | 26 | 13 | 3 | 1 | 4.2 | 25.9 | |
| 10-Jan-08 | 0 | 0 | 8 | 4 | A | 12 | 9 | 15 | 23 | 24 | 12 | 19 | 19 | 20 | 19 | 15 | 16 | 7 | 9 | 17 | 17 | 26 | 18 | 16 | 14.2 | 26.1 | |
| 11-Jan-08 | 15 | 19 | 17 | 15 | A | 17 | 23 | 20 | 16 | 6 | 9 | 9 | 8 | 6 | 3 | 4 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 8.5 | 22.6 | |
| 12-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 2 | 6 | 5 | 12 | 26 | 10 | 16 | 17 | 20 | 15 | 14 | 9 | 0 | 0 | 1 | 6.7 | 26.5 | |
| 13-Jan-08 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1.9 | |
| 14-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 4.6 | |
| 15-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.7 | |
| 16-Jan-08 | 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 | 0.2 | |
| 17-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 2.2 | |
| 18-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 12 | 27 | 4 | 8 | 3 | 22 | 12 | 12 | 12 | 39 | 14 | 1 | 10 | 11 | 23 | 8 | 5 | 9.6 | 38.7 | |
| 19-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1.9 | |
| 20-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 3 | 5 | 4 | 5 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1.2 | 5.0 | |
| 21-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 3 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 4.5 | |
| 22-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 7.1 | |
| 23-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 3.8 | |
| 24-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1.0 | |
| 25-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 8 | 8 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.4 | 8.4 | |
| 26-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.2 | |
| 27-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.8 | |
| 28-Jan-08 | 0 | 0 | 0 | 0 | A | 1 | 2 | 1 | 3 | 8 | 7 | 20 | 20 | 13 | 9 | 7 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4.2 | 20.0 | |
| 29-Jan-08 | 0 | 0 | 0 | 0 | A | 1 | 15 | 15 | 17 | 21 | 34 | 28 | 21 | 17 | 12 | 6 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8.4 | 33.9 | |
| 30-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 3 | 6 | 6 | 5 | 7 | 5 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 1.8 | 6.6 | |
| 31-Jan-08 | 1 | 0 | 2 | 4 | A | 0 | 7 | 2 | 9 | 13 | 18 | 14 | 10 | 8 | 7 | 6 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4.5 | 17.9 | |
| Hourly Avg | 1.1 | 0.7 | 1.0 | 1.0 | N | 1.3 | 2.3 | 2.4 | 4.2 | 3.8 | 5.0 | 6.1 | 7.8 | 6.8 | 5.8 | 4.5 | 5.0 | 3.5 | 2.1 | 2.5 | 3.4 | 2.6 | 1.2 | 1.0 | | | |
| Hourly Max | 14.7 | 18.9 | 17.4 | 15.4 | 0.0 | 17.2 | 22.6 | 19.5 | 35.6 | 23.9 | 33.9 | 40.5 | 73.1 | 42.5 | 40.2 | 34.9 | 38.7 | 33.0 | 30.9 | 22.4 | 43.5 | 26.1 | 18.1 | 15.8 | | | |

PASZA - Beaverlodge Oxides of Nitrogen Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

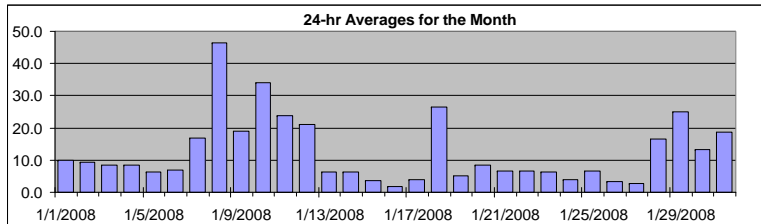
HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | | |
|------------------------|------|-----|-------|-------------|
| Maximum 1-hr Average: | 99.6 | ppb | 8-Jan | 12:00 13:00 |
| Maximum 24-hr Average: | 46.4 | ppb | 8-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|----------|---------|
| AIC Time: | 32 hrs | Operational Time: | 708 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 60.7 | 41.0 | 14.7 | 7.8 | 3.9 | 1.2 | 0.9 | 12.4 ppb | 7.8 ppb |

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|---------------|------|
| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | | |
| 1-Jan-08 | 5 | 5 | 6 | 7 | A | 4 | 14 | 16 | 9 | 14 | 11 | 10 | 6 | 8 | 10 | 12 | 15 | 16 | 11 | 10 | 12 | 10 | 9 | 11 | 10.0 | 16.4 |
| 2-Jan-08 | 22 | 15 | 13 | 12 | A | 12 | 10 | 12 | 17 | 13 | 26 | 11 | 10 | 10 | 4 | 3 | 3 | 3 | 4 | 3 | 2 | 3 | 3 | 4 | 9.3 | 26.5 |
| 3-Jan-08 | 3 | 2 | 4 | 2 | A | 3 | 4 | 6 | 7 | 7 | 4 | 6 | 5 | 15 | 12 | 20 | 11 | 12 | 19 | 8 | 9 | 8 | 16 | 11 | 8.4 | 19.6 |
| 4-Jan-08 | 11 | 12 | 11 | 11 | A | 9 | 16 | 14 | 9 | 10 | C | C | C | C | A | 11 | 5 | 11 | 4 | 4 | 4 | 4 | 4 | 3 | 8.5 | 15.9 |
| 5-Jan-08 | 3 | 3 | 3 | 3 | A | 12 | 9 | 8 | 6 | 6 | 6 | 7 | 5 | 6 | 6 | 5 | 7 | 8 | 5 | 7 | 6 | 6 | 6 | 11 | 6.3 | 11.8 |
| 6-Jan-08 | 10 | 7 | 7 | 7 | A | 7 | 6 | 6 | 6 | 6 | 6 | 7 | 6 | 5 | 8 | 9 | 5 | 5 | 7 | 5 | 7 | 8 | 11 | 8 | 6.9 | 11.2 |
| 7-Jan-08 | 6 | 5 | 4 | 4 | A | 4 | 6 | 6 | 8 | 24 | 14 | 5 | 12 | 15 | 25 | 21 | 46 | 50 | 31 | 20 | 20 | 24 | 16 | 18 | 16.8 | 50.4 |
| 8-Jan-08 | 20 | 18 | 20 | 28 | A | 31 | 40 | 34 | 62 | 44 | 34 | 61 | 100 | 64 | 63 | 59 | 55 | 61 | 58 | 49 | 72 | 38 | 27 | 28 | 46.4 | 99.6 |
| 9-Jan-08 | 36 | 23 | 22 | 23 | A | 10 | 10 | 9 | 11 | 11 | 10 | 10 | 10 | 10 | 12 | 11 | 14 | 17 | 18 | 35 | 51 | 36 | 22 | 21 | 18.8 | 50.8 |
| 10-Jan-08 | 18 | 17 | 28 | 24 | A | 33 | 29 | 37 | 48 | 45 | 27 | 35 | 32 | 34 | 35 | 33 | 36 | 29 | 30 | 39 | 40 | 51 | 41 | 39 | 34.0 | 50.8 |
| 11-Jan-08 | 38 | 42 | 41 | 38 | A | 40 | 45 | 42 | 39 | 26 | 23 | 19 | 17 | 15 | 12 | 15 | 23 | 29 | 20 | 13 | 3 | 4 | 3 | 3 | 23.9 | 44.8 |
| 12-Jan-08 | 3 | 3 | 3 | 3 | A | 4 | 4 | 9 | 6 | 9 | 18 | 14 | 24 | 48 | 24 | 36 | 45 | 53 | 46 | 44 | 38 | 16 | 16 | 21 | 21.1 | 52.5 |
| 13-Jan-08 | 20 | 9 | 6 | 3 | A | 2 | 2 | 3 | 3 | 6 | 4 | 4 | 10 | 8 | 5 | 3 | 6 | 5 | 6 | 4 | 7 | 9 | 9 | 13 | 6.3 | 19.5 |
| 14-Jan-08 | 10 | 9 | 8 | 7 | A | 7 | 6 | 8 | 6 | 5 | 15 | 9 | 11 | 19 | 12 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 6.4 | 19.0 |
| 15-Jan-08 | 2 | 3 | 1 | 2 | A | 4 | 4 | 7 | 8 | 7 | 4 | 2 | 1 | 1 | 2 | 2 | 3 | 3 | 6 | 5 | 3 | 4 | 7 | 4 | 3.7 | 8.2 |
| 16-Jan-08 | 2 | 2 | 1 | 1 | A | 2 | 3 | 4 | 4 | 6 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.8 | 5.8 |
| 17-Jan-08 | 1 | 1 | 1 | 1 | A | 4 | 6 | 3 | 2 | 3 | 3 | 4 | 3 | 4 | 10 | 9 | 11 | 6 | 2 | 2 | 5 | 3 | 3 | 2 | 3.9 | 10.7 |
| 18-Jan-08 | 5 | 8 | 5 | 4 | A | 6 | 5 | 28 | 50 | 18 | 20 | 9 | 39 | 26 | 27 | 30 | 68 | 44 | 28 | 36 | 39 | 52 | 33 | 29 | 26.5 | 67.9 |
| 19-Jan-08 | 8 | 5 | 3 | 2 | A | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 4 | 8 | 8 | 11 | 9 | 12 | 12 | 10 | 9 | 7 | 5.3 | 11.7 |
| 20-Jan-08 | 7 | 6 | 6 | 8 | A | 12 | 12 | 8 | 7 | 8 | 9 | 11 | 10 | 11 | 10 | 8 | 6 | 7 | 7 | 5 | 6 | 7 | 16 | 7 | 8.3 | 15.6 |
| 21-Jan-08 | 7 | 5 | 4 | 5 | A | 6 | 9 | 7 | 6 | 5 | 7 | 8 | 8 | 12 | 7 | 6 | 6 | 8 | 10 | 7 | 6 | 4 | 5 | 3 | 6.6 | 12.2 |
| 22-Jan-08 | 3 | 13 | 2 | 2 | A | 2 | 2 | 5 | 7 | 5 | 7 | 6 | 4 | 4 | 18 | 13 | 5 | 7 | 5 | 5 | 11 | 9 | 9 | 9 | 6.6 | 18.3 |
| 23-Jan-08 | 11 | 11 | 9 | 9 | A | 5 | 3 | 3 | 5 | 4 | 3 | 12 | 6 | 9 | 4 | 5 | 3 | 5 | 4 | 4 | 5 | 6 | 10 | 10 | 6.4 | 12.3 |
| 24-Jan-08 | 4 | 3 | 2 | 2 | A | 1 | 2 | 2 | 2 | 4 | 5 | 5 | 4 | 3 | 3 | 2 | 3 | 4 | 5 | 5 | 8 | 8 | 7 | 9 | 4.0 | 8.8 |
| 25-Jan-08 | 9 | 7 | 6 | 7 | A | 6 | 7 | 6 | 7 | 8 | 11 | 10 | 16 | 17 | 14 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 6.6 | 16.9 |
| 26-Jan-08 | 3 | 3 | 2 | 1 | A | 1 | 3 | 2 | 2 | 8 | 9 | 7 | 4 | 4 | 5 | 3 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 3.2 | 9.2 |
| 27-Jan-08 | 1 | 1 | 1 | 2 | A | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 4 | 4 | 2 | 5 | 5 | 4 | 5 | 14 | 2.8 | 14.4 |
| 28-Jan-08 | 10 | 19 | 11 | 15 | A | 17 | 26 | 24 | 28 | 28 | 17 | 33 | 32 | 22 | 17 | 17 | 15 | 12 | 6 | 3 | 4 | 6 | 9 | 9 | 16.5 | 33.1 |
| 29-Jan-08 | 13 | 14 | 13 | 21 | A | 23 | 40 | 43 | 48 | 47 | 57 | 46 | 34 | 29 | 25 | 16 | 16 | 15 | 14 | 11 | 11 | 14 | 15 | 14 | 25.1 | 56.7 |
| 30-Jan-08 | 11 | 12 | 11 | 9 | A | 9 | 7 | 9 | 11 | 10 | 9 | 14 | 12 | 11 | 14 | 14 | 17 | 25 | 20 | 13 | 17 | 18 | 12 | 18 | 13.2 | 24.7 |
| 31-Jan-08 | 25 | 22 | 21 | 28 | A | 19 | 30 | 20 | 33 | 34 | 34 | 26 | 18 | 14 | 14 | 14 | 9 | 9 | 9 | 7 | 8 | 13 | 12 | 10 | 18.6 | 34.4 |
| Hourly Avg | 10.6 | 9.8 | 8.8 | 9.4 | N | 9.6 | 11.8 | 12.3 | 14.9 | 13.6 | 13.3 | 13.2 | 14.9 | 14.3 | 13.4 | 12.8 | 14.6 | 15.0 | 12.7 | 12.0 | 13.4 | 12.2 | 11.0 | 11.0 | | |
| Hourly Max | 37.9 | 42.2 | 40.6 | 38.5 | 0.0 | 39.9 | 44.8 | 42.9 | 62.0 | 47.3 | 56.7 | 61.2 | 99.6 | 64.3 | 63.0 | 59.4 | 67.9 | 60.8 | 58.1 | 49.3 | 72.0 | 52.2 | 41.2 | 38.9 | | |

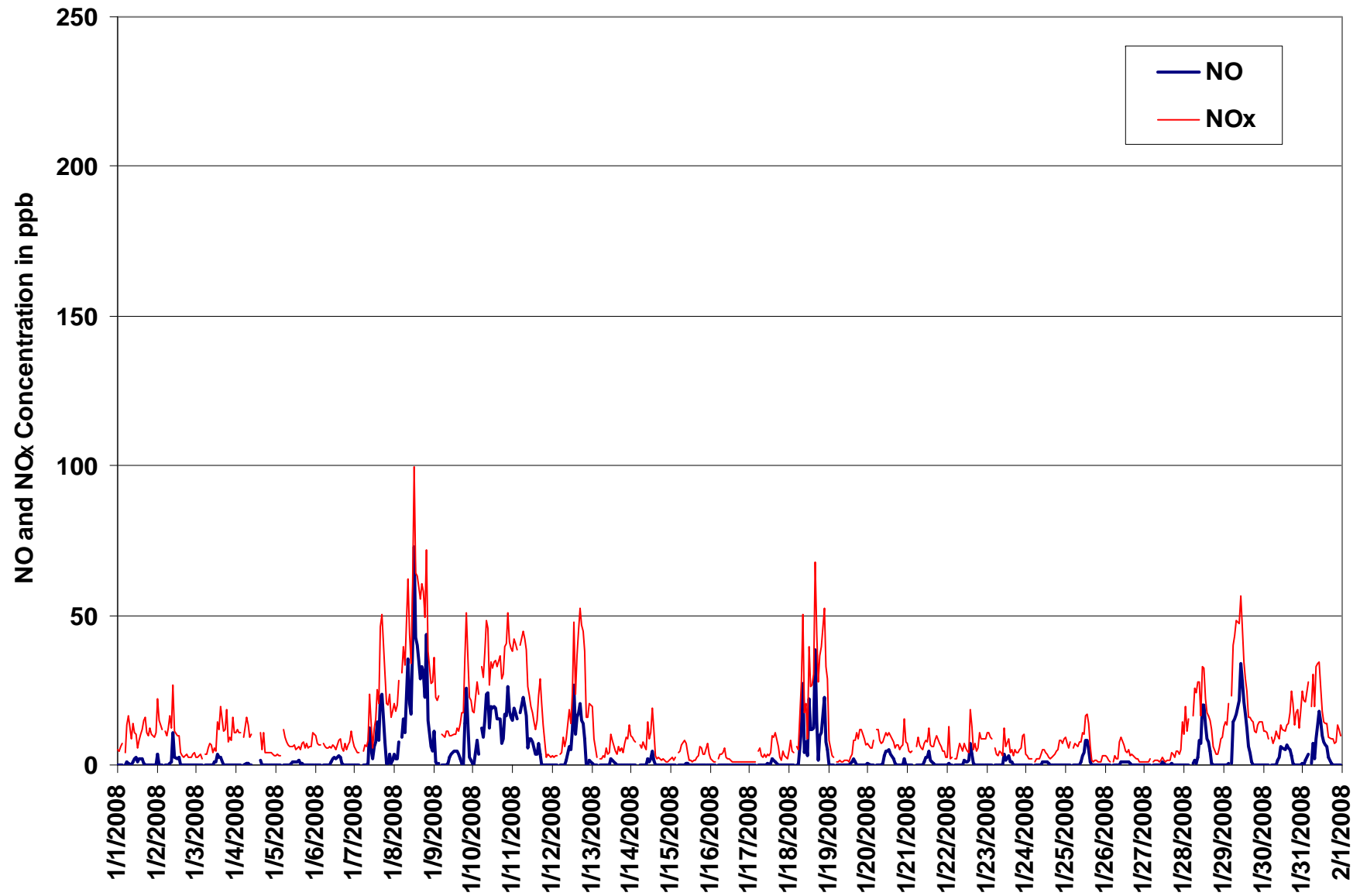


Figure 38. PASZA - Beaverlodge Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Beaverlodge
 Station Owner: PASZA

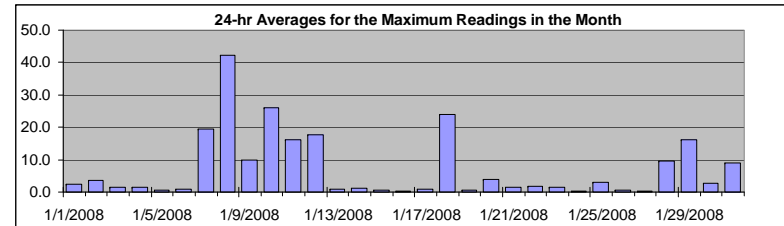
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-------|-----|-------|------------|
| Maximum 1-hr Value: | 104.8 | ppb | 7-Jan | 9:00 10:00 |
| Maximum 24-hr Value: | 42.2 | ppb | 8-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 32 hrs | Operational Time: | 708 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 71.7 | 37.9 | 5.8 | 0.9 | 0.0 | 0.0 | 0.0 | 7.2 ppb | 0.9 ppb |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 7 | 4 | 0 | 4 | 8 | 7 | 3 | 4 | 9 | 3 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 2.3 | 8.8 |
| 2-Jan-08 | 15 | 2 | 1 | 0 | A | 0 | 0 | 2 | 5 | 7 | 30 | 8 | 5 | 6 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 3.6 | 29.8 |
| 3-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 10 | 12 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1.5 | 11.7 |
| 4-Jan-08 | 0 | 0 | 0 | 0 | A | 2 | 5 | 7 | 0 | 6 | C | C | C | C | A | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.4 | 6.8 |
| 5-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 0.6 | 2.9 |
| 6-Jan-08 | 1 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 3 | 3 | 3 | 3 | 4 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 4.8 |
| 7-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 2 | 5 | 3 | 105 | 16 | 3 | 8 | 18 | 57 | 40 | 49 | 44 | 41 | 3 | 4 | 29 | 1 | 20 | 19.4 | 104.8 |
| 8-Jan-08 | 30 | 21 | 15 | 44 | A | 33 | 40 | 23 | 65 | 35 | 37 | 84 | 86 | 74 | 49 | 44 | 43 | 39 | 34 | 30 | 72 | 36 | 23 | 15 | 42.2 | 85.7 |
| 9-Jan-08 | 21 | 6 | 0 | 2 | A | 0 | 0 | 0 | 0 | 2 | 4 | 5 | 6 | 6 | 6 | 6 | 4 | 2 | 2 | 47 | 55 | 42 | 13 | 3 | 10.0 | 54.5 |
| 10-Jan-08 | 1 | 3 | 51 | 9 | A | 66 | 18 | 34 | 37 | 34 | 16 | 32 | 22 | 23 | 22 | 18 | 30 | 12 | 15 | 23 | 30 | 43 | 38 | 22 | 26.1 | 66.0 |
| 11-Jan-08 | 19 | 28 | 20 | 22 | A | 24 | 32 | 33 | 41 | 11 | 15 | 11 | 11 | 10 | 7 | 23 | 38 | 28 | 1 | 1 | 0 | 0 | 0 | 0 | 16.3 | 41.2 |
| 12-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 2 | 0 | 15 | 21 | 9 | 22 | 72 | 30 | 42 | 37 | 30 | 30 | 51 | 21 | 0 | 0 | 20 | 17.5 | 72.0 |
| 13-Jan-08 | 6 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 5 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 5.6 |
| 14-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 5 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.1 | 9.7 |
| 15-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 7 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0.6 | 6.7 |
| 16-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.9 |
| 17-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 4 | 4 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.9 | 6.0 |
| 18-Jan-08 | 0 | 0 | 0 | 1 | A | 0 | 0 | 85 | 88 | 28 | 23 | 5 | 56 | 33 | 14 | 15 | 61 | 29 | 5 | 28 | 22 | 26 | 20 | 12 | 23.9 | 88.2 |
| 19-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 4 | 5 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0.7 | 4.8 |
| 20-Jan-08 | 11 | 0 | 0 | 1 | A | 4 | 0 | 1 | 1 | 2 | 7 | 6 | 6 | 6 | 6 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | 31 | 0 | 3.9 | 31.5 |
| 21-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 5 | 11 | 4 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1.4 | 10.6 |
| 22-Jan-08 | 0 | 3 | 0 | 0 | A | 0 | 0 | 0 | 1 | 1 | 5 | 4 | 3 | 3 | 13 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.9 | 12.9 |
| 23-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 13 | 5 | 14 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.6 | 13.6 |
| 24-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 1 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.9 |
| 25-Jan-08 | 0 | 0 | 0 | 1 | A | 0 | 0 | 0 | 1 | 2 | 6 | 7 | 16 | 13 | 10 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.1 | 16.5 |
| 26-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 3 | 1 | 4 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 3.8 |
| 27-Jan-08 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.0 |
| 28-Jan-08 | 0 | 0 | 1 | 4 | A | 5 | 5 | 3 | 6 | 36 | 26 | 54 | 34 | 17 | 13 | 10 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 9.6 | 54.3 |
| 29-Jan-08 | 0 | 0 | 1 | 6 | A | 3 | 57 | 36 | 36 | 32 | 71 | 34 | 29 | 34 | 16 | 10 | 6 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 16.3 | 71.1 |
| 30-Jan-08 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0 | 1 | 2 | 4 | 8 | 7 | 7 | 9 | 7 | 7 | 5 | 3 | 0 | 0 | 2 | 0 | 3 | 2.8 | 8.7 |
| 31-Jan-08 | 3 | 1 | 17 | 11 | A | 3 | 38 | 8 | 18 | 21 | 23 | 19 | 11 | 10 | 8 | 9 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 9.0 | 37.9 |
| Hourly Avg | 3.5 | 2.1 | 3.5 | 3.2 | N | 4.5 | 6.6 | 7.8 | 9.8 | 11.4 | 11.0 | 11.1 | 12.0 | 13.2 | 10.4 | 9.1 | 10.0 | 6.5 | 4.3 | 5.9 | 6.6 | 5.9 | 4.3 | 3.1 | | |
| Hourly Max | 29.6 | 28.4 | 51.1 | 43.8 | 0.0 | 66.0 | 56.8 | 84.9 | 88.2 | 104.8 | 71.1 | 83.6 | 85.7 | 74.1 | 56.5 | 43.6 | 61.1 | 43.8 | 40.9 | 50.7 | 71.7 | 42.6 | 38.0 | 22.4 | | |

Station: Beaverlodge
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

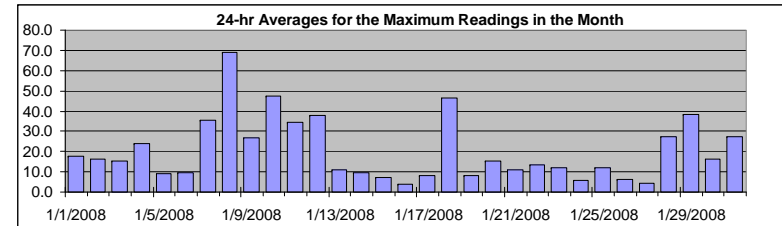
Oxides of Nitrogen (NO_x)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-------|-----|-------|------------|
| Maximum 1-hr Value: | 174.1 | ppb | 4-Jan | 9:00 10:00 |
| Maximum 24-hr Value: | 69.1 | ppb | 8-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|------|-----|-----|-----|----------|----------|
| AIC Time: | 32 hrs | Operational Time: | 708 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 104.0 | 68.3 | 24.5 | 11.8 | 6.7 | 2.5 | 1.9 | 20.2 ppb | 11.8 ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 11 | 7 | 12 | 17 | A | 6 | 37 | 32 | 12 | 25 | 24 | 24 | 10 | 12 | 27 | 16 | 19 | 25 | 17 | 15 | 21 | 14 | 11 | 17 | 17.7 | 37.3 |
| 2-Jan-08 | 44 | 22 | 21 | 15 | A | 15 | 12 | 18 | 27 | 29 | 54 | 22 | 18 | 16 | 8 | 5 | 4 | 10 | 11 | 6 | 6 | 5 | 6 | 6 | 16.4 | 53.9 |
| 3-Jan-08 | 5 | 3 | 9 | 3 | A | 7 | 8 | 9 | 12 | 23 | 7 | 8 | 7 | 32 | 37 | 24 | 19 | 23 | 25 | 21 | 12 | 17 | 31 | 13 | 15.2 | 36.6 |
| 4-Jan-08 | 13 | 13 | 13 | 13 | A | 27 | 39 | 37 | 14 | 174 | C | C | C | C | A | 16 | 16 | 18 | 9 | 8 | 5 | 5 | 5 | 4 | 23.7 | 174.1 |
| 5-Jan-08 | 3 | 4 | 5 | 4 | A | 16 | 12 | 9 | 8 | 8 | 7 | 9 | 6 | 8 | 8 | 7 | 10 | 15 | 12 | 11 | 8 | 16 | 10 | 19 | 9.1 | 18.6 |
| 6-Jan-08 | 16 | 14 | 10 | 8 | A | 8 | 7 | 7 | 7 | 9 | 8 | 10 | 7 | 7 | 11 | 13 | 8 | 6 | 15 | 14 | 8 | 11 | 13 | 12 | 9.7 | 16.0 |
| 7-Jan-08 | 7 | 6 | 5 | 5 | A | 6 | 11 | 19 | 15 | 127 | 34 | 7 | 16 | 31 | 79 | 61 | 73 | 72 | 66 | 28 | 26 | 56 | 22 | 47 | 35.6 | 126.6 |
| 8-Jan-08 | 54 | 46 | 38 | 69 | A | 60 | 69 | 49 | 93 | 63 | 60 | 116 | 114 | 102 | 75 | 69 | 70 | 68 | 62 | 57 | 104 | 63 | 50 | 39 | 69.1 | 115.8 |
| 9-Jan-08 | 44 | 29 | 23 | 25 | A | 17 | 12 | 10 | 14 | 13 | 12 | 12 | 14 | 13 | 14 | 18 | 18 | 22 | 22 | 77 | 82 | 69 | 35 | 25 | 26.8 | 82.4 |
| 10-Jan-08 | 21 | 22 | 77 | 30 | A | 95 | 39 | 58 | 64 | 58 | 29 | 50 | 37 | 38 | 38 | 35 | 52 | 35 | 36 | 46 | 51 | 66 | 62 | 45 | 47.3 | 95.4 |
| 11-Jan-08 | 43 | 53 | 43 | 45 | A | 47 | 55 | 56 | 65 | 28 | 29 | 23 | 23 | 23 | 18 | 45 | 69 | 59 | 25 | 23 | 6 | 7 | 4 | 5 | 34.5 | 69.4 |
| 12-Jan-08 | 7 | 3 | 3 | 3 | A | 4 | 6 | 26 | 9 | 40 | 43 | 22 | 38 | 104 | 51 | 75 | 70 | 65 | 63 | 84 | 53 | 25 | 23 | 51 | 37.8 | 104.3 |
| 13-Jan-08 | 32 | 11 | 8 | 8 | A | 5 | 4 | 7 | 5 | 13 | 8 | 9 | 22 | 12 | 6 | 5 | 10 | 10 | 9 | 10 | 10 | 18 | 13 | 25 | 11.2 | 32.1 |
| 14-Jan-08 | 11 | 11 | 9 | 9 | A | 8 | 8 | 13 | 9 | 7 | 21 | 12 | 20 | 32 | 23 | 5 | 4 | 6 | 4 | 5 | 3 | 2 | 2 | 3 | 9.7 | 32.4 |
| 15-Jan-08 | 4 | 4 | 3 | 4 | A | 7 | 6 | 9 | 17 | 18 | 8 | 3 | 4 | 3 | 3 | 7 | 6 | 15 | 10 | 9 | 8 | 12 | 6 | 6 | 7.3 | 17.7 |
| 16-Jan-08 | 5 | 4 | 2 | 2 | A | 4 | 6 | 8 | 10 | 11 | 7 | 4 | 5 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 3.8 | 11.0 |
| 17-Jan-08 | 1 | 1 | 2 | 2 | A | 18 | 17 | 5 | 9 | 10 | 4 | 8 | 10 | 15 | 15 | 14 | 23 | 9 | 4 | 3 | 10 | 4 | 3 | 3 | 8.2 | 23.2 |
| 18-Jan-08 | 7 | 10 | 6 | 12 | A | 8 | 10 | 128 | 126 | 55 | 41 | 15 | 86 | 55 | 29 | 36 | 94 | 59 | 33 | 58 | 52 | 56 | 50 | 38 | 46.3 | 128.3 |
| 19-Jan-08 | 16 | 14 | 4 | 3 | A | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 4 | 10 | 17 | 14 | 12 | 13 | 15 | 14 | 16 | 11 | 8 | 8.1 | 16.6 |
| 20-Jan-08 | 29 | 7 | 7 | 21 | A | 35 | 16 | 11 | 12 | 10 | 13 | 13 | 12 | 12 | 13 | 16 | 9 | 12 | 10 | 6 | 9 | 9 | 64 | 12 | 15.4 | 63.8 |
| 21-Jan-08 | 13 | 9 | 4 | 6 | A | 17 | 16 | 8 | 9 | 9 | 14 | 15 | 14 | 25 | 12 | 10 | 9 | 14 | 15 | 10 | 7 | 5 | 16 | 4 | 11.2 | 25.2 |
| 22-Jan-08 | 4 | 35 | 4 | 6 | A | 3 | 3 | 7 | 23 | 8 | 17 | 15 | 11 | 9 | 29 | 29 | 9 | 14 | 9 | 9 | 16 | 10 | 16 | 21 | 13.2 | 35.4 |
| 23-Jan-08 | 16 | 15 | 13 | 10 | A | 7 | 6 | 8 | 12 | 6 | 5 | 33 | 14 | 30 | 7 | 9 | 6 | 7 | 5 | 8 | 13 | 16 | 18 | 16 | 12.1 | 33.3 |
| 24-Jan-08 | 6 | 3 | 3 | 2 | A | 2 | 3 | 6 | 3 | 6 | 7 | 7 | 5 | 6 | 4 | 3 | 4 | 5 | 6 | 8 | 14 | 14 | 10 | 13 | 5.9 | 13.6 |
| 25-Jan-08 | 12 | 10 | 10 | 25 | A | 10 | 10 | 8 | 11 | 10 | 16 | 14 | 28 | 24 | 24 | 33 | 3 | 3 | 4 | 4 | 2 | 3 | 9 | 5 | 11.9 | 33.0 |
| 26-Jan-08 | 5 | 4 | 6 | 4 | A | 6 | 6 | 4 | 7 | 11 | 11 | 12 | 9 | 6 | 11 | 5 | 19 | 6 | 5 | 3 | 4 | 2 | 2 | 1 | 6.4 | 19.2 |
| 27-Jan-08 | 2 | 3 | 2 | 3 | A | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 6 | 6 | 6 | 8 | 6 | 5 | 11 | 18 | 4.4 | 17.6 |
| 28-Jan-08 | 12 | 25 | 17 | 25 | A | 32 | 34 | 31 | 35 | 72 | 51 | 78 | 52 | 28 | 23 | 21 | 20 | 15 | 10 | 4 | 7 | 9 | 10 | 12 | 27.1 | 78.1 |
| 29-Jan-08 | 17 | 18 | 22 | 37 | A | 31 | 99 | 77 | 76 | 62 | 101 | 55 | 46 | 53 | 28 | 22 | 18 | 20 | 18 | 15 | 13 | 19 | 21 | 19 | 38.4 | 100.7 |
| 30-Jan-08 | 17 | 14 | 12 | 10 | A | 11 | 9 | 11 | 14 | 11 | 10 | 17 | 14 | 14 | 18 | 17 | 24 | 26 | 29 | 14 | 24 | 24 | 15 | 27 | 16.5 | 29.2 |
| 31-Jan-08 | 28 | 26 | 50 | 41 | A | 31 | 72 | 36 | 45 | 44 | 42 | 35 | 20 | 17 | 16 | 18 | 13 | 11 | 14 | 14 | 12 | 19 | 19 | 11 | 27.4 | 72.3 |
| Hourly Avg | 16.2 | 14.3 | 14.2 | 15.1 | N | 17.5 | 20.4 | 22.9 | 24.6 | 31.0 | 22.9 | 21.7 | 22.2 | 24.5 | 21.3 | 20.9 | 23.2 | 21.2 | 18.4 | 19.0 | 19.6 | 19.0 | 18.4 | 16.8 | | |
| Hourly Max | 53.7 | 53.0 | 77.4 | 69.3 | 0.0 | 95.4 | 99.0 | 128.3 | 126.4 | 174.1 | 100.7 | 115.8 | 114.3 | 104.3 | 78.6 | 74.6 | 93.8 | 72.1 | 65.8 | 84.3 | 104.1 | 68.5 | 63.8 | 50.9 | | |

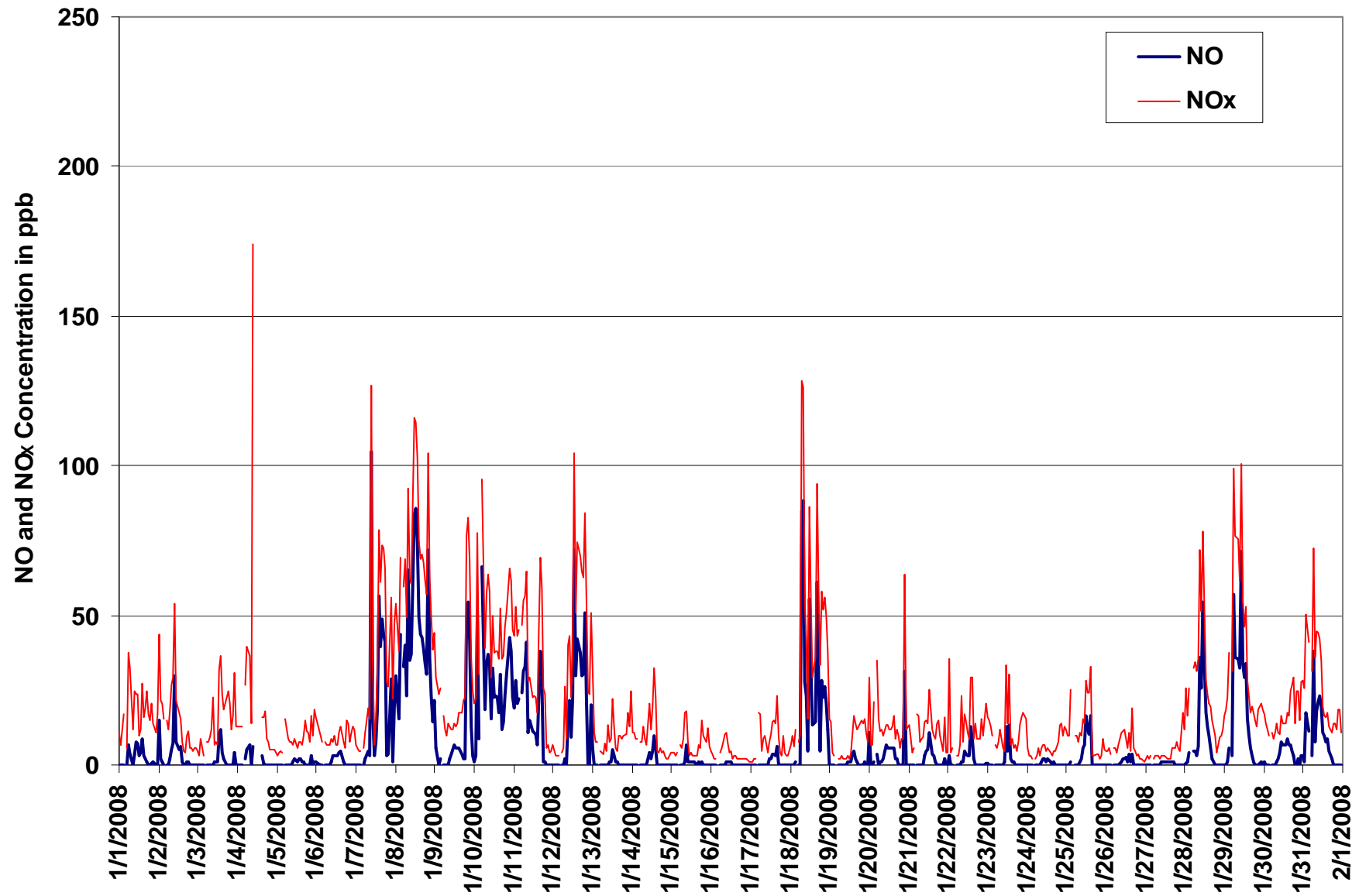


Figure 39. PASZA - Beaverlodge Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

PASZA - Beaverlodge Ozone Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Ozone (O₃)

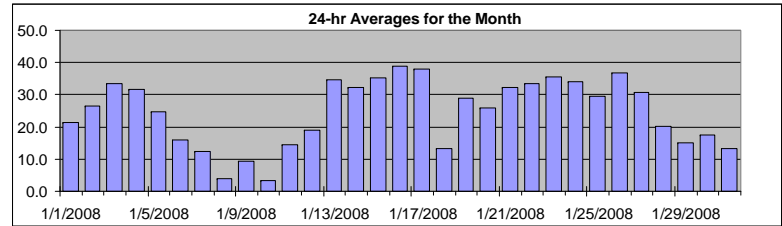
Monitoring Dates: January 1, 2008 to February 1, 2008

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

Summary

| | | | | |
|-----------------------------|----------|--------|-------|-------|
| Number of 1-hr Exceedances: | 0 | | | |
| Maximum 1-hr Average: | 42.6 ppb | 25-Jan | 21:00 | 22:00 |
| Maximum 24-hr Average: | 38.8 ppb | 16-Jan | | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|------|------|-----|-----|----------|----------|
| AIC Time: | 32 hrs | Operational Time: | 709 hrs | | | | | | |
| Calibration Time: | 3 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 42.0 | 40.8 | 34.8 | 26.0 | 16.0 | 2.0 | 1.0 | 24.5 ppb | 26.0 ppb |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | | |
|------------|------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|------|------|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 23:00 | 0:00 | | |
| 1-Jan-08 | 31 | 31 | 28 | 26 | A | 30 | 20 | 14 | 23 | 19 | 23 | 23 | 28 | 24 | 23 | 20 | 17 | 15 | 19 | 17 | 15 | 15 | 16 | 15 | | 21.4 | 31.4 | |
| 2-Jan-08 | 9 | 10 | 12 | 13 | A | 14 | 17 | 15 | 12 | 16 | 13 | 25 | 30 | 33 | 38 | 41 | 41 | 39 | 38 | 39 | 39 | 38 | 37 | 36 | | 26.4 | 40.9 | |
| 3-Jan-08 | 38 | 38 | 37 | 38 | A | 37 | 36 | 35 | 33 | 34 | 37 | 37 | 38 | 32 | 34 | 26 | 33 | 32 | 23 | 35 | 33 | 33 | 24 | 27 | | 33.5 | 38.4 | |
| 4-Jan-08 | 24 | 22 | 23 | 23 | A | 28 | 23 | 25 | 29 | 35 | 32 | 40 | 41 | C | C | C | A | 33 | 39 | 38 | 37 | 37 | 37 | 37 | | 31.7 | 40.8 | |
| 5-Jan-08 | 37 | 37 | 37 | 37 | A | 23 | 25 | 25 | 27 | 26 | 26 | 25 | 25 | 24 | 23 | 23 | 20 | 19 | 20 | 18 | 19 | 18 | 17 | 13 | | 24.6 | 37.2 | |
| 6-Jan-08 | 14 | 15 | 14 | 14 | A | 12 | 13 | 14 | 14 | 14 | 16 | 17 | 17 | 19 | 18 | 18 | 20 | 20 | 18 | 19 | 17 | 16 | 13 | 15 | | 15.9 | 20.2 | |
| 7-Jan-08 | 16 | 18 | 19 | 20 | A | 18 | 16 | 17 | 16 | 12 | 15 | 21 | 18 | 17 | 14 | 15 | 5 | 1 | 2 | 4 | 4 | 4 | 7 | 7 | | 12.4 | 20.8 | |
| 8-Jan-08 | 6 | 6 | 4 | 3 | A | 2 | 1 | 2 | 2 | 3 | 9 | 9 | 6 | 7 | 6 | 5 | 3 | 1 | 1 | 1 | 1 | 4 | 6 | 3 | | 3.9 | 8.9 | |
| 9-Jan-08 | 1 | 3 | 3 | 2 | A | 15 | 16 | 16 | 13 | 13 | 16 | 18 | 17 | 17 | 15 | 15 | 12 | 7 | 6 | 4 | 1 | 2 | 2 | 2 | | 9.4 | 17.5 | |
| 10-Jan-08 | 3 | 4 | 2 | 2 | A | 1 | 1 | 1 | 1 | 2 | 6 | 8 | 8 | 9 | 8 | 8 | 4 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | | 3.4 | 8.5 | |
| 11-Jan-08 | 2 | 2 | 2 | 1 | A | 2 | 2 | 2 | 1 | 4 | 11 | 15 | 18 | 22 | 26 | 24 | 19 | 8 | 12 | 23 | 36 | 34 | 34 | 33 | | 14.4 | 35.6 | |
| 12-Jan-08 | 33 | 33 | 32 | 32 | A | 32 | 32 | 24 | 26 | 27 | 21 | 23 | 19 | 14 | 18 | 14 | 6 | 1 | 0 | 2 | 4 | 15 | 16 | 12 | | 19.0 | 33.3 | |
| 13-Jan-08 | 12 | 23 | 32 | 40 | A | 42 | 42 | 41 | 41 | 38 | 41 | 41 | 36 | 36 | 39 | 40 | 36 | 38 | 35 | 35 | 31 | 28 | 28 | 22 | | 34.7 | 42.4 | |
| 14-Jan-08 | 25 | 25 | 25 | 26 | A | 27 | 29 | 27 | 30 | 31 | 22 | 30 | 29 | 23 | 27 | 38 | 42 | 42 | 41 | 40 | 40 | 40 | 40 | 40 | | 32.1 | 42.2 | |
| 15-Jan-08 | 39 | 38 | 39 | 37 | A | 35 | 34 | 32 | 30 | 32 | 34 | 37 | 37 | 38 | 39 | 38 | 37 | 36 | 32 | 33 | 34 | 34 | 31 | 34 | | 35.2 | 38.7 | |
| 16-Jan-08 | 36 | 37 | 38 | 38 | A | 37 | 36 | 35 | 35 | 33 | 37 | 37 | 39 | 40 | 40 | 41 | 41 | 41 | 42 | 42 | 42 | 42 | 42 | 42 | | 38.8 | 41.9 | |
| 17-Jan-08 | 42 | 42 | 41 | 41 | A | 38 | 36 | 40 | 39 | 41 | 42 | 41 | 41 | 38 | 32 | 32 | 30 | 34 | 39 | 39 | 36 | 37 | 37 | 37 | | 38.0 | 42.2 | |
| 18-Jan-08 | 33 | 22 | 25 | 27 | A | 24 | 24 | 15 | 10 | 14 | 15 | 22 | 13 | 15 | 13 | 10 | 3 | 1 | 4 | 3 | 1 | 0 | 3 | 5 | | 13.2 | 32.8 | |
| 19-Jan-08 | 25 | 28 | 29 | 31 | A | 36 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 35 | 34 | 32 | 30 | 27 | 23 | 24 | 21 | 21 | 21 | 22 | 24 | | 29.0 | 35.7 |
| 20-Jan-08 | 24 | 26 | 27 | 24 | A | 21 | 18 | 22 | 21 | 22 | 24 | 25 | 27 | 28 | 30 | 30 | 30 | 29 | 28 | 30 | 29 | 28 | 23 | 28 | | 25.9 | 30.4 | |
| 21-Jan-08 | 28 | 31 | 32 | 31 | A | 32 | 30 | 31 | 33 | 34 | 33 | 33 | 33 | 31 | 34 | 34 | 34 | 31 | 29 | 31 | 32 | 33 | 33 | 35 | | 32.1 | 35.3 | |
| 22-Jan-08 | 35 | 27 | 37 | 37 | A | 37 | 37 | 35 | 33 | 35 | 33 | 35 | 37 | 38 | 30 | 32 | 37 | 34 | 36 | 33 | 28 | 29 | 28 | 28 | | 33.5 | 37.5 | |
| 23-Jan-08 | 26 | 25 | 27 | 26 | A | 34 | 39 | 40 | 38 | 39 | 41 | 36 | 40 | 38 | 40 | 39 | 40 | 38 | 38 | 38 | 37 | 36 | 31 | 29 | | 35.5 | 40.8 | |
| 24-Jan-08 | 38 | 38 | 39 | 38 | A | 39 | 38 | 37 | 37 | 34 | 32 | 33 | 35 | 36 | 37 | 37 | 36 | 35 | 33 | 31 | 28 | 26 | 26 | 23 | | 34.2 | 39.4 | |
| 25-Jan-08 | 21 | 23 | 26 | 26 | A | 27 | 23 | 23 | 20 | 19 | 18 | 20 | 19 | 19 | 24 | 37 | 41 | 42 | 42 | 42 | 42 | 43 | 41 | 40 | | 29.5 | 42.6 | |
| 26-Jan-08 | 40 | 41 | 42 | 42 | A | 42 | 40 | 41 | 41 | 36 | 36 | 38 | 40 | 40 | 39 | 41 | 31 | 28 | 29 | 30 | 30 | 31 | 32 | 32 | | 36.6 | 42.5 | |
| 27-Jan-08 | 32 | 32 | 32 | 31 | A | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 33 | 33 | 33 | 31 | 30 | 31 | 29 | 29 | 30 | 28 | 19 | | 30.8 | 32.7 | |
| 28-Jan-08 | 22 | 14 | 21 | 17 | A | 16 | 8 | 8 | 7 | 14 | 23 | 21 | 22 | 23 | 25 | 24 | 22 | 22 | 26 | 29 | 29 | 26 | 23 | 22 | | 20.2 | 29.4 | |
| 29-Jan-08 | 19 | 17 | 18 | 12 | A | 9 | 8 | 7 | 3 | 7 | 11 | 15 | 18 | 21 | 20 | 22 | 20 | 17 | 16 | 19 | 20 | 17 | 16 | 16 | | 15.1 | 22.1 | |
| 30-Jan-08 | 17 | 17 | 18 | 20 | A | 20 | 22 | 21 | 18 | 20 | 22 | 21 | 22 | 23 | 22 | 21 | 17 | 9 | 10 | 15 | 11 | 11 | 16 | 10 | | 17.5 | 22.9 | |
| 31-Jan-08 | 4 | 6 | 9 | 5 | A | 9 | 6 | 10 | 4 | 7 | 11 | 15 | 19 | 21 | 21 | 20 | 20 | 19 | 18 | 19 | 19 | 14 | 15 | 16 | | 13.3 | 20.6 | |
| Hourly Avg | 23.6 | 23.5 | 24.7 | 24.6 | N | 24.9 | 23.8 | 23.2 | 22.7 | 23.5 | 24.7 | 26.7 | 27.1 | 26.4 | 26.7 | 26.8 | 25.1 | 23.4 | 23.7 | 24.6 | 24.1 | 24.0 | 23.3 | 22.8 | | | | |
| Hourly Max | 41.8 | 41.6 | 41.9 | 42.5 | 0.0 | 42.4 | 42.1 | 41.0 | 41.1 | 40.5 | 42.2 | 41.1 | 40.8 | 40.3 | 40.4 | 40.9 | 41.9 | 42.2 | 41.7 | 42.0 | 42.5 | 42.6 | 41.6 | 41.8 | | | | |

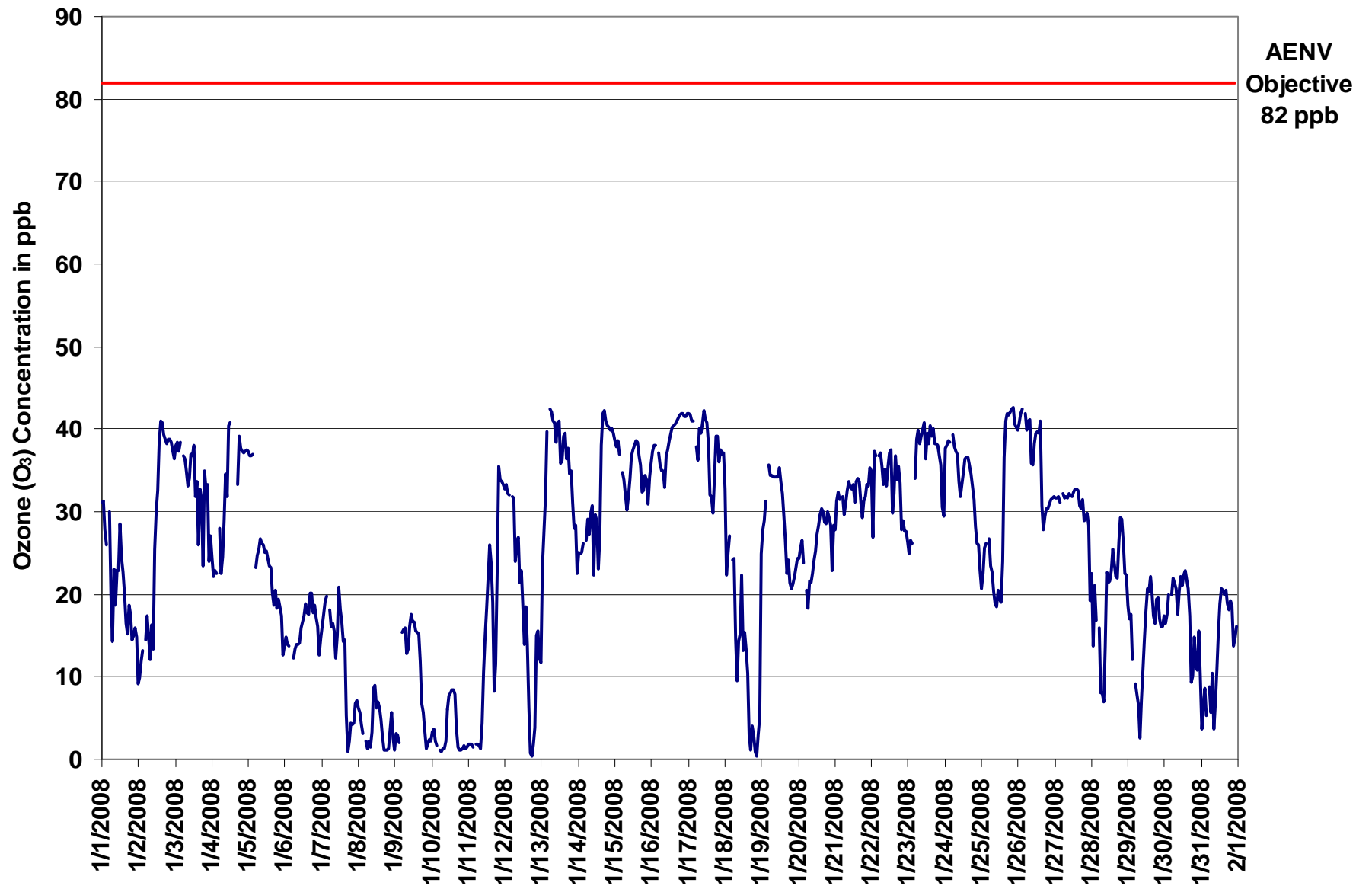


Figure 40. PASZA - Beaverlodge Ozone 1-hr Average Monthly Trend

Station: Beaverlodge
 Station Owner: PASZA

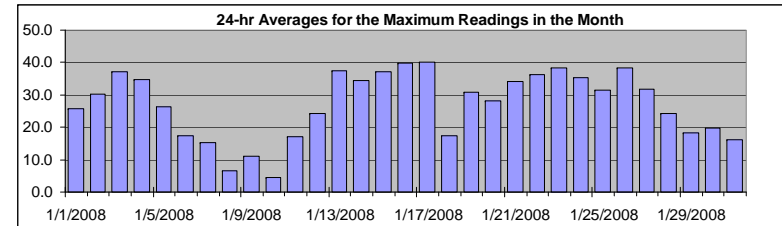
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Ozone (O₃)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|------|-----|--------|-------------|
| Maximum 1-hr Value: | 43.9 | ppb | 14-Jan | 17:00 18:00 |
| Maximum 24-hr Value: | 40.0 | ppb | 17-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|------|------|-----|-----|----------|----------|
| AIC Time: | 32 hrs | Operational Time: | 709 hrs | | | | | | |
| Calibration Time: | 3 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 43.4 | 42.1 | 37.5 | 29.5 | 19.0 | 4.1 | 1.5 | 27.0 ppb | 29.5 ppb |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 35 | 32 | 37 | 29 | A | 33 | 31 | 19 | 29 | 29 | 27 | 28 | 32 | 27 | 26 | 25 | 19 | 19 | 22 | 20 | 18 | 18 | 19 | 17 | 25.7 | 37.5 |
| 2-Jan-08 | 18 | 15 | 18 | 19 | A | 19 | 20 | 18 | 19 | 20 | 25 | 32 | 34 | 39 | 40 | 42 | 42 | 41 | 40 | 40 | 40 | 39 | 38 | 38 | 30.4 | 42.4 |
| 3-Jan-08 | 40 | 39 | 39 | 39 | A | 39 | 38 | 37 | 36 | 37 | 37 | 38 | 39 | 39 | 39 | 33 | 35 | 37 | 35 | 39 | 39 | 38 | 30 | 30 | 37.1 | 39.9 |
| 4-Jan-08 | 26 | 23 | 24 | 24 | A | 32 | 31 | 34 | 33 | 38 | 41 | 42 | 42 | C | C | C | A | 39 | 40 | 40 | 38 | 38 | 38 | 38 | 34.7 | 42.0 |
| 5-Jan-08 | 38 | 37 | 37 | 38 | A | 26 | 27 | 26 | 28 | 27 | 27 | 26 | 26 | 25 | 24 | 24 | 22 | 22 | 22 | 21 | 21 | 21 | 21 | 17 | 26.2 | 37.6 |
| 6-Jan-08 | 16 | 16 | 16 | 15 | A | 13 | 14 | 14 | 14 | 15 | 17 | 17 | 18 | 20 | 19 | 20 | 21 | 21 | 22 | 20 | 18 | 17 | 14 | 16 | 17.2 | 22.0 |
| 7-Jan-08 | 17 | 18 | 21 | 20 | A | 19 | 18 | 18 | 18 | 17 | 21 | 21 | 21 | 20 | 18 | 20 | 12 | 2 | 6 | 7 | 8 | 9 | 8 | 10 | 15.2 | 21.3 |
| 8-Jan-08 | 10 | 9 | 8 | 7 | A | 6 | 1 | 7 | 2 | 7 | 11 | 12 | 7 | 9 | 8 | 7 | 4 | 1 | 1 | 1 | 2 | 11 | 13 | 5 | 6.5 | 12.7 |
| 9-Jan-08 | 2 | 5 | 4 | 3 | A | 19 | 18 | 17 | 16 | 15 | 17 | 18 | 17 | 17 | 16 | 17 | 14 | 10 | 8 | 6 | 2 | 4 | 4 | 4 | 11.0 | 18.6 |
| 10-Jan-08 | 5 | 5 | 4 | 3 | A | 2 | 1 | 2 | 2 | 5 | 7 | 9 | 9 | 10 | 10 | 10 | 6 | 3 | 1 | 1 | 1 | 2 | 2 | 2 | 4.5 | 10.0 |
| 11-Jan-08 | 2 | 3 | 3 | 2 | A | 2 | 4 | 2 | 2 | 8 | 13 | 16 | 20 | 26 | 27 | 26 | 25 | 18 | 18 | 36 | 37 | 35 | 34 | 34 | 17.1 | 36.9 |
| 12-Jan-08 | 34 | 34 | 33 | 33 | A | 32 | 33 | 32 | 29 | 32 | 28 | 26 | 24 | 24 | 24 | 22 | 19 | 5 | 1 | 9 | 19 | 22 | 20 | 24 | 24.3 | 34.1 |
| 13-Jan-08 | 21 | 25 | 38 | 43 | A | 44 | 43 | 43 | 42 | 41 | 43 | 42 | 41 | 38 | 40 | 40 | 40 | 39 | 37 | 36 | 33 | 32 | 30 | 30 | 37.5 | 43.9 |
| 14-Jan-08 | 27 | 27 | 26 | 28 | A | 28 | 31 | 30 | 31 | 32 | 29 | 32 | 33 | 27 | 36 | 40 | 44 | 44 | 42 | 41 | 41 | 41 | 41 | 40 | 34.4 | 43.9 |
| 15-Jan-08 | 40 | 39 | 39 | 39 | A | 36 | 35 | 35 | 33 | 34 | 37 | 38 | 38 | 39 | 40 | 39 | 39 | 38 | 37 | 38 | 38 | 36 | 33 | 37 | 37.1 | 40.0 |
| 16-Jan-08 | 37 | 38 | 39 | 39 | A | 39 | 38 | 38 | 38 | 36 | 39 | 38 | 40 | 41 | 41 | 41 | 41 | 42 | 42 | 42 | 42 | 42 | 42 | 42 | 39.9 | 42.4 |
| 17-Jan-08 | 42 | 42 | 42 | 42 | A | 42 | 39 | 42 | 40 | 43 | 44 | 43 | 43 | 43 | 34 | 35 | 34 | 37 | 40 | 40 | 39 | 38 | 38 | 38 | 40.0 | 43.5 |
| 18-Jan-08 | 35 | 29 | 26 | 29 | A | 26 | 26 | 25 | 22 | 20 | 19 | 24 | 21 | 17 | 16 | 13 | 7 | 3 | 6 | 7 | 1 | 1 | 6 | 16 | 17.2 | 35.2 |
| 19-Jan-08 | 31 | 32 | 31 | 36 | A | 37 | 36 | 35 | 35 | 35 | 35 | 35 | 36 | 36 | 33 | 33 | 30 | 24 | 26 | 23 | 23 | 22 | 24 | 26 | 31.0 | 37.0 |
| 20-Jan-08 | 26 | 28 | 28 | 26 | A | 28 | 22 | 24 | 23 | 24 | 25 | 26 | 28 | 29 | 31 | 31 | 31 | 31 | 30 | 31 | 32 | 30 | 28 | 31 | 28.0 | 31.7 |
| 21-Jan-08 | 30 | 32 | 33 | 33 | A | 34 | 33 | 35 | 34 | 36 | 38 | 36 | 35 | 33 | 37 | 36 | 35 | 35 | 32 | 33 | 33 | 34 | 34 | 36 | 34.2 | 37.5 |
| 22-Jan-08 | 36 | 37 | 39 | 38 | A | 38 | 38 | 38 | 37 | 37 | 37 | 38 | 40 | 40 | 38 | 37 | 38 | 38 | 38 | 35 | 31 | 30 | 30 | 30 | 36.3 | 39.9 |
| 23-Jan-08 | 29 | 29 | 28 | 30 | A | 36 | 42 | 42 | 41 | 41 | 42 | 41 | 42 | 42 | 42 | 41 | 42 | 40 | 40 | 39 | 40 | 39 | 39 | 35 | 38.3 | 42.3 |
| 24-Jan-08 | 39 | 38 | 39 | 40 | A | 41 | 39 | 38 | 38 | 36 | 33 | 34 | 36 | 37 | 37 | 37 | 37 | 36 | 34 | 33 | 30 | 30 | 28 | 24 | 35.5 | 40.6 |
| 25-Jan-08 | 22 | 24 | 30 | 30 | A | 29 | 26 | 23 | 22 | 20 | 20 | 21 | 21 | 21 | 30 | 41 | 42 | 42 | 42 | 43 | 43 | 43 | 43 | 41 | 31.4 | 43.4 |
| 26-Jan-08 | 42 | 42 | 43 | 43 | A | 43 | 42 | 43 | 43 | 39 | 37 | 40 | 41 | 41 | 41 | 41 | 41 | 30 | 31 | 31 | 32 | 32 | 32 | 32 | 38.4 | 43.4 |
| 27-Jan-08 | 32 | 32 | 32 | 32 | A | 33 | 33 | 33 | 33 | 33 | 33 | 32 | 33 | 33 | 33 | 33 | 32 | 32 | 33 | 31 | 30 | 31 | 31 | 23 | 31.8 | 33.2 |
| 28-Jan-08 | 24 | 25 | 25 | 21 | A | 23 | 14 | 15 | 16 | 20 | 27 | 26 | 25 | 25 | 28 | 27 | 24 | 25 | 30 | 30 | 30 | 30 | 24 | 24 | 24.2 | 29.9 |
| 29-Jan-08 | 21 | 19 | 20 | 18 | A | 14 | 14 | 16 | 7 | 11 | 13 | 16 | 20 | 23 | 23 | 24 | 22 | 19 | 19 | 21 | 21 | 19 | 20 | 19 | 18.3 | 24.2 |
| 30-Jan-08 | 18 | 18 | 19 | 20 | A | 21 | 23 | 23 | 19 | 22 | 23 | 22 | 23 | 24 | 23 | 21 | 20 | 15 | 15 | 16 | 15 | 18 | 18 | 17 | 19.7 | 23.7 |
| 31-Jan-08 | 6 | 9 | 10 | 10 | A | 14 | 12 | 17 | 14 | 10 | 13 | 18 | 20 | 21 | 21 | 21 | 21 | 20 | 20 | 21 | 20 | 18 | 17 | 17 | 16.1 | 21.5 |
| Hourly Avg | 25.8 | 25.9 | 26.9 | 26.7 | N | 27.3 | 26.5 | 26.4 | 25.6 | 26.4 | 27.6 | 28.7 | 29.3 | 28.8 | 29.2 | 29.3 | 28.0 | 26.1 | 26.2 | 26.8 | 26.4 | 26.5 | 25.8 | 25.6 | | |
| Hourly Max | 42.4 | 42.5 | 43.1 | 43.4 | 0.0 | 43.9 | 43.4 | 42.8 | 43.1 | 43.3 | 43.5 | 42.7 | 43.4 | 42.9 | 42.1 | 42.4 | 43.9 | 43.9 | 42.4 | 42.9 | 43.4 | 43.3 | 42.9 | 42.4 | | |

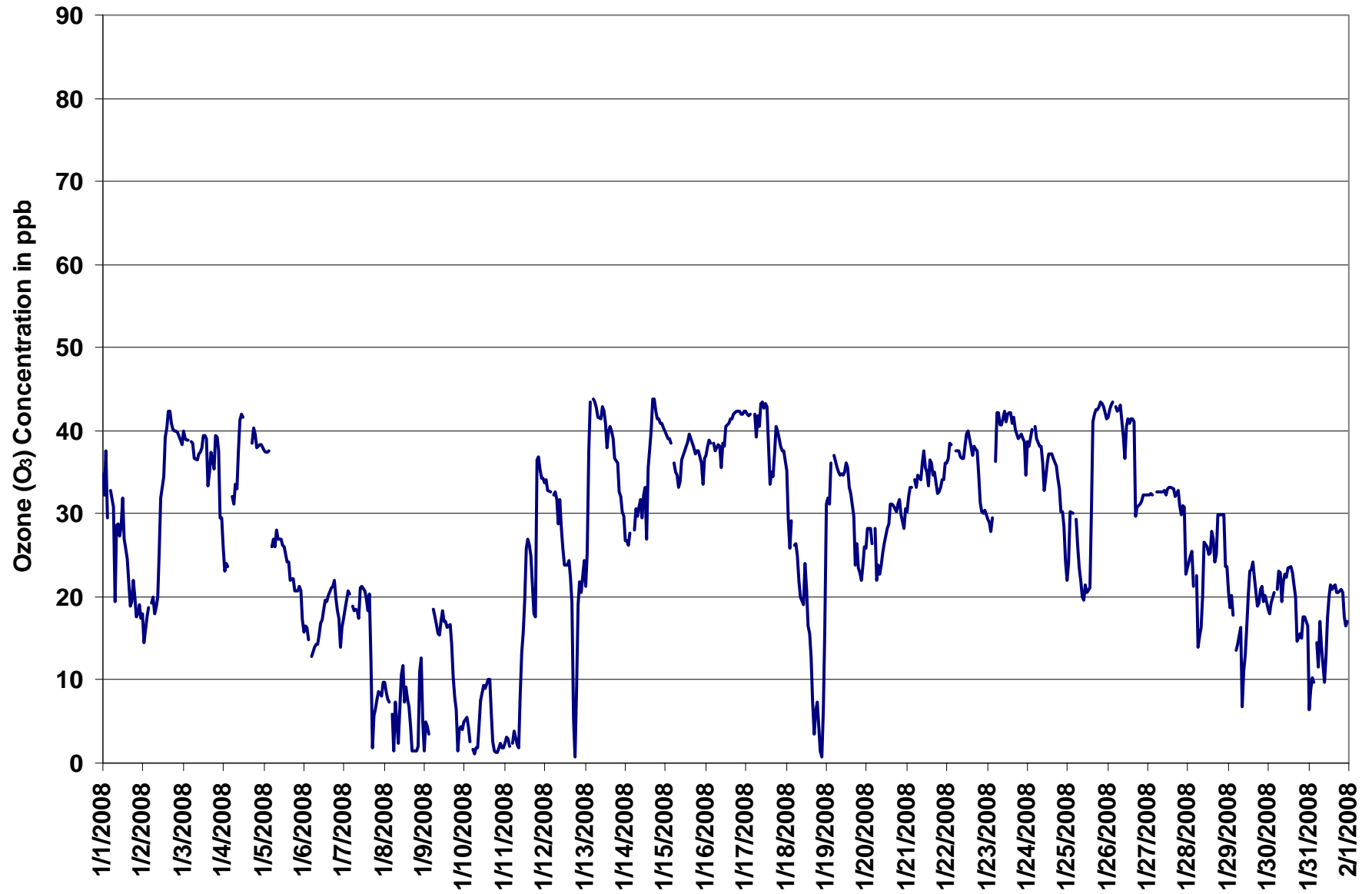
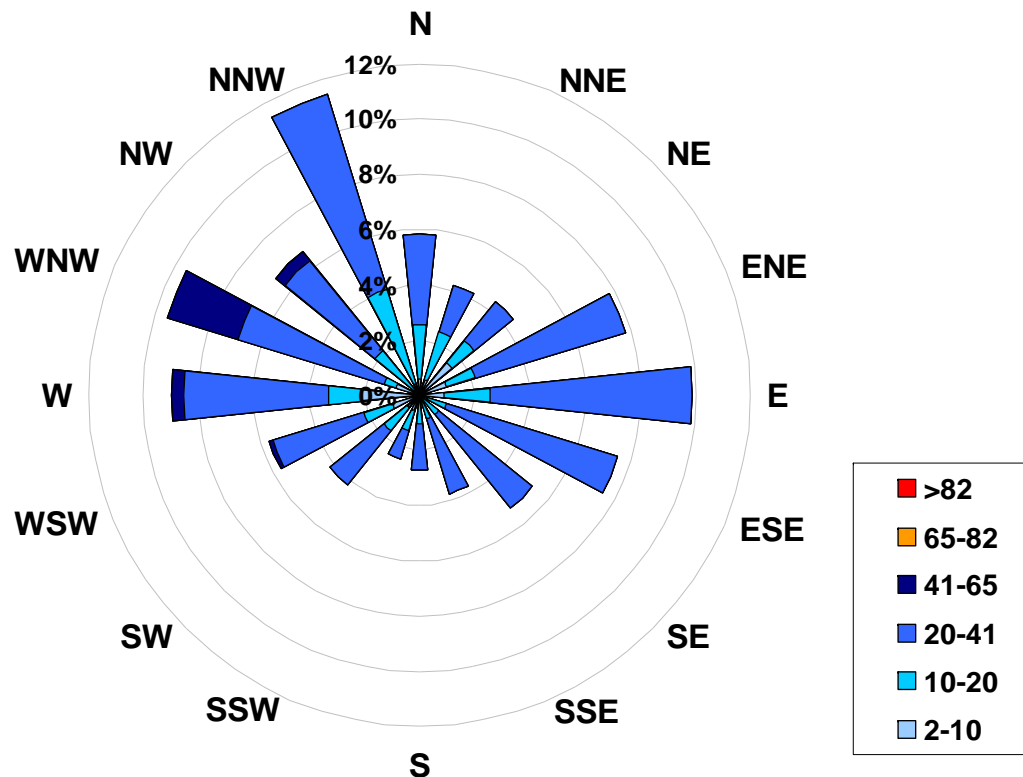


Figure 41. PASZA - Beaverlodge Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Ozone (in ppb) Located at the Beaverlodge Site for January 2008



Calms: 0%

| Frequency Distribution of O ₃ in ppb | | | |
|---|-------|-----------------|-----|
| Range | | Frequency (hrs) | |
| 2.0 | < 10 | 109 | |
| 10 | to 20 | 140 | |
| 20 | to 41 | 435 | |
| 41 | to 65 | 25 | |
| 65 | to 82 | 0 | |
| | > 82 | 0 | |
| Total Non-Zero Values | | | 709 |

PASZA - Beaverlodge Ozone Eight Hour Average Summary

Station: Beaverlodge
 Station Owner: PASZA

EIGHT HOUR RUNNING AVERAGE TABLE

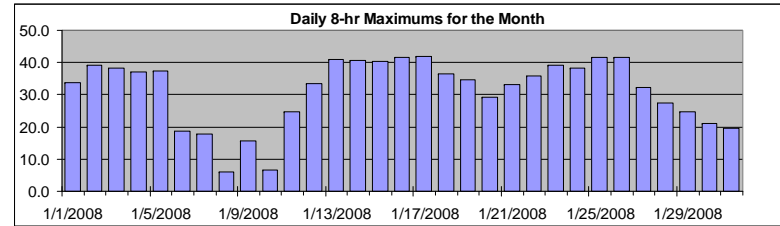
Ozone (O₃)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | |
|-----------------------------|----------|--------|-----------|
| Number of 8-hr Exceedances: | 0 | | |
| Maximum 8-hr Average: | 41.7 ppb | 17-Jan | 1:00 2:00 |

| | | | | | | | |
|------------|------|------|------|------|------|-----|-----|
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 |
| | 41.4 | 39.6 | 34.5 | 26.1 | 16.1 | 3.3 | 1.7 |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|----------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 |
| 1-Jan-08 | 33 | 34 | 33 | 32 | 31 | 31 | 29 | 26 | 25 | 23 | 22 | 22 | 23 | 22 | 22 | 23 | 22 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 33.8 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Jan-08 | 15 | 14 | 14 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 16 | 18 | 20 | 23 | 26 | 30 | 33 | 36 | 37 | 38 | 39 | 39 | 39 | 39.2 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3-Jan-08 | 38 | 38 | 38 | 38 | 38 | 38 | 37 | 37 | 36 | 36 | 36 | 36 | 36 | 35 | 35 | 34 | 34 | 33 | 32 | 32 | 31 | 31 | 30 | 30 | 38.2 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4-Jan-08 | 29 | 28 | 28 | 26 | 25 | 24 | 24 | 24 | 24 | 26 | 28 | 30 | 31 | 32 | N | N | N | N | N | N | N | N | N | 37.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5-Jan-08 | 37 | 37 | 37 | 37 | 37 | 35 | 33 | 32 | 30 | 29 | 27 | 25 | 25 | 25 | 25 | 24 | 23 | 23 | 22 | 21 | 20 | 20 | 18 | 37.5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6-Jan-08 | 17 | 17 | 16 | 16 | 15 | 14 | 13 | 14 | 14 | 14 | 14 | 14 | 15 | 16 | 16 | 17 | 17 | 18 | 18 | 19 | 19 | 18 | 18 | 17 | 18.5 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7-Jan-08 | 17 | 16 | 17 | 17 | 17 | 17 | 17 | 18 | 18 | 17 | 16 | 16 | 17 | 16 | 16 | 16 | 15 | 13 | 12 | 10 | 8 | 6 | 5 | 4 | 17.6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8-Jan-08 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 3 | 3 | 4 | 4 | 5 | 6 | 6 | 6 | 6 | 5 | 4 | 3 | 3 | 3 | 2 | 6.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9-Jan-08 | 2 | 2 | 3 | 3 | 3 | 3 | 5 | 6 | 8 | 10 | 11 | 13 | 15 | 15 | 16 | 16 | 15 | 15 | 15 | 13 | 11 | 10 | 8 | 6 | 4 | 15.6 | | | | | | | | | | | | | | | | | | | | | | | |
| 10-Jan-08 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 5 | 5 | 6 | 7 | 6 | 6 | 5 | 4 | 3 | 2 | 2 | 6.6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 11-Jan-08 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 5 | 7 | 9 | 12 | 15 | 17 | 18 | 18 | 19 | 21 | 23 | 24 | 25 | 24.8 | | | | | | | | | | | | | | | | | | | | | | | | |
| 12-Jan-08 | 26 | 30 | 32 | 33 | 33 | 33 | 32 | 31 | 30 | 29 | 28 | 26 | 25 | 23 | 22 | 20 | 18 | 15 | 12 | 9 | 7 | 8 | 7 | 7 | 33.3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 13-Jan-08 | 8 | 11 | 14 | 19 | 21 | 25 | 29 | 33 | 37 | 39 | 41 | 41 | 40 | 39 | 39 | 39 | 38 | 38 | 38 | 37 | 36 | 35 | 34 | 32 | 40.9 | | | | | | | | | | | | | | | | | | | | | | | | |
| 14-Jan-08 | 30 | 29 | 27 | 26 | 26 | 26 | 26 | 26 | 27 | 28 | 27 | 28 | 28 | 28 | 27 | 29 | 30 | 32 | 34 | 35 | 37 | 39 | 40 | 41 | 40.7 | | | | | | | | | | | | | | | | | | | | | | | | |
| 15-Jan-08 | 40 | 40 | 39 | 39 | 39 | 38 | 37 | 36 | 35 | 34 | 33 | 33 | 34 | 34 | 35 | 36 | 37 | 37 | 37 | 36 | 36 | 35 | 34 | 34 | 40.3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 16-Jan-08 | 34 | 34 | 35 | 35 | 35 | 36 | 37 | 37 | 37 | 36 | 36 | 36 | 36 | 36 | 37 | 38 | 38 | 40 | 40 | 41 | 41 | 41 | 41 | 42 | 41.6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 17-Jan-08 | 42 | 42 | 42 | 42 | 41 | 41 | 40 | 40 | 40 | 39 | 40 | 40 | 40 | 40 | 39 | 38 | 37 | 36 | 36 | 36 | 35 | 35 | 36 | 36 | 41.7 | | | | | | | | | | | | | | | | | | | | | | | | |
| 18-Jan-08 | 37 | 35 | 33 | 32 | 31 | 29 | 28 | 24 | 21 | 20 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 10 | 8 | 6 | 4 | 3 | 3 | 36.6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19-Jan-08 | 5 | 9 | 12 | 15 | 17 | 22 | 27 | 31 | 32 | 33 | 34 | 34 | 35 | 34 | 34 | 33 | 32 | 31 | 30 | 28 | 26 | 25 | 24 | 23 | 34.6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 20-Jan-08 | 23 | 23 | 23 | 24 | 24 | 24 | 23 | 23 | 23 | 22 | 22 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 29 | 29 | 29 | 29 | 28 | 29.4 | | | | | | | | | | | | | | | | | | | | | | | | |
| 21-Jan-08 | 28 | 28 | 29 | 29 | 29 | 29 | 30 | 31 | 31 | 32 | 32 | 32 | 32 | 32 | 33 | 33 | 33 | 33 | 32 | 32 | 32 | 32 | 32 | 32 | 33.1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 22-Jan-08 | 33 | 32 | 33 | 34 | 34 | 34 | 35 | 35 | 35 | 36 | 35 | 35 | 36 | 35 | 34 | 35 | 35 | 35 | 35 | 35 | 33 | 32 | 32 | 31 | 36.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 23-Jan-08 | 30 | 29 | 28 | 27 | 27 | 28 | 29 | 31 | 33 | 35 | 37 | 38 | 38 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 38 | 37 | 36 | 39.2 | | | | | | | | | | | | | | | | | | | | | | | | |
| 24-Jan-08 | 36 | 36 | 36 | 36 | 35 | 36 | 37 | 38 | 38 | 37 | 37 | 36 | 36 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 34 | 33 | 31 | 30 | 38.2 | | | | | | | | | | | | | | | | | | | | | | | | |
| 25-Jan-08 | 28 | 26 | 25 | 25 | 24 | 24 | 24 | 24 | 24 | 23 | 22 | 22 | 21 | 20 | 20 | 22 | 25 | 28 | 30 | 33 | 36 | 39 | 41 | 42 | 41.6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 26-Jan-08 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 40 | 39 | 39 | 39 | 39 | 39 | 38 | 37 | 36 | 35 | 34 | 33 | 32 | 30 | 41.4 | | | | | | | | | | | | | | | | | | | | | | | | |
| 27-Jan-08 | 31 | 31 | 31 | 31 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 31 | 31 | 31 | 30 | 28 | 32.3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 28-Jan-08 | 27 | 25 | 24 | 23 | 22 | 20 | 17 | 15 | 13 | 13 | 13 | 14 | 15 | 16 | 18 | 20 | 22 | 23 | 23 | 24 | 25 | 26 | 25 | 25 | 27.5 | | | | | | | | | | | | | | | | | | | | | | | | |
| 29-Jan-08 | 25 | 24 | 23 | 21 | 20 | 17 | 15 | 13 | 10 | 9 | 8 | 8 | 10 | 11 | 13 | 15 | 17 | 18 | 19 | 19 | 19 | 19 | 19 | 18 | 24.6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 30-Jan-08 | 17 | 17 | 17 | 18 | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 | 21 | 21 | 21 | 21 | 20 | 18 | 17 | 16 | 14 | 14 | 12 | 21.1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 31-Jan-08 | 11 | 10 | 10 | 9 | 9 | 8 | 7 | 7 | 7 | 7 | 7 | 9 | 10 | 12 | 13 | 15 | 17 | 18 | 19 | 20 | 20 | 19 | 18 | 17 | 19.6 | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Hourly Max | 41.7 | 41.7 | 41.6 | 41.5 | 41.5 | 41.1 | 41.0 | 41.1 | 41.3 | 40.6 | 40.7 | 40.9 | 40.3 | 39.8 | 39.3 | 39.0 | 39.2 | 39.5 | 40.1 | 40.7 | 41.1 | 41.3 | 41.4 | 41.6 |
|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|

PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

HOURLY AVERAGE TABLE

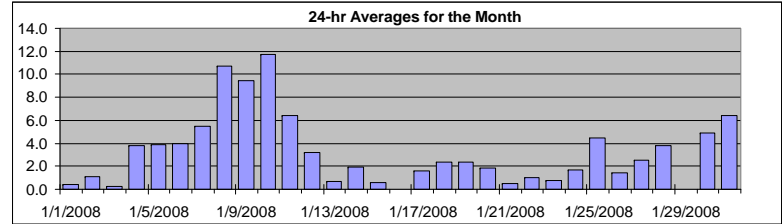
Particulate Matter (PM_{2.5})

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | |
|--------------------------------------|--|
| Number of 24-hr Exceedances (draft): | 0 |
| Maximum 1-hr Average: | 16.7 µg/m ³ 8-Jan 11:00 12:00 |
| Maximum 24-hr Value: | 11.8 µg/m ³ 10-Jan |

| | | | | | | | | | |
|-------------------|-------|-------------------------|---------|-----|-----|-----|-----|-------------------------|-----------------------|
| AIC Time: | 0 hrs | Operational Time: | 719 hrs | | | | | | |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 96.6% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average / Median | Geomean |
| | 14.4 | 11.9 | 5.2 | 2.1 | 0.0 | 0.0 | 0.0 | 3.4 2 µg/m ³ | 1.9 µg/m ³ |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum |
|------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|---------------|
| | Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | | |
| 1-Jan-08 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | D | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.4 | 2.5 |
| 2-Jan-08 | 1 | 2 | 3 | 2 | 2 | 1 | 0 | 0 | 1 | 1 | 3 | 4 | 1 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.1 | 4.3 |
| 3-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0.2 | 2.5 |
| 4-Jan-08 | 2 | 7 | 6 | 8 | 7 | 9 | 9 | 6 | 5 | 6 | 1 | 0 | D | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 5 | 2 | 0 | 3.8 | 9.2 | |
| 5-Jan-08 | 3 | 2 | 2 | 2 | 3 | 4 | 3 | 5 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 6 | 5 | 5 | 5 | 6 | 3.9 | 5.8 |
| 6-Jan-08 | 9 | 6 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 5 | 4 | 4 | 5 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 4.0 | 8.7 |
| 7-Jan-08 | 3 | 4 | 3 | 2 | 3 | 3 | 3 | 2 | 1 | 2 | 9 | 5 | 3 | 5 | 7 | 12 | 12 | 13 | 8 | 7 | 6 | 8 | 6 | 7 | 5.5 | 12.8 |
| 8-Jan-08 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 8 | 9 | 12 | 13 | 17 | 15 | 13 | 13 | 14 | 14 | 13 | 14 | 13 | 13 | 10 | 8 | 8 | 10.7 | 16.7 |
| 9-Jan-08 | 10 | 9 | 10 | 12 | 11 | 10 | 9 | 7 | 6 | 8 | 7 | 7 | 10 | 11 | 9 | 8 | 9 | 9 | 10 | 12 | 11 | 11 | 9 | 9 | 9.4 | 12.1 |
| 10-Jan-08 | 9 | 9 | 10 | 10 | 8 | 10 | 9 | 11 | 12 | 12 | 11 | 12 | 12 | 13 | 15 | 14 | 14 | 13 | 12 | 13 | 12 | 15 | 13 | 13 | 11.8 | 14.8 |
| 11-Jan-08 | 15 | 14 | 13 | 13 | 14 | 15 | 14 | 14 | 11 | 5 | 5 | 2 | 2 | 2 | 1 | 1 | 0 | 5 | 4 | 2 | 0 | 0 | 0 | 0 | 6.4 | 15.1 |
| 12-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | D | 0 | 0 | 0 | 0 | 2 | 6 | 7 | 6 | 8 | 6 | 6 | 8 | 9 | 7 | 6 | 2 | 3.2 | 8.8 |
| 13-Jan-08 | 6 | 2 | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 2 | 2 | 0.7 | 5.9 |
| 14-Jan-08 | 3 | 4 | 7 | 7 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | D | D | 0 | 1 | 0 | 1 | 7 | 0 | 1.9 | 7.4 |
| 15-Jan-08 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 3.2 |
| 16-Jan-08 | 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 |
| 17-Jan-08 | 0 | 0 | 4 | 5 | 3 | 2 | 1 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 12 | 5 | 0 | 0 | 0 | 0 | 1.6 | 11.5 | |
| 18-Jan-08 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 2 | 3 | 1 | 3 | 4 | 0 | 4 | 3 | 2 | 5 | 3 | 2 | 3 | 5 | 3 | 5 | 5 | 2.4 | 5.2 |
| 19-Jan-08 | 3 | 3 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 1 | 2 | 2 | 3 | 5 | 4 | 5 | 4 | 5 | 4 | 2.4 | 5.1 |
| 20-Jan-08 | 3 | 4 | 3 | 2 | 0 | 0 | 3 | 0 | 0 | 1 | 2 | 4 | 3 | 1 | 4 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1.8 | 8.4 |
| 21-Jan-08 | 3 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0.5 | 2.9 |
| 22-Jan-08 | 2 | 3 | 4 | 3 | 3 | 1 | 2 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1.0 | 3.8 |
| 23-Jan-08 | D | 0 | 0 | 2 | 0 | 1 | 0 | D | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 4 | 0 | 0 | 0 | 1 | 3 | 0.7 | 3.7 |
| 24-Jan-08 | 0 | 0 | 3 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 4 | 3 | 3 | 4 | 1.7 | 3.7 |
| 25-Jan-08 | 4 | 6 | 5 | 8 | 5 | 3 | 3 | 5 | 6 | 11 | 12 | 12 | 9 | 12 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.5 | 12.5 |
| 26-Jan-08 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 4 | 7 | 4 | 4 | 2 | 4 | 3 | 1.5 | 7.2 |
| 27-Jan-08 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 4 | 2 | 0 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 5 | 3 | 2 | 2 | 2.5 | 4.7 |
| 28-Jan-08 | 1 | D | 1 | 0 | 7 | 1 | D | 2 | 5 | 3 | 11 | 11 | 6 | 3 | 5 | 3 | 1 | 2 | 2 | 3 | 6 | 6 | 2 | P | 3.8 | 11.0 |
| 29-Jan-08 | N | N | N | N | N | N | N | N | N | N | N | N | N | N | 2 | 4 | 6 | 7 | 3 | 9 | 6 | 5 | 7 | 5 | N | 9.1 |
| 30-Jan-08 | 4 | 8 | 6 | 5 | 4 | 3 | 1 | 1 | 2 | 4 | 6 | 7 | 5 | 5 | 6 | 6 | 5 | 7 | 6 | 6 | 6 | 5 | 4 | 3 | 4.9 | 7.7 |
| 31-Jan-08 | 2 | 6 | 9 | 9 | 7 | 9 | 8 | 7 | 8 | 9 | 8 | 7 | 7 | 8 | 4 | 5 | 5 | 4 | 6 | 5 | 5 | 5 | 6 | 6 | 6.4 | 9.3 |
| Hourly Avg | 3.2 | 3.6 | 3.7 | 3.6 | 3.3 | 3.0 | 2.9 | 2.7 | 2.8 | 2.9 | 4.0 | 3.7 | 3.1 | 3.6 | 3.2 | 3.6 | 3.5 | 4.2 | 3.3 | 3.4 | 3.5 | 3.4 | 3.4 | 3.2 | | |
| Hourly Max | 15.1 | 14.5 | 13.4 | 12.6 | 13.8 | 14.9 | 14.4 | 14.1 | 11.9 | 11.8 | 13.5 | 16.7 | 14.5 | 13.4 | 14.6 | 14.4 | 13.7 | 13.5 | 14.0 | 13.4 | 13.2 | 14.8 | 13.2 | 13.2 | | |

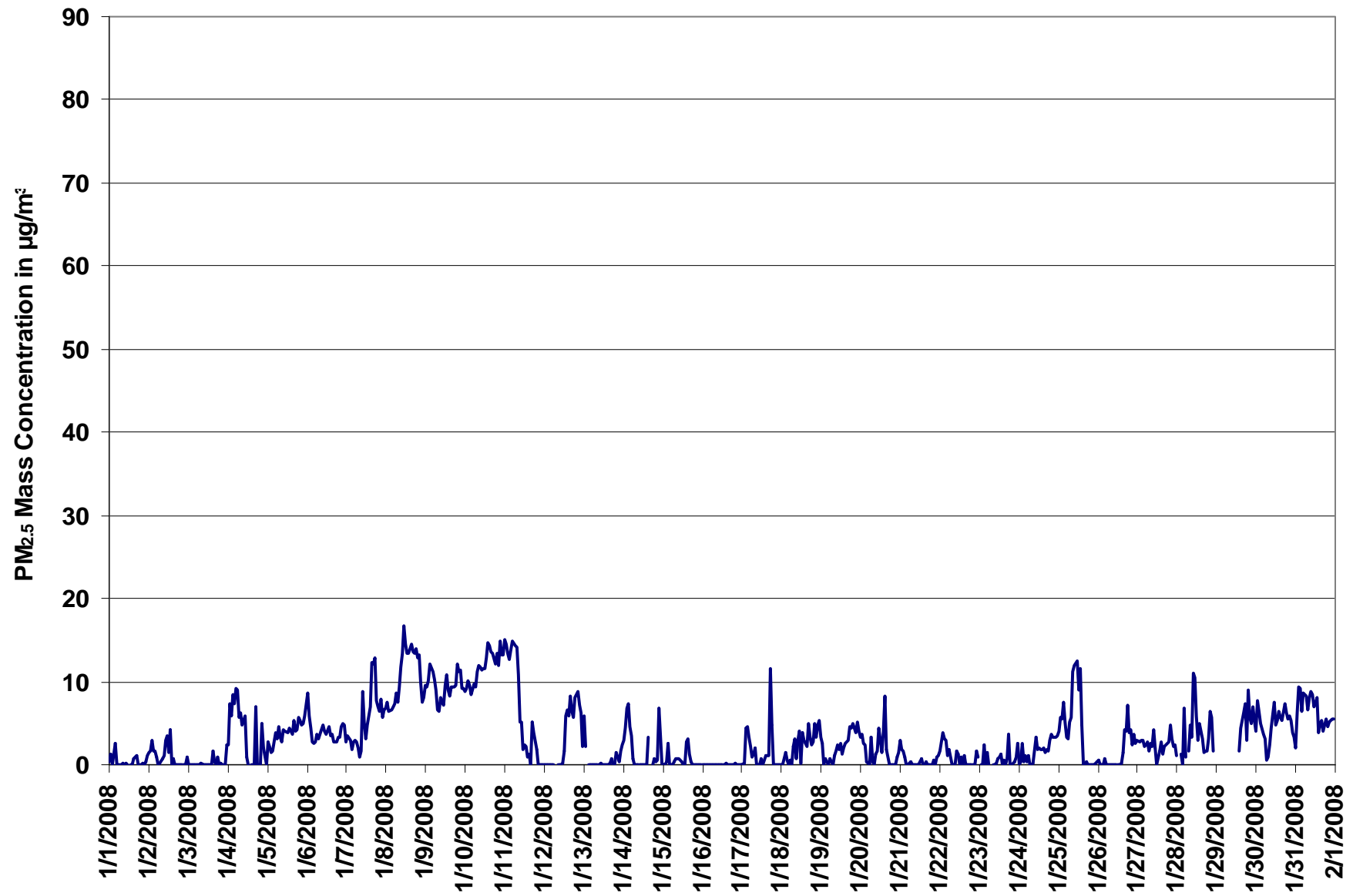


Figure 42. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) 1-hr Average Monthly Trend

Station: Beaverlodge
 Station Owner: PASZA

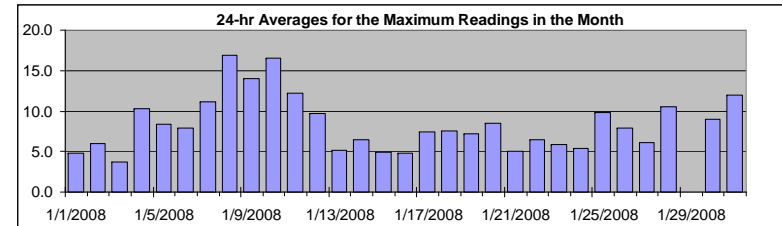
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Particulate Matter (PM_{2.5})

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|-------------------|--------|-------------|
| Maximum 1-hr Average: | 41.2 | µg/m ³ | 28-Jan | 10:00 11:00 |
| Maximum 24-hr Value: | 16.9 | µg/m ³ | 8-Jan | |



| | | | | | | | | | |
|-------------------|-------|-------------------------|---------|-----|-----|-----|-----|-------------------------|-----------------------|
| AIC Time: | 0 hrs | Operational Time: | 729 hrs | | | | | | |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 98.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average / Median | Geomean |
| | 22.2 | 17.9 | 11.4 | 7.1 | 4.5 | 2.3 | 0.9 | 8.4 7 µg/m ³ | 7.8 µg/m ³ |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 6 | 6 | 9 | 8 | 8 | 4 | 5 | 4 | 3 | 3 | 4 | 3 | 2 | 4 | 3 | 6 | 6 | 8 | 6 | 3 | 3 | 3 | 4 | 6 | 4.8 | 8.7 |
| 2-Jan-08 | 6 | 7 | 8 | 7 | 6 | 6 | 4 | 4 | 5 | 6 | 9 | 13 | 7 | 15 | 2 | 24 | 4 | 2 | 2 | 2 | 0 | 2 | 2 | 4 | 6.0 | 24.4 |
| 3-Jan-08 | 3 | 2 | 7 | 4 | 2 | 4 | 4 | 4 | 5 | 3 | 1 | 1 | 0 | 3 | 2 | 5 | 6 | 4 | 5 | 4 | 4 | 4 | 4 | 8 | 3.7 | 7.9 |
| 4-Jan-08 | 7 | 14 | 10 | 14 | 12 | 14 | 17 | 12 | 11 | 9 | 17 | 11 | 5 | 6 | 1 | 11 | 15 | 19 | 8 | 3 | 8 | 12 | 9 | 4 | 10.3 | 18.9 |
| 5-Jan-08 | 7 | 7 | 8 | 7 | 7 | 7 | 8 | 10 | 9 | 8 | 9 | 9 | 8 | 8 | 8 | 9 | 9 | 8 | 7 | 9 | 10 | 10 | 9 | 9 | 8.4 | 10.3 |
| 6-Jan-08 | 12 | 12 | 8 | 7 | 7 | 6 | 8 | 7 | 8 | 10 | 9 | 8 | 8 | 7 | 6 | 7 | 6 | 5 | 6 | 8 | 7 | 11 | 9 | 8 | 7.9 | 12.2 |
| 7-Jan-08 | 9 | 8 | 8 | 6 | 9 | 8 | 6 | 6 | 5 | 11 | 15 | 12 | 6 | 9 | 16 | 19 | 20 | 18 | 15 | 15 | 12 | 14 | 11 | 12 | 11.2 | 19.6 |
| 8-Jan-08 | 13 | 13 | 13 | 14 | 13 | 17 | 14 | 16 | 17 | 16 | 21 | 29 | 21 | 20 | 19 | 19 | 18 | 18 | 18 | 17 | 17 | 16 | 14 | 12 | 16.9 | 29.4 |
| 9-Jan-08 | 13 | 13 | 14 | 17 | 15 | 13 | 13 | 11 | 10 | 11 | 11 | 12 | 14 | 16 | 12 | 13 | 15 | 13 | 16 | 22 | 16 | 17 | 13 | 15 | 14.1 | 22.2 |
| 10-Jan-08 | 12 | 17 | 16 | 17 | 15 | 15 | 15 | 16 | 15 | 16 | 16 | 17 | 16 | 17 | 20 | 19 | 16 | 17 | 15 | 18 | 15 | 20 | 17 | 17 | 16.5 | 20.5 |
| 11-Jan-08 | 19 | 20 | 17 | 17 | 19 | 21 | 23 | 20 | 17 | 11 | 12 | 12 | 6 | 7 | 5 | 9 | 4 | 19 | 9 | 13 | 6 | 0 | 7 | 2 | 12.2 | 22.8 |
| 12-Jan-08 | 1 | 3 | 3 | 2 | 4 | 7 | 3 | 12 | 5 | 8 | 16 | 13 | 9 | 17 | 16 | 14 | 15 | 12 | 11 | 11 | 16 | 12 | 12 | 9 | 9.7 | 17.2 |
| 13-Jan-08 | 16 | 16 | 4 | 5 | 4 | 4 | 4 | 6 | 5 | 1 | 4 | 5 | 4 | 0 | 1 | 0 | 5 | 4 | 3 | 4 | 5 | 5 | 7 | 8 | 5.2 | 16.5 |
| 14-Jan-08 | 7 | 9 | 11 | 12 | 8 | 7 | 4 | 4 | 3 | 3 | 4 | 3 | 2 | 2 | 11 | 10 | 7 | 6 | 4 | 5 | 7 | 7 | 14 | 6 | 6.4 | 14.1 |
| 15-Jan-08 | 6 | 4 | 6 | 9 | 3 | 4 | 3 | 7 | 5 | 6 | 5 | 4 | 3 | 5 | 6 | 7 | 5 | 4 | 4 | 6 | 5 | 3 | 5 | 4 | 4.9 | 9.0 |
| 16-Jan-08 | 4 | 5 | 3 | 2 | 2 | 2 | 2 | 4 | 4 | 7 | 4 | 7 | 5 | 5 | 5 | 3 | 5 | 6 | 6 | 8 | 10 | 6 | 5 | 7 | 4.8 | 9.6 |
| 17-Jan-08 | 7 | 6 | 14 | 9 | 9 | 5 | 4 | 6 | 7 | 6 | 6 | 5 | 7 | 2 | 6 | 6 | 5 | 27 | 22 | 2 | 5 | 5 | 6 | 3 | 7.5 | 27.5 |
| 18-Jan-08 | 5 | 4 | 8 | 7 | 3 | 5 | 4 | 8 | 9 | 7 | 9 | 11 | 8 | 15 | 9 | 8 | 10 | 7 | 5 | 6 | 9 | 6 | 9 | 9 | 7.5 | 15.0 |
| 19-Jan-08 | 6 | 6 | 6 | 6 | 5 | 6 | 5 | 3 | 8 | 6 | 7 | 6 | 7 | 5 | 6 | 6 | 8 | 9 | 9 | 12 | 9 | 9 | 11 | 12 | 7.2 | 12.4 |
| 20-Jan-08 | 8 | 9 | 9 | 9 | 8 | 7 | 16 | 6 | 6 | 7 | 9 | 20 | 12 | 7 | 12 | 15 | 8 | 4 | 4 | 4 | 4 | 5 | 6 | 7 | 8.5 | 20.2 |
| 21-Jan-08 | 9 | 7 | 7 | 5 | 5 | 4 | 5 | 3 | 2 | 3 | 3 | 3 | 6 | 4 | 2 | 4 | 3 | 3 | 6 | 6 | 7 | 5 | 6 | 14 | 5.1 | 13.7 |
| 22-Jan-08 | 9 | 7 | 10 | 9 | 9 | 9 | 9 | 5 | 4 | 4 | 11 | 9 | 6 | 6 | 1 | 3 | 1 | 3 | 2 | 4 | 2 | 4 | 11 | 15 | 6.4 | 14.9 |
| 23-Jan-08 | 8 | 11 | 5 | 11 | 13 | 8 | 6 | 4 | 2 | 6 | 5 | 5 | 4 | 5 | 2 | 4 | 2 | 6 | 7 | 3 | 4 | 8 | 6 | 8 | 5.9 | 13.4 |
| 24-Jan-08 | 4 | 5 | 10 | 5 | 5 | 5 | 6 | 3 | 3 | 4 | 8 | 5 | 5 | 4 | 4 | 6 | 5 | 5 | 6 | 7 | 6 | 6 | 7 | 5.3 | 9.8 | |
| 25-Jan-08 | 9 | 10 | 9 | 12 | 10 | 9 | 8 | 10 | 11 | 16 | 18 | 18 | 18 | 18 | 14 | 11 | 2 | 8 | 5 | 4 | 4 | 4 | 2 | 5 | 9.9 | 18.3 |
| 26-Jan-08 | 6 | 3 | 3 | 5 | 8 | 2 | 4 | 5 | 4 | 4 | 3 | 5 | 3 | 4 | 6 | 3 | 15 | 21 | 37 | 11 | 10 | 10 | 10 | 9 | 7.8 | 37.3 |
| 27-Jan-08 | 10 | 8 | 11 | 11 | 9 | 4 | 4 | 4 | 5 | 4 | 6 | 5 | 1 | 10 | 7 | 3 | 3 | 4 | 6 | 4 | 7 | 5 | 4 | 11 | 6.1 | 11.3 |
| 28-Jan-08 | 7 | 0 | 7 | 4 | 30 | 18 | 3 | 9 | 15 | 10 | 41 | 15 | 12 | 8 | 10 | 9 | 6 | 4 | 4 | 6 | 9 | 13 | 3 | P | 10.5 | 41.2 |
| 29-Jan-08 | N | N | N | N | N | N | N | N | N | N | N | N | N | N | 4 | 9 | 11 | 12 | 7 | 13 | 7 | 8 | 13 | 16 | N | 15.9 |
| 30-Jan-08 | 6 | 18 | 10 | 6 | 6 | 4 | 2 | 4 | 5 | 10 | 11 | 12 | 8 | 9 | 12 | 11 | 10 | 13 | 11 | 10 | 12 | 10 | 6 | 9 | 9.0 | 17.9 |
| 31-Jan-08 | 5 | 12 | 16 | 16 | 12 | 17 | 18 | 16 | 15 | 14 | 14 | 16 | 13 | 14 | 7 | 9 | 11 | 6 | 9 | 7 | 10 | 10 | 10 | 10 | 12.0 | 17.8 |
| Hourly Avg | 8.1 | 8.8 | 9.0 | 8.8 | 8.8 | 8.1 | 7.5 | 7.6 | 7.4 | 7.6 | 10.3 | 9.8 | 7.5 | 8.4 | 7.6 | 9.1 | 8.1 | 9.5 | 8.8 | 8.0 | 7.9 | 8.1 | 8.1 | 8.8 | | |
| Hourly Max | 18.5 | 20.1 | 17.5 | 17.5 | 29.9 | 21.2 | 22.8 | 19.9 | 17.4 | 16.5 | 41.2 | 29.4 | 21.1 | 20.5 | 20.5 | 24.4 | 19.6 | 27.5 | 37.3 | 22.2 | 16.7 | 20.3 | 16.9 | 17.5 | | |

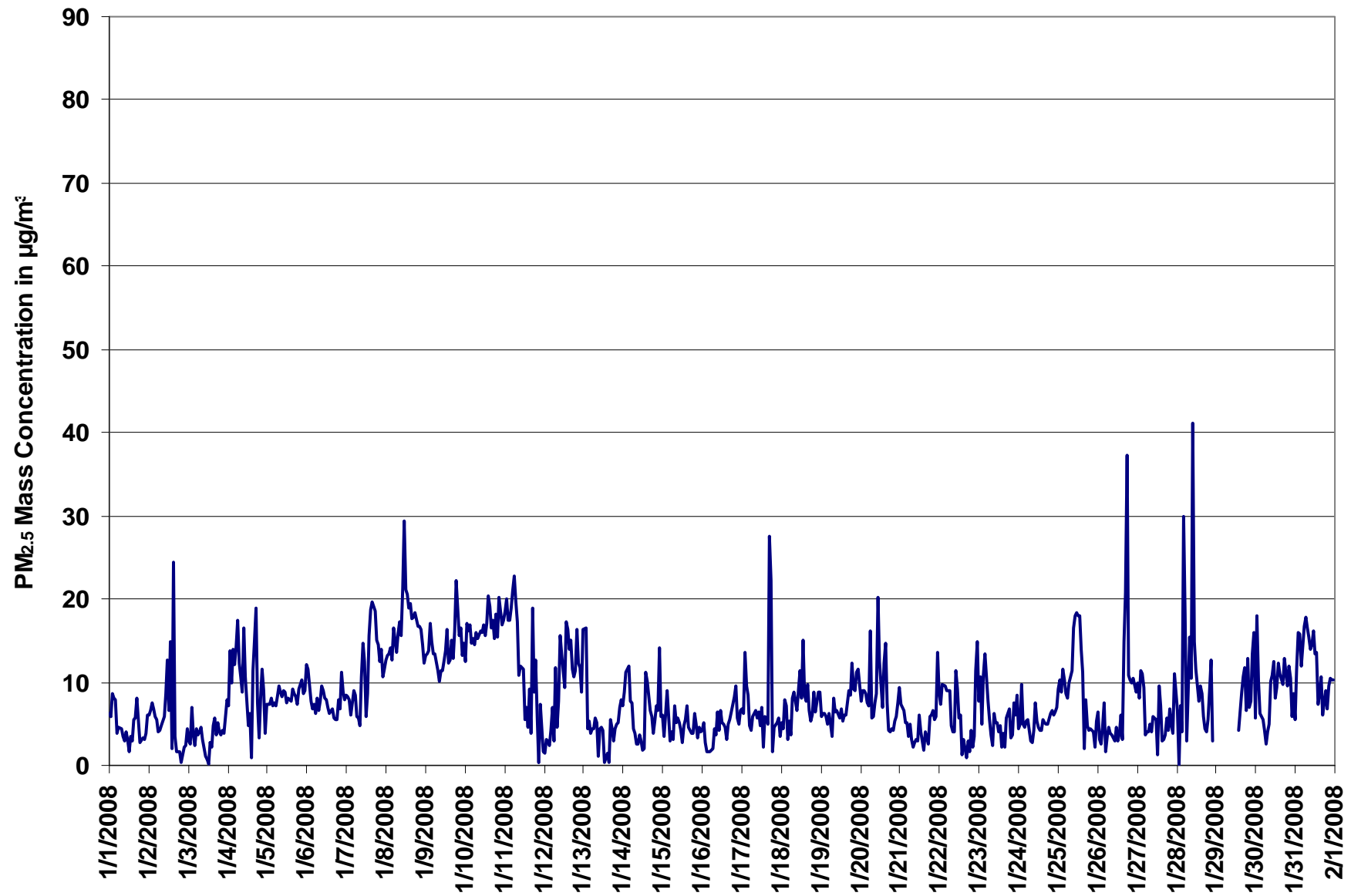
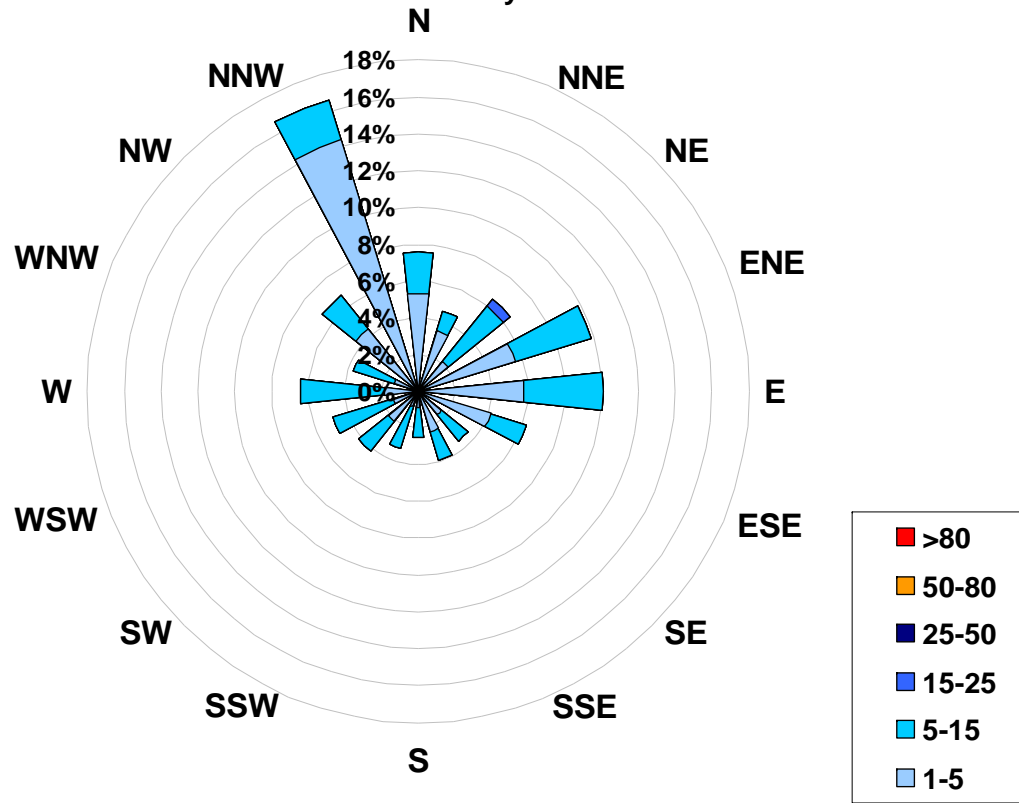


Figure 43. PASZA - Beaverlodge Particulate Matter (less than 2.5 microns) Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Particulate Matter (less than 2.5 microns) (in micrograms per cubic meter) Located at the Beaverlodge Site for January 2008



Calms: 0%

| Frequency Distribution of PM _{2.5} in µg/m ³ | | | |
|--|----|----|-----------------|
| Range | | | Frequency (hrs) |
| 1.0 | < | 5 | 531 |
| 5 | to | 15 | 186 |
| 15 | to | 25 | 2 |
| 25 | to | 50 | 0 |
| 50 | to | 80 | 0 |
| | > | 80 | 0 |
| Total Non-Zero Values | | | 719 |

PASZA - Beaverlodge Relative Humidity Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

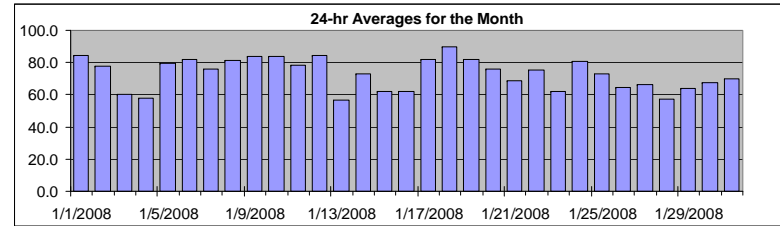
HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | |
|-----------------------|--------|--------|------------|
| Maximum 1-hr Average: | 95.9 % | 17-Jan | 9:00 10:00 |
| Maximum 24-hr Value: | 89.5 % | 18-Jan | |



| | | | | | | | | | |
|-------------------|-------|-------------------------|---------|------|------|------|------|---------|--------|
| AIC Time: | 0 hrs | Operational Time: | 744 hrs | | | | | | |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 93.3 | 89.6 | 84.4 | 74.1 | 64.2 | 49.0 | 40.2 | 72.9 % | 74.1 % |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|---------------|------|
| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | | |
| 1-Jan-08 | 85 | 87 | 85 | 88 | 89 | 87 | 86 | 86 | 86 | 83 | 80 | 80 | 73 | 77 | 79 | 82 | 84 | 84 | 86 | 87 | 87 | 89 | 89 | 89 | 84.4 | 89.2 |
| 2-Jan-08 | 87 | 88 | 87 | 88 | 86 | 87 | 87 | 87 | 87 | 88 | 83 | 87 | 85 | 70 | 72 | 61 | 62 | 66 | 70 | 70 | 70 | 66 | 68 | 71 | 78.0 | 88.0 |
| 3-Jan-08 | 66 | 66 | 64 | 63 | 61 | 64 | 68 | 68 | 69 | 66 | 62 | 54 | 52 | 53 | 52 | 53 | 52 | 52 | 55 | 55 | 58 | 59 | 65 | 70 | 60.3 | 69.7 |
| 4-Jan-08 | 76 | 76 | 78 | 79 | 68 | 61 | 67 | 71 | 70 | 63 | 58 | 46 | 45 | 42 | 46 | 48 | 44 | 49 | 48 | 50 | 49 | 50 | 58 | 53 | 58.1 | 79.0 |
| 5-Jan-08 | 53 | 54 | 57 | 61 | 73 | 78 | 79 | 83 | 88 | 89 | 90 | 89 | 86 | 84 | 83 | 85 | 86 | 85 | 83 | 84 | 85 | 85 | 86 | 86 | 79.6 | 90.0 |
| 6-Jan-08 | 87 | 87 | 88 | 87 | 86 | 85 | 85 | 86 | 87 | 88 | 85 | 82 | 74 | 70 | 69 | 70 | 75 | 80 | 83 | 80 | 80 | 82 | 84 | 85 | 81.8 | 87.9 |
| 7-Jan-08 | 84 | 85 | 84 | 84 | 84 | 85 | 85 | 84 | 84 | 83 | 74 | 66 | 58 | 43 | 46 | 55 | 72 | 80 | 78 | 78 | 82 | 83 | 83 | 84 | 76.1 | 85.2 |
| 8-Jan-08 | 83 | 84 | 84 | 84 | 84 | 83 | 84 | 84 | 83 | 82 | 72 | 72 | 72 | 78 | 78 | 78 | 80 | 82 | 82 | 84 | 85 | 87 | 86 | 85 | 81.6 | 87.4 |
| 9-Jan-08 | 86 | 87 | 84 | 84 | 84 | 84 | 84 | 84 | 83 | 83 | 83 | 82 | 82 | 83 | 83 | 82 | 82 | 83 | 83 | 83 | 83 | 84 | 84 | 83 | 83.5 | 87.4 |
| 10-Jan-08 | 83 | 83 | 82 | 83 | 82 | 82 | 84 | 85 | 85 | 84 | 83 | 83 | 81 | 79 | 78 | 79 | 84 | 86 | 86 | 86 | 86 | 87 | 86 | 88 | 83.6 | 87.7 |
| 11-Jan-08 | 86 | 87 | 86 | 87 | 87 | 86 | 85 | 85 | 87 | 88 | 84 | 73 | 67 | 57 | 54 | 74 | 73 | 82 | 81 | 73 | 70 | 75 | 78 | 75 | 78.4 | 87.9 |
| 12-Jan-08 | 80 | 81 | 87 | 88 | 88 | 90 | 88 | 91 | 94 | 90 | 80 | 78 | 73 | 74 | 78 | 83 | 85 | 87 | 87 | 88 | 89 | 88 | 85 | 80 | 84.6 | 93.6 |
| 13-Jan-08 | 86 | 78 | 63 | 50 | 45 | 42 | 43 | 45 | 46 | 46 | 46 | 49 | 54 | 56 | 56 | 51 | 56 | 56 | 58 | 60 | 64 | 69 | 69 | 72 | 56.7 | 86.3 |
| 14-Jan-08 | 72 | 72 | 73 | 73 | 79 | 81 | 85 | 87 | 87 | 87 | 87 | 81 | 76 | 77 | 76 | 87 | 72 | 55 | 50 | 51 | 53 | 55 | 65 | 74 | 73.1 | 87.4 |
| 15-Jan-08 | 76 | 76 | 73 | 73 | 77 | 73 | 66 | 64 | 68 | 61 | 54 | 49 | 47 | 45 | 45 | 46 | 51 | 55 | 58 | 63 | 64 | 68 | 69 | 71 | 62.2 | 76.7 |
| 16-Jan-08 | 71 | 67 | 66 | 67 | 67 | 67 | 69 | 72 | 69 | 72 | 66 | 63 | 55 | 54 | 55 | 55 | 57 | 57 | 56 | 56 | 56 | 57 | 56 | 55 | 61.9 | 71.7 |
| 17-Jan-08 | 55 | 56 | 58 | 67 | 83 | 94 | 95 | 95 | 96 | 96 | 93 | 84 | 85 | 83 | 81 | 89 | 88 | 88 | 85 | 79 | 80 | 81 | 78 | 78 | 82.0 | 95.9 |
| 18-Jan-08 | 86 | 91 | 94 | 93 | 91 | 91 | 91 | 90 | 90 | 89 | 88 | 86 | 84 | 84 | 83 | 85 | 89 | 91 | 92 | 92 | 92 | 92 | 92 | 92 | 89.5 | 93.8 |
| 19-Jan-08 | 93 | 92 | 88 | 89 | 87 | 86 | 86 | 86 | 84 | 80 | 72 | 70 | 69 | 67 | 66 | 68 | 79 | 86 | 87 | 86 | 87 | 87 | 84 | 84 | 82.0 | 93.5 |
| 20-Jan-08 | 83 | 83 | 83 | 81 | 81 | 81 | 80 | 80 | 80 | 78 | 73 | 63 | 58 | 60 | 62 | 67 | 70 | 76 | 79 | 78 | 80 | 81 | 81 | 78 | 75.7 | 83.3 |
| 21-Jan-08 | 79 | 76 | 76 | 76 | 76 | 72 | 74 | 76 | 75 | 73 | 71 | 56 | 41 | 52 | 52 | 49 | 58 | 65 | 65 | 72 | 77 | 77 | 81 | 75 | 68.5 | 80.6 |
| 22-Jan-08 | 68 | 69 | 61 | 62 | 68 | 71 | 73 | 78 | 82 | 80 | 78 | 76 | 62 | 57 | 62 | 70 | 76 | 85 | 85 | 85 | 89 | 92 | 93 | 90 | 75.5 | 93.1 |
| 23-Jan-08 | 87 | 90 | 91 | 92 | 82 | 74 | 62 | 59 | 63 | 62 | 50 | 37 | 38 | 37 | 37 | 46 | 45 | 56 | 60 | 60 | 61 | 63 | 69 | 72 | 62.2 | 92.2 |
| 24-Jan-08 | 63 | 63 | 68 | 70 | 74 | 78 | 83 | 83 | 83 | 82 | 80 | 79 | 78 | 79 | 82 | 85 | 86 | 86 | 86 | 87 | 87 | 89 | 91 | 89 | 80.5 | 90.9 |
| 25-Jan-08 | 87 | 89 | 89 | 88 | 91 | 92 | 91 | 89 | 87 | 87 | 87 | 80 | 70 | 71 | 70 | 55 | 50 | 50 | 54 | 55 | 55 | 55 | 54 | 54 | 73.0 | 92.0 |
| 26-Jan-08 | 56 | 56 | 57 | 57 | 60 | 61 | 66 | 66 | 64 | 69 | 66 | 60 | 56 | 52 | 43 | 49 | 68 | 75 | 76 | 78 | 78 | 78 | 76 | 73 | 64.2 | 78.4 |
| 27-Jan-08 | 72 | 73 | 73 | 71 | 70 | 69 | 68 | 66 | 66 | 65 | 61 | 58 | 59 | 59 | 60 | 60 | 63 | 68 | 65 | 67 | 67 | 68 | 68 | 68 | 66.0 | 73.0 |
| 28-Jan-08 | 68 | 67 | 67 | 66 | 66 | 66 | 66 | 66 | 64 | 64 | 56 | 45 | 40 | 27 | 26 | 28 | 40 | 61 | 63 | 62 | 64 | 67 | 67 | 67 | 57.3 | 68.0 |
| 29-Jan-08 | 66 | 65 | 64 | 64 | 64 | 63 | 63 | 63 | 64 | 64 | 64 | 63 | 54 | 54 | 57 | 59 | 63 | 65 | 68 | 67 | 67 | 68 | 68 | 69 | 63.6 | 69.2 |
| 30-Jan-08 | 71 | 69 | 68 | 67 | 68 | 68 | 67 | 67 | 68 | 64 | 63 | 63 | 62 | 63 | 63 | 65 | 67 | 72 | 70 | 67 | 69 | 73 | 72 | 73 | 67.5 | 73.1 |
| 31-Jan-08 | 75 | 75 | 74 | 73 | 73 | 73 | 73 | 74 | 74 | 74 | 72 | 67 | 63 | 52 | 58 | 65 | 67 | 71 | 71 | 70 | 69 | 71 | 73 | 73 | 70.0 | 74.6 |
| Hourly Avg | 76.5 | 76.5 | 75.8 | 76.0 | 76.6 | 76.6 | 76.9 | 77.4 | 77.8 | 76.8 | 73.0 | 68.4 | 64.5 | 62.5 | 62.9 | 65.5 | 68.5 | 72.0 | 72.5 | 72.7 | 73.7 | 75.0 | 76.2 | 76.1 | | |
| Hourly Max | 93.5 | 91.8 | 93.8 | 93.0 | 91.3 | 93.7 | 95.2 | 95.3 | 95.7 | 95.9 | 92.9 | 88.6 | 86.4 | 84.3 | 83.2 | 88.7 | 88.8 | 90.8 | 91.8 | 91.9 | 92.0 | 92.2 | 93.1 | 92.1 | | |

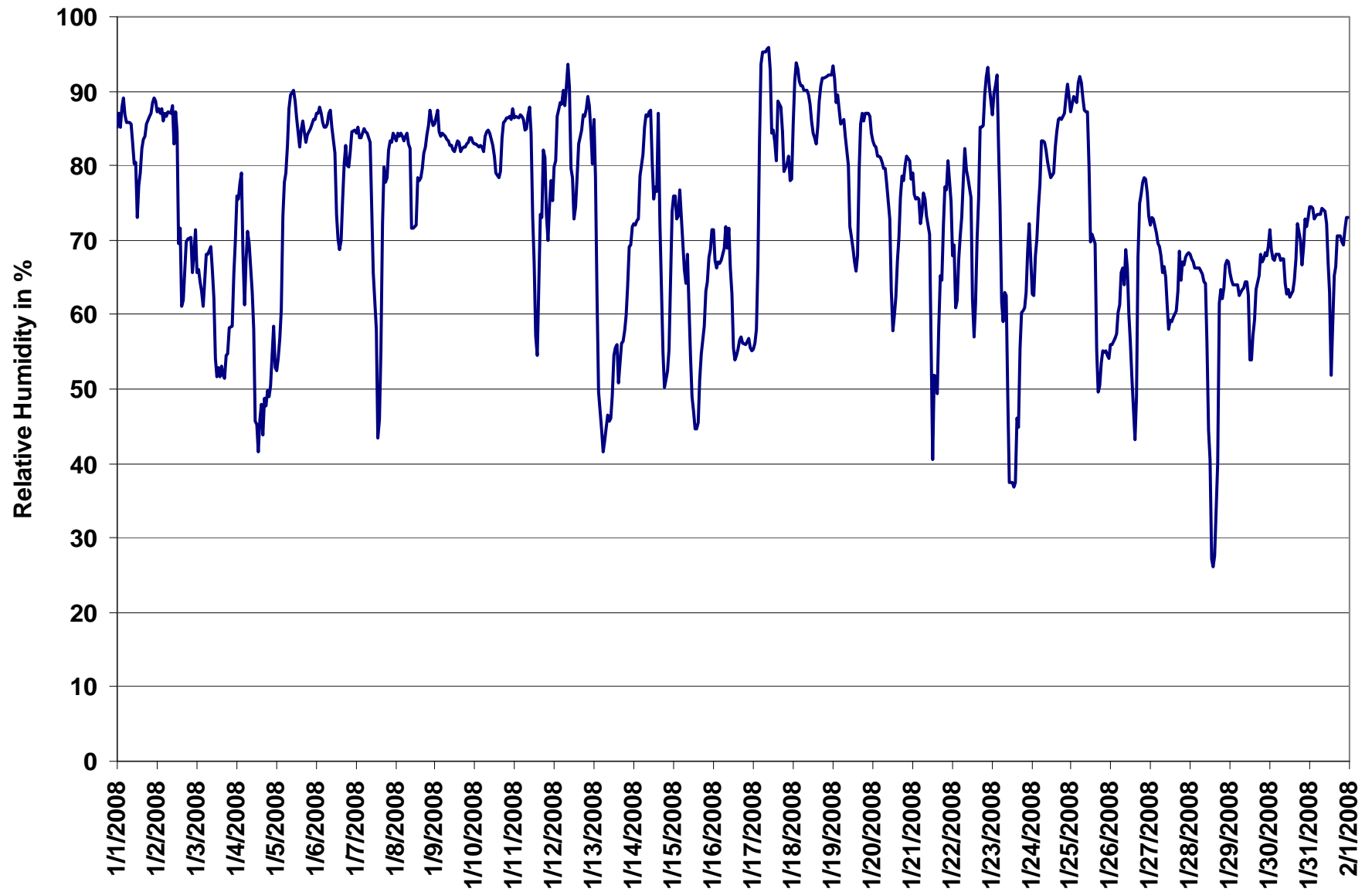


Figure 44. PASZA - Beaverlodge Relative Humidity 1-hr Average Monthly Trend

PASZA - Beaverlodge Temperature Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

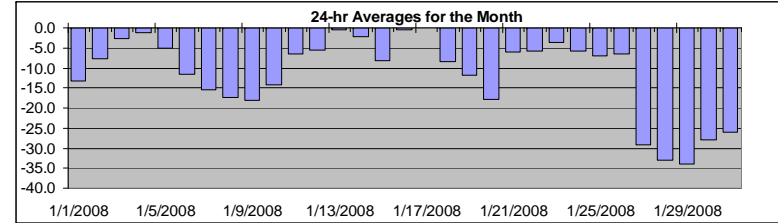
HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|-----|----|--------|-------------|
| Maximum 1-hr Average: | 4.1 | °C | 16-Jan | 19:00 20:00 |
| Maximum 24-hr Value: | 0.0 | °C | 17-Jan | |



| | | | | | | | | | |
|-------------------|-------|-------------------------|---------|------|-------|-------|-------|----------|---------|
| AIC Time: | 0 hrs | Operational Time: | 744 hrs | | | | | | |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 100.0% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 3.7 | 1.3 | -3.8 | -8.5 | -17.2 | -31.3 | -37.0 | -11.4 °C | -8.5 °C |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|-------|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | | | 0:00 |
| 1-Jan-08 | -13 | -12 | -16 | -16 | -14 | -13 | -15 | -16 | -13 | -14 | -14 | -14 | -11 | -13 | -12 | -13 | -13 | -12 | -12 | -12 | -12 | -13 | -14 | -14 | -13.3 | -11.3 | |
| 2-Jan-08 | -13 | -15 | -15 | -15 | -14 | -14 | -13 | -14 | -13 | -13 | -12 | -8 | -5 | -1 | 0 | 1 | 0 | -1 | -3 | -3 | -3 | -3 | -4 | -5 | -7.6 | 1.5 | |
| 3-Jan-08 | -4 | -4 | -4 | -4 | -4 | -4 | -5 | -5 | -5 | -4 | -3 | -2 | -1 | -1 | -1 | -1 | -1 | -1 | 0 | 0 | 0 | -2 | -3 | -2.5 | 0.1 | | |
| 4-Jan-08 | -4 | -5 | -5 | -6 | -3 | -2 | -3 | -4 | -3 | -2 | -1 | 3 | 2 | 2 | 0 | -1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | -1.2 | 2.5 | | |
| 5-Jan-08 | -1 | -1 | -1 | -1 | -3 | -4 | -5 | -6 | -7 | -7 | -6 | -6 | -5 | -5 | -5 | -5 | -6 | -6 | -6 | -6 | -7 | -7 | -7 | -7 | -5.1 | -0.6 | |
| 6-Jan-08 | -7 | -7 | -8 | -8 | -9 | -9 | -10 | -11 | -12 | -13 | -13 | -13 | -11 | -11 | -10 | -10 | -11 | -13 | -14 | -14 | -15 | -15 | -16 | -17 | -11.5 | -6.7 | |
| 7-Jan-08 | -17 | -17 | -17 | -17 | -18 | -18 | -18 | -18 | -18 | -18 | -16 | -13 | -11 | -7 | -8 | -10 | -14 | -17 | -16 | -15 | -16 | -16 | -16 | -17 | -15.3 | -7.1 | |
| 8-Jan-08 | -17 | -17 | -18 | -20 | -18 | -19 | -19 | -19 | -21 | -19 | -15 | -16 | -16 | -17 | -16 | -15 | -15 | -16 | -16 | -16 | -17 | -18 | -18 | -19 | -17.4 | -15.1 | |
| 9-Jan-08 | -19 | -19 | -19 | -19 | -18 | -18 | -18 | -18 | -19 | -19 | -19 | -17 | -18 | -16 | -16 | -18 | -18 | -19 | -19 | -19 | -18 | -18 | -17 | -17 | -17 | -18.0 | -16.2 |
| 10-Jan-08 | -18 | -18 | -18 | -19 | -18 | -19 | -17 | -16 | -15 | -15 | -15 | -13 | -12 | -11 | -11 | -10 | -11 | -11 | -12 | -11 | -11 | -12 | -12 | -13 | -14.1 | -10.3 | |
| 11-Jan-08 | -12 | -12 | -13 | -13 | -13 | -13 | -13 | -12 | -12 | -10 | -9 | -5 | -3 | 0 | 2 | -3 | -3 | -5 | -5 | -2 | 1 | -1 | -2 | -1 | -6.5 | 2.1 | |
| 12-Jan-08 | -2 | -2 | -4 | -4 | -4 | -4 | -4 | -8 | -6 | -5 | -5 | -6 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -8 | -7 | -6 | -5 | -5.7 | -2.0 | |
| 13-Jan-08 | -7 | -4 | -2 | 0 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 0 | 0 | 2 | 0 | 0 | -1 | -2 | -3 | -3 | -4 | -0.4 | 2.1 | |
| 14-Jan-08 | -4 | -3 | -3 | -3 | -3 | -3 | -2 | -2 | -1 | -1 | -1 | 0 | 1 | 1 | 1 | 0 | -2 | -2 | -2 | -3 | -4 | -4 | -5 | -6 | -2.1 | 1.5 | |
| 15-Jan-08 | -7 | -8 | -7 | -8 | -9 | -10 | -10 | -11 | -12 | -10 | -9 | -7 | -6 | -5 | -5 | -5 | -6 | -8 | -9 | -10 | -9 | -9 | -9 | -9 | -8.2 | -4.6 | |
| 16-Jan-08 | -9 | -7 | -6 | -5 | -5 | -4 | -4 | -5 | -4 | -5 | -2 | 0 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | -0.5 | 4.1 | |
| 17-Jan-08 | 4 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | -1 | -1 | -2 | -2 | -3 | -4 | 0.0 | 3.6 | | |
| 18-Jan-08 | -7 | -10 | -10 | -9 | -10 | -10 | -11 | -11 | -11 | -12 | -11 | -9 | -8 | -9 | -8 | -7 | -8 | -7 | -6 | -6 | -5 | -6 | -6 | -5 | -8.3 | -5.1 | |
| 19-Jan-08 | -5 | -4 | -5 | -6 | -6 | -7 | -9 | -9 | -10 | -11 | -11 | -11 | -11 | -11 | -11 | -12 | -16 | -17 | -18 | -17 | -19 | -19 | -20 | -20 | -11.9 | -4.4 | |
| 20-Jan-08 | -19 | -20 | -21 | -22 | -22 | -23 | -25 | -24 | -24 | -23 | -20 | -18 | -16 | -15 | -14 | -14 | -14 | -14 | -13 | -13 | -13 | -13 | -12 | -12 | -17.7 | -12.2 | |
| 21-Jan-08 | -13 | -11 | -11 | -10 | -9 | -8 | -7 | -8 | -8 | -7 | -7 | -3 | 2 | -1 | -1 | 0 | -2 | -3 | -3 | -6 | -7 | -7 | -8 | -8 | -6.1 | 1.7 | |
| 22-Jan-08 | -7 | -7 | -4 | -4 | -5 | -6 | -6 | -6 | -8 | -7 | -8 | -6 | -2 | 0 | -2 | -3 | -5 | -7 | -7 | -6 | -7 | -8 | -9 | -8 | -5.8 | -0.1 | |
| 23-Jan-08 | -8 | -10 | -11 | -10 | -8 | -7 | -5 | -5 | -5 | -5 | -2 | 2 | 2 | 3 | 4 | 1 | 1 | -1 | -2 | -3 | -4 | -4 | -6 | -6 | -3.7 | 3.7 | |
| 24-Jan-08 | -4 | -4 | -4 | -4 | -3 | -4 | -6 | -6 | -7 | -8 | -7 | -6 | -6 | -5 | -6 | -6 | -6 | -6 | -6 | -6 | -6 | -7 | -7 | -7 | -5.7 | -3.4 | |
| 25-Jan-08 | -7 | -7 | -8 | -8 | -9 | -11 | -13 | -13 | -14 | -13 | -12 | -8 | -8 | -9 | -8 | -3 | -2 | -2 | -2 | -3 | -2 | -2 | -2 | -2 | -7.0 | -1.6 | |
| 26-Jan-08 | -1 | -1 | -1 | -2 | -2 | -3 | -4 | -3 | -3 | -4 | -4 | -2 | -1 | 0 | 3 | 1 | -5 | -12 | -15 | -17 | -18 | -20 | -21 | -23 | -6.6 | 2.7 | |
| 27-Jan-08 | -24 | -25 | -26 | -26 | -27 | -28 | -28 | -29 | -29 | -30 | -30 | -30 | -29 | -29 | -29 | -30 | -30 | -30 | -30 | -31 | -32 | -33 | -33 | -34 | -29.2 | -23.9 | |
| 28-Jan-08 | -35 | -36 | -36 | -36 | -36 | -36 | -36 | -36 | -37 | -36 | -33 | -30 | -30 | -30 | -24 | -23 | -24 | -28 | -33 | -34 | -34 | -34 | -35 | -35 | -32.9 | -22.8 | |
| 29-Jan-08 | -36 | -37 | -38 | -37 | -38 | -38 | -38 | -38 | -38 | -37 | -36 | -35 | -32 | -31 | -31 | -31 | -32 | -31 | -32 | -31 | -31 | -31 | -30 | -30 | -34.0 | -29.6 | |
| 30-Jan-08 | -30 | -30 | -31 | -31 | -30 | -30 | -30 | -30 | -30 | -29 | -28 | -27 | -26 | -26 | -26 | -25 | -25 | -26 | -26 | -26 | -26 | -27 | -27 | -28 | -27.9 | -25.1 | |
| 31-Jan-08 | -29 | -29 | -29 | -29 | -29 | -29 | -28 | -28 | -28 | -27 | -26 | -25 | -24 | -21 | -23 | -24 | -24 | -25 | -25 | -25 | -24 | -24 | -24 | -24 | -26.1 | -21.3 | |
| Hourly Avg | -12.0 | -12.3 | -12.5 | -12.6 | -12.5 | -12.6 | -12.9 | -13.2 | -13.3 | -13.0 | -12.1 | -10.4 | -9.4 | -8.5 | -8.3 | -8.7 | -9.6 | -10.6 | -10.9 | -11.2 | -11.6 | -11.9 | -12.2 | | | | |
| Hourly Max | 3.6 | 3.2 | 2.9 | 2.3 | 1.4 | 1.4 | 1.6 | 1.6 | 1.3 | 0.9 | 1.3 | 2.5 | 2.5 | 3.4 | 3.7 | 3.9 | 3.7 | 3.8 | 4.0 | 4.1 | 4.0 | 3.7 | 3.8 | 3.7 | | | |

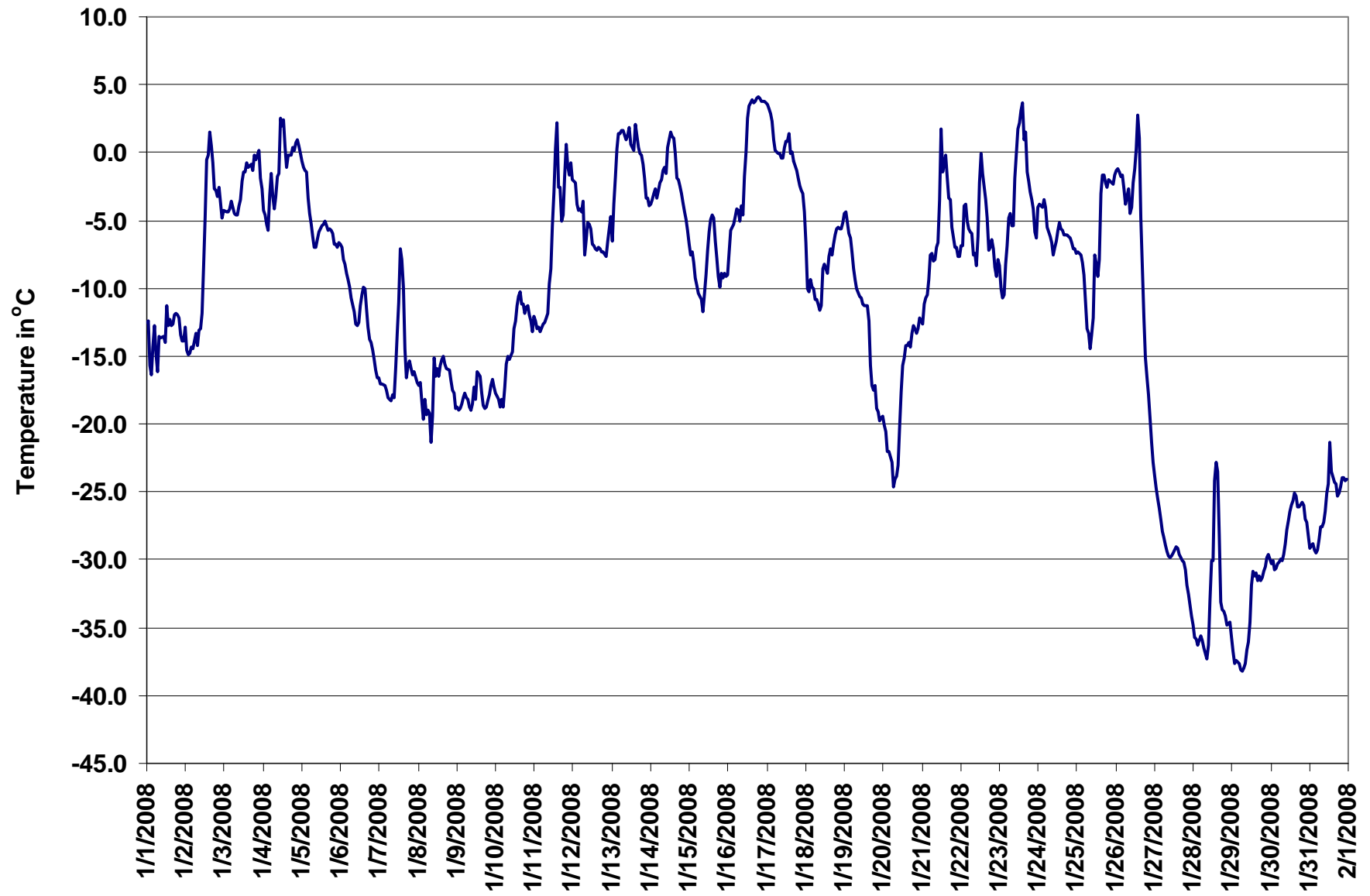


Figure 45. PASZA - Beaverlodge Temperature 1-hr Average Monthly Trend

PASZA - Beaverlodge Scalar Wind Speed Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

HOURLY AVERAGE TABLE

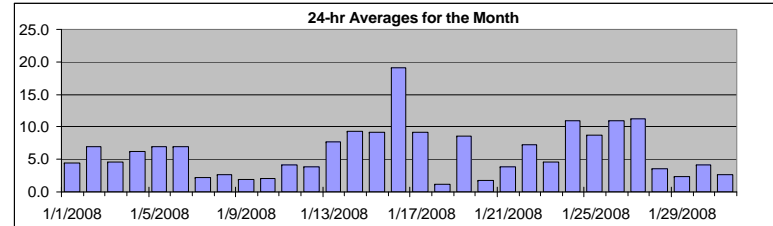
Wind Speed (WSs)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|-------|--------|-------------|
| Maximum 1-hr Average: | 37.5 | km/hr | 16-Jan | 20:00 21:00 |
| Maximum 24-hr Value: | 19.1 | km/hr | 16-Jan | |

| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|-----------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 740 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 99.5% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | AverageS |
| | 30.6 | 17.5 | 8.2 | 4.1 | 2.4 | 1.0 | 0.0 | 6.1 km/hr |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | 24-hr Scalar Average | Daily Max | |
|--------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-----------|------|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | | |
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | |
| 1-Jan-08 | 2 | 2 | 3 | 2 | 4 | 4 | 3 | 4 | 6 | 6 | 6 | 5 | 10 | 3 | 5 | 5 | 7 | 7 | 4 | 4 | 4 | 2 | 3 | 5 | 4.4 | 10.3 |
| 2-Jan-08 | 4 | 5 | 4 | 4 | 4 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 4 | 9 | 12 | 16 | 16 | 15 | 15 | 16 | 13 | 8 | 5 | 3 | 7.0 | 15.9 |
| 3-Jan-08 | 4 | 2 | 3 | 4 | 5 | 6 | 5 | 3 | 3 | 2 | 4 | 5 | 6 | 5 | 5 | 4 | 6 | 5 | 4 | 7 | 6 | 5 | 4 | 4 | 4.5 | 7.3 |
| 4-Jan-08 | 5 | 6 | 4 | 2 | 4 | 5 | 4 | 5 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 8 | 8 | 12 | 10 | 15 | 15 | 12 | 7 | 6.2 | 15.3 | |
| 5-Jan-08 | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 11 | 12 | 13 | 13 | 11 | 12 | 10 | 9 | 9 | 5 | 6 | 4 | 3 | 6 | 5 | 3 | 1 | 7.0 | 13.2 |
| 6-Jan-08 | 2 | 5 | 7 | 9 | 10 | 8 | 9 | 9 | 9 | 11 | 11 | 11 | 11 | 5 | 8 | 6 | 5 | 6 | 5 | 8 | 6 | 4 | 4 | 6 | 7.0 | 11.2 |
| 7-Jan-08 | 7 | 6 | 6 | 7 | 4 | 1 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 0 | 1 | 0 | 2 | 2 | 2 | 0 | 1 | 2 | 0 | 1 | 2.2 | 7.3 |
| 8-Jan-08 | 3 | 3 | 3 | 4 | 5 | 5 | 2 | 3 | 0 | 0 | 1 | 2 | 2 | 5 | 3 | 3 | 2 | 2 | 2 | 2 | 4 | 4 | 3 | 2 | 2.7 | 5.0 |
| 9-Jan-08 | 4 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 4 | 3 | 3 | 3 | 2 | 0 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 0 | 1 | 1.9 | 4.3 |
| 10-Jan-08 | 0 | 3 | 2 | 2 | 1 | 3 | 3 | 2 | 4 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 3 | 3 | 1 | 2 | 1 | 3 | 2.1 | 3.6 |
| 11-Jan-08 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 11 | 18 | 9 | 4 | 6 | 4.1 | 17.6 |
| 12-Jan-08 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 2 | 3 | 6 | 4 | 8 | 6 | 6 | 7 | 2 | 2 | 4 | 4 | 2 | 3 | 4 | 3.9 | 8.4 |
| 13-Jan-08 | 4 | 3 | 5 | 21 | 15 | 10 | 13 | 14 | 9 | 8 | 8 | 7 | 5 | 5 | 5 | 6 | 11 | 8 | 11 | 6 | 1 | 2 | 1 | 3 | 7.7 | 20.8 |
| 14-Jan-08 | 2 | 1 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 2 | 5 | 15 | 27 | 23 | 22 | 20 | 21 | 18 | 15 | 9.4 | 27.1 | |
| 15-Jan-08 | 12 | 7 | 7 | 6 | 4 | 6 | 6 | 4 | 3 | 3 | 3 | 14 | 18 | 19 | 18 | 16 | 16 | 15 | 9 | 7 | 9 | 7 | 4 | 9.2 | 19.1 | |
| 16-Jan-08 | 4 | 10 | 16 | 14 | 12 | 10 | 6 | 5 | 5 | 3 | 9 | 11 | 14 | 22 | 25 | 25 | 29 | 32 | 34 | 36 | 38 | 34 | 33 | 33 | 19.1 | 37.5 |
| 17-Jan-08 | 32 | 26 | 22 | 9 | 6 | 3 | 6 | 6 | 6 | 7 | 8 | 4 | 4 | 7 | 2 | 3 | 2 | 10 | 16 | 9 | 9 | 8 | 9 | 6 | 9.2 | 31.8 |
| 18-Jan-08 | 4 | 4 | 4 | 3 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1.2 | 4.0 |
| 19-Jan-08 | 4 | 5 | 10 | 9 | 12 | 16 | 13 | 11 | 11 | 12 | 12 | 10 | 12 | 9 | 8 | 7 | 2 | 1 | 3 | 2 | N | N | N | N | 8.6 | 15.8 |
| 20-Jan-08 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 0 | 2 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 0 | 2 | 3 | 3 | 1.8 | 4.4 |
| 21-Jan-08 | 3 | 2 | 2 | 2 | 2 | 5 | 4 | 3 | 7 | 9 | 8 | 5 | 2 | 2 | 2 | 2 | 3 | 6 | 7 | 2 | 3 | 2 | 2 | 6 | 3.8 | 8.6 |
| 22-Jan-08 | 11 | 7 | 14 | 14 | 16 | 20 | 13 | 11 | 7 | 6 | 6 | 3 | 3 | 3 | 4 | 4 | 5 | 8 | 7 | 4 | 2 | 1 | 2 | 3 | 7.2 | 19.7 |
| 23-Jan-08 | 3 | 2 | 0 | 1 | 4 | 3 | 4 | 2 | 1 | 3 | 5 | 5 | 4 | 5 | 6 | 6 | 9 | 10 | 10 | 7 | 7 | 7 | 4 | 4 | 4.6 | 9.7 |
| 24-Jan-08 | 7 | 8 | 14 | 14 | 17 | 10 | 11 | 11 | 8 | 10 | 15 | 12 | 12 | 16 | 15 | 14 | 14 | 13 | 12 | 10 | 7 | 3 | 6 | 7 | 11.0 | 17.2 |
| 25-Jan-08 | 6 | 3 | 5 | 5 | 4 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 3 | 3 | 4 | 14 | 18 | 28 | 24 | 20 | 21 | 17 | 9 | 10 | 8.7 | 27.5 |
| 26-Jan-08 | 12 | 9 | 9 | 12 | 21 | 14 | 13 | 6 | 7 | 4 | 3 | 2 | 2 | 2 | 4 | 5 | 14 | 18 | 20 | 17 | 16 | 19 | 17 | 18 | 11.0 | 20.7 |
| 27-Jan-08 | 16 | 17 | 15 | 13 | 14 | 15 | 13 | 12 | 11 | 10 | 12 | 11 | 12 | 9 | 10 | 10 | 8 | 7 | 6 | 7 | 9 | 10 | 11 | 11 | 11.3 | 16.8 |
| 28-Jan-08 | 11 | 4 | 7 | 3 | 6 | 8 | 2 | 1 | 2 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 1 | 4 | 5 | 5 | 5 | 6 | 6 | 3 | 3.5 | 10.7 |
| 29-Jan-08 | 3 | 2 | 3 | 1 | 3 | 1 | 1 | 3 | 3 | 2 | 2 | 2 | 1 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 2 | 2 | 3 | 2 | 2.4 | 4.3 |
| 30-Jan-08 | 4 | 6 | 11 | 10 | 8 | 6 | 4 | 3 | 3 | 2 | 2 | 3 | 3 | 4 | 4 | 2 | 3 | 4 | 4 | 1 | 2 | 5 | 4 | 3 | 4.1 | 10.9 |
| 31-Jan-08 | 2 | 3 | 2 | 1 | 1 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 4 | 5 | 5 | 4 | 3 | 1 | 3 | 4 | 3 | 2.7 | 5.5 |
| 1-hr Average | 5.9 | 5.2 | 6.2 | 6.0 | 6.3 | 5.8 | 5.2 | 5.0 | 4.6 | 4.5 | 5.1 | 5.2 | 5.1 | 5.6 | 5.7 | 6.4 | 7.6 | 8.3 | 8.4 | 7.6 | 7.7 | 7.1 | 6.2 | 5.9 | | |
| Hourly Max | 31.8 | 26.1 | 22.1 | 20.8 | 20.7 | 19.7 | 13.3 | 14.4 | 11.7 | 13.0 | 14.6 | 14.2 | 17.9 | 21.5 | 25.2 | 24.6 | 29.2 | 31.6 | 34.5 | 35.9 | 37.5 | 34.0 | 32.6 | 32.8 | | |

PASZA - Beaverlodge Vector Wind Speed Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

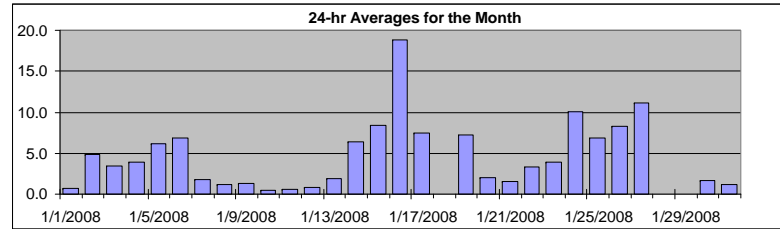
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|-------|--------|-------------|
| Maximum 1-hr Average: | 37.5 | km/hr | 16-Jan | 20:00 21:00 |
| Maximum 24-hr Value: | 18.8 | km/hr | 16-Jan | |



| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|-----------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 740 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 99.5% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | AverageV |
| | 30.5 | 17.4 | 7.8 | 3.4 | 1.7 | 0.5 | 0.0 | 3.8 km/hr |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hr Vector Average | Daily Max |
|-------------|------------------------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-----------|
| | Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | | |
| 1-Jan-08 | 1 | 1 | 2 | 1 | 4 | 4 | 2 | 3 | 6 | 5 | 3 | 3 | 6 | 2 | 2 | 5 | 6 | 3 | 4 | 4 | 4 | 2 | 1 | 3 | 0.7 | 6.5 |
| 2-Jan-08 | 2 | 4 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 1 | 9 | 12 | 16 | 16 | 15 | 14 | 16 | 13 | 7 | 3 | 3 | 4.9 | 15.9 |
| 3-Jan-08 | 4 | 1 | 1 | 3 | 4 | 6 | 0 | 2 | 2 | 2 | 4 | 5 | 6 | 5 | 5 | 4 | 6 | 5 | 4 | 7 | 6 | 5 | 4 | 4 | 3.5 | 7.1 |
| 4-Jan-08 | 4 | 4 | 3 | 0 | 3 | 4 | 4 | 5 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 4 | 7 | 7 | 12 | 10 | 15 | 15 | 9 | 7 | 3.9 | 15.3 |
| 5-Jan-08 | 4 | 4 | 5 | 5 | 1 | 3 | 5 | 11 | 12 | 13 | 13 | 11 | 12 | 10 | 9 | 9 | 5 | 6 | 3 | 3 | 5 | 5 | 3 | 0 | 6.2 | 13.2 |
| 6-Jan-08 | 2 | 5 | 7 | 9 | 10 | 7 | 9 | 9 | 9 | 11 | 11 | 11 | 5 | 8 | 6 | 4 | 5 | 6 | 4 | 8 | 5 | 4 | 4 | 6 | 6.9 | 11.2 |
| 7-Jan-08 | 7 | 5 | 6 | 7 | 3 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 0 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 0 | 1.8 | 7.3 |
| 8-Jan-08 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 0 | 0 | 0 | 1 | 1 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 4 | 3 | 3 | 1 | 1.2 | 3.6 |
| 9-Jan-08 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 4 | 3 | 3 | 3 | 2 | 1 | 1 | 3 | 2 | 1 | 2 | 0 | 0 | 1 | 1 | 0 | 1.3 | 3.8 |
| 10-Jan-08 | 0 | 2 | 2 | 1 | 0 | 1 | 3 | 1 | 3 | 3 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 3 | 1 | 2 | 1 | 1 | 0.5 | 3.3 |
| 11-Jan-08 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 3 | 2 | 3 | 1 | 11 | 18 | 9 | 4 | 6 | 0.5 | 17.6 |
| 12-Jan-08 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 1 | 2 | 6 | 3 | 8 | 5 | 4 | 5 | 0 | 1 | 2 | 4 | 2 | 3 | 3 | 0.8 | 8.1 |
| 13-Jan-08 | 1 | 3 | 2 | 21 | 15 | 9 | 12 | 14 | 9 | 8 | 7 | 7 | 2 | 4 | 5 | 6 | 11 | 8 | 11 | 6 | 0 | 1 | 1 | 2 | 1.9 | 20.6 |
| 14-Jan-08 | 1 | 1 | 3 | 3 | 4 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 1 | 3 | 14 | 27 | 23 | 22 | 20 | 21 | 18 | 18 | 15 | 6.4 | 26.8 |
| 15-Jan-08 | 12 | 7 | 6 | 5 | 4 | 6 | 6 | 3 | 2 | 3 | 0 | 14 | 18 | 19 | 18 | 16 | 16 | 14 | 8 | 6 | 9 | 9 | 7 | 4 | 8.4 | 19.1 |
| 16-Jan-08 | 4 | 10 | 16 | 14 | 12 | 10 | 6 | 4 | 5 | 2 | 9 | 11 | 14 | 21 | 25 | 24 | 29 | 31 | 34 | 36 | 37 | 34 | 33 | 33 | 18.8 | 37.5 |
| 17-Jan-08 | 32 | 26 | 21 | 8 | 5 | 3 | 6 | 6 | 5 | 7 | 8 | 4 | 4 | 6 | 2 | 3 | 2 | 10 | 16 | 9 | 9 | 8 | 8 | 6 | 7.4 | 31.8 |
| 18-Jan-08 | 2 | 4 | 4 | 3 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | - | 4.0 |
| 19-Jan-08 | 4 | 5 | 10 | 9 | 12 | 16 | 13 | 11 | 11 | 12 | 12 | 10 | 12 | 9 | 7 | 4 | 2 | 1 | 3 | 2 | N | N | N | N | 7.3 | 15.6 |
| 20-Jan-08 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 0 | 2 | 3 | 3 | 2.0 | 4.4 |
| 21-Jan-08 | 3 | 1 | 2 | 2 | 1 | 5 | 4 | 2 | 7 | 9 | 8 | 5 | 1 | 0 | 1 | 1 | 2 | 5 | 7 | 1 | 2 | 2 | 2 | 5 | 1.6 | 8.6 |
| 22-Jan-08 | 11 | 6 | 14 | 14 | 16 | 20 | 13 | 11 | 7 | 5 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 8 | 7 | 4 | 2 | 1 | 2 | 3 | 3.4 | 19.6 |
| 23-Jan-08 | 3 | 1 | 0 | 1 | 3 | 3 | 3 | 1 | 1 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 9 | 10 | 10 | 7 | 6 | 6 | 3 | 4 | 3.9 | 9.7 |
| 24-Jan-08 | 7 | 8 | 14 | 14 | 17 | 9 | 10 | 11 | 8 | 10 | 15 | 12 | 12 | 16 | 15 | 14 | 14 | 13 | 12 | 10 | 6 | 3 | 5 | 6 | 10.0 | 17.0 |
| 25-Jan-08 | 6 | 3 | 4 | 5 | 3 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 3 | 3 | 1 | 14 | 18 | 27 | 24 | 20 | 21 | 17 | 9 | 10 | 6.8 | 27.4 |
| 26-Jan-08 | 12 | 9 | 9 | 12 | 21 | 14 | 13 | 6 | 6 | 4 | 3 | 1 | 2 | 1 | 1 | 5 | 14 | 18 | 20 | 17 | 16 | 18 | 17 | 18 | 8.2 | 20.5 |
| 27-Jan-08 | 16 | 17 | 15 | 13 | 14 | 14 | 13 | 12 | 10 | 10 | 12 | 11 | 11 | 9 | 10 | 10 | 8 | 7 | 5 | 7 | 9 | 10 | 11 | 11 | 11.2 | 16.7 |
| 28-Jan-08 | 11 | 4 | 6 | 2 | 6 | 8 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 1 | 4 | 5 | 5 | 5 | 6 | 6 | 2 | N | 10.7 |
| 29-Jan-08 | 3 | 2 | 3 | 0 | 3 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 0 | 1 | 3 | 2 | 2 | 3 | 3 | 4 | 3 | 2 | 2 | 2 | N | 4.2 |
| 30-Jan-08 | 4 | 6 | 11 | 10 | 8 | 6 | 4 | 3 | 3 | 2 | 2 | 2 | 3 | 4 | 4 | 2 | 3 | 4 | 3 | 1 | 2 | 5 | 4 | 1 | 1.6 | 10.9 |
| 31-Jan-08 | 2 | 3 | 2 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 4 | 5 | 5 | 4 | 3 | 1 | 3 | 4 | 3 | 1.2 | 5.5 |
| 1-hr Vector | 2.7 | 2.7 | 3.5 | 2.7 | 2.8 | 2.7 | 2.2 | 2.1 | 1.6 | 1.3 | 1.1 | 1.3 | 0.7 | 1.7 | 1.7 | 2.3 | 2.9 | 3.0 | 2.1 | 3.0 | 4.4 | 3.3 | 2.9 | 3.0 | | |
| Hourly Max | 31.8 | 26.0 | 21.3 | 20.6 | 20.5 | 19.6 | 13.1 | 14.4 | 11.5 | 12.9 | 14.5 | 14.2 | 17.8 | 21.5 | 25.2 | 24.5 | 29.1 | 31.5 | 34.4 | 35.8 | 37.5 | 33.9 | 32.6 | 32.7 | | |

PASZA - Beaverlodge Wind Direction Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|------|------|-----|---------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 740 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 99.5% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average |
| | 355.6 | 347.7 | 296.3 | 215.3 | 92.4 | 30.6 | 4.1 | 323 deg |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24-hour Average | WD Sector |
|------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-----------|
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | |
| 1-Jan-08 | 309 | 291 | 289 | 61 | 75 | 78 | 205 | 234 | 136 | 181 | 186 | 178 | 130 | 268 | 295 | 318 | 319 | 359 | 252 | 272 | 254 | 240 | 32 | 28 | 249 | WSW |
| 2-Jan-08 | 348 | 284 | 349 | 48 | 337 | 50 | 355 | 27 | 323 | 86 | 58 | 45 | 231 | 259 | 261 | 263 | 264 | 266 | 251 | 256 | 261 | 285 | 227 | 118 | 271 | W |
| 3-Jan-08 | 188 | 181 | 174 | 148 | 135 | 215 | 226 | 175 | 168 | 92 | 109 | 102 | 111 | 120 | 113 | 127 | 114 | 118 | 148 | 129 | 153 | 151 | 238 | 222 | 147 | SSE |
| 4-Jan-08 | 224 | 294 | 44 | 118 | 230 | 246 | 240 | 240 | 81 | 77 | 78 | 132 | 86 | 96 | 110 | 93 | 84 | 112 | 121 | 126 | 118 | 112 | 90 | 111 | 116 | ESE |
| 5-Jan-08 | 114 | 24 | 28 | 17 | 32 | 312 | 345 | 330 | 334 | 332 | 329 | 322 | 322 | 331 | 332 | 328 | 335 | 9 | 334 | 343 | 355 | 0 | 31 | 319 | 341 | NNW |
| 6-Jan-08 | 321 | 346 | 345 | 333 | 329 | 334 | 333 | 337 | 335 | 334 | 338 | 336 | 352 | 343 | 358 | 341 | 348 | 348 | 339 | 330 | 322 | 324 | 316 | 326 | 336 | NNW |
| 7-Jan-08 | 323 | 326 | 343 | 340 | 340 | 49 | 31 | 330 | 335 | 297 | 61 | 101 | 96 | 72 | 56 | 84 | 250 | 73 | 116 | 263 | 48 | 30 | 1 | 259 | 354 | N |
| 8-Jan-08 | 262 | 38 | 70 | 50 | 300 | 41 | 258 | 55 | 94 | 70 | 252 | 45 | 268 | 314 | 63 | 300 | 288 | 35 | 69 | 67 | 265 | 243 | 270 | 354 | 342 | NNW |
| 9-Jan-08 | 173 | 194 | 100 | 266 | 244 | 150 | 118 | 148 | 131 | 129 | 144 | 158 | 185 | 202 | 177 | 184 | 161 | 87 | 56 | 248 | 341 | 280 | 230 | 267 | 159 | SSE |
| 10-Jan-08 | 51 | 29 | 275 | 356 | 32 | 353 | 48 | 316 | 313 | 266 | 81 | 267 | 237 | 76 | 96 | 99 | 220 | 173 | 195 | 77 | 97 | 248 | 262 | 42 | 351 | N |
| 11-Jan-08 | 45 | 342 | 66 | 61 | 340 | 1 | 52 | 75 | 76 | 84 | 85 | 113 | 108 | 91 | 104 | 83 | 127 | 200 | 148 | 270 | 267 | 250 | 252 | 244 | 255 | WSW |
| 12-Jan-08 | 216 | 193 | 124 | 99 | 108 | 80 | 73 | 143 | 82 | 95 | 226 | 275 | 32 | 305 | 48 | 12 | 331 | 213 | 269 | 309 | 41 | 77 | 68 | 263 | 18 | NNE |
| 13-Jan-08 | 184 | 68 | 331 | 281 | 295 | 302 | 298 | 303 | 310 | 308 | 297 | 317 | 171 | 125 | 100 | 113 | 130 | 119 | 126 | 114 | 22 | 87 | 100 | 177 | 293 | WNW |
| 14-Jan-08 | 171 | 137 | 70 | 93 | 128 | 128 | 147 | 124 | 97 | 124 | 134 | 268 | 265 | 125 | 316 | 334 | 309 | 300 | 301 | 303 | 302 | 303 | 324 | 314 | 309 | NW |
| 15-Jan-08 | 307 | 292 | 318 | 10 | 289 | 296 | 303 | 306 | 1 | 327 | 348 | 283 | 286 | 287 | 285 | 286 | 281 | 277 | 264 | 268 | 256 | 243 | 241 | 252 | 285 | WNW |
| 16-Jan-08 | 261 | 284 | 276 | 280 | 277 | 275 | 264 | 245 | 249 | 260 | 259 | 268 | 284 | 286 | 283 | 280 | 286 | 290 | 291 | 292 | 294 | 292 | 291 | 292 | 285 | WNW |
| 17-Jan-08 | 294 | 295 | 311 | 352 | 25 | 309 | 297 | 325 | 344 | 325 | 316 | 323 | 341 | 261 | 250 | 61 | 43 | 37 | 33 | 1 | 338 | 328 | 331 | 353 | 327 | NNW |
| 18-Jan-08 | 103 | 118 | 93 | 97 | 237 | 74 | 84 | 263 | 288 | 101 | 74 | 91 | 270 | 265 | 79 | 237 | 221 | 217 | 214 | 77 | 266 | 212 | 268 | 112 | - | - |
| 19-Jan-08 | 147 | 80 | 77 | 86 | 82 | 78 | 65 | 69 | 62 | 72 | 68 | 68 | 67 | 46 | 6 | 22 | 159 | 218 | 260 | 285 | N | N | N | N | 68 | ENE |
| 20-Jan-08 | 310 | 344 | 4 | 356 | 67 | 213 | 83 | 61 | 77 | 68 | 70 | 76 | 83 | 70 | 75 | 79 | 93 | 115 | 131 | 148 | 163 | 87 | 72 | 81 | 87 | E |
| 21-Jan-08 | 85 | 97 | 88 | 97 | 308 | 287 | 297 | 234 | 274 | 269 | 254 | 252 | 261 | 124 | 264 | 118 | 97 | 282 | 286 | 226 | 83 | 72 | 67 | 12 | 280 | W |
| 22-Jan-08 | 317 | 308 | 318 | 322 | 330 | 326 | 338 | 334 | 282 | 266 | 26 | 58 | 70 | 68 | 146 | 138 | 109 | 133 | 126 | 124 | 202 | 226 | 79 | 71 | 335 | NNW |
| 23-Jan-08 | 72 | 83 | 105 | 80 | 294 | 69 | 27 | 296 | 131 | 60 | 14 | 321 | 3 | 351 | 347 | 36 | 29 | 37 | 42 | 40 | 31 | 52 | 81 | 82 | 31 | NNE |
| 24-Jan-08 | 81 | 99 | 86 | 104 | 105 | 96 | 70 | 80 | 104 | 116 | 120 | 112 | 108 | 116 | 112 | 99 | 105 | 110 | 121 | 125 | 142 | 157 | 189 | 228 | 109 | ESE |
| 25-Jan-08 | 234 | 259 | 270 | 293 | 283 | 237 | 104 | 90 | 102 | 101 | 95 | 103 | 140 | 88 | 10 | 301 | 290 | 292 | 298 | 292 | 293 | 285 | 301 | 308 | 293 | WNW |
| 26-Jan-08 | 307 | 298 | 275 | 271 | 277 | 269 | 238 | 258 | 250 | 189 | 192 | 227 | 305 | 269 | 331 | 54 | 340 | 348 | 348 | 349 | 339 | 333 | 336 | 341 | 313 | NW |
| 27-Jan-08 | 341 | 340 | 339 | 342 | 350 | 342 | 348 | 357 | 352 | 356 | 345 | 349 | 352 | 9 | 359 | 347 | 339 | 342 | 3 | 336 | 331 | 339 | 339 | 339 | 346 | NNW |
| 28-Jan-08 | 338 | 22 | 356 | 29 | 354 | 355 | 23 | 244 | 334 | 104 | 82 | 240 | 234 | 162 | 234 | 160 | 89 | 79 | 106 | 101 | 119 | 110 | 115 | 139 | N | - |
| 29-Jan-08 | 223 | 231 | 56 | 13 | 59 | 276 | 280 | 353 | 24 | 4 | 290 | 68 | 87 | 290 | 71 | 155 | 197 | 275 | 202 | 234 | 261 | 347 | 350 | 252 | N | - |
| 30-Jan-08 | 236 | 323 | 328 | 326 | 326 | 328 | 349 | 354 | 359 | 41 | 98 | 161 | 161 | 138 | 153 | 144 | 269 | 263 | 143 | 147 | 349 | 17 | 44 | 25 | 340 | NNW |
| 31-Jan-08 | 73 | 57 | 46 | 220 | 126 | 301 | 303 | 354 | 204 | 254 | 225 | 226 | 198 | 198 | 147 | 185 | 192 | 197 | 171 | 105 | 341 | 285 | 243 | 226 | 204 | SSW |
| Hourly Avg | 300 | 321 | 341 | 342 | 329 | 331 | 333 | 340 | 351 | 358 | 6 | 319 | 354 | 325 | 335 | 329 | 308 | 313 | 306 | 304 | 301 | 306 | 319 | 315 | | |

PASZA - Beaverlodge Standard Deviation of Wind Direction Monthly Summary

Station: Beaverlodge
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| |
|--|
| |
| |

Determined by the Yamartino 15-min interval calculation

| | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 740 hrs | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 99.5% | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 |
| | 87.6 | 78.3 | 49.7 | 22.3 | 9.2 | 4.3 | 3.1 |

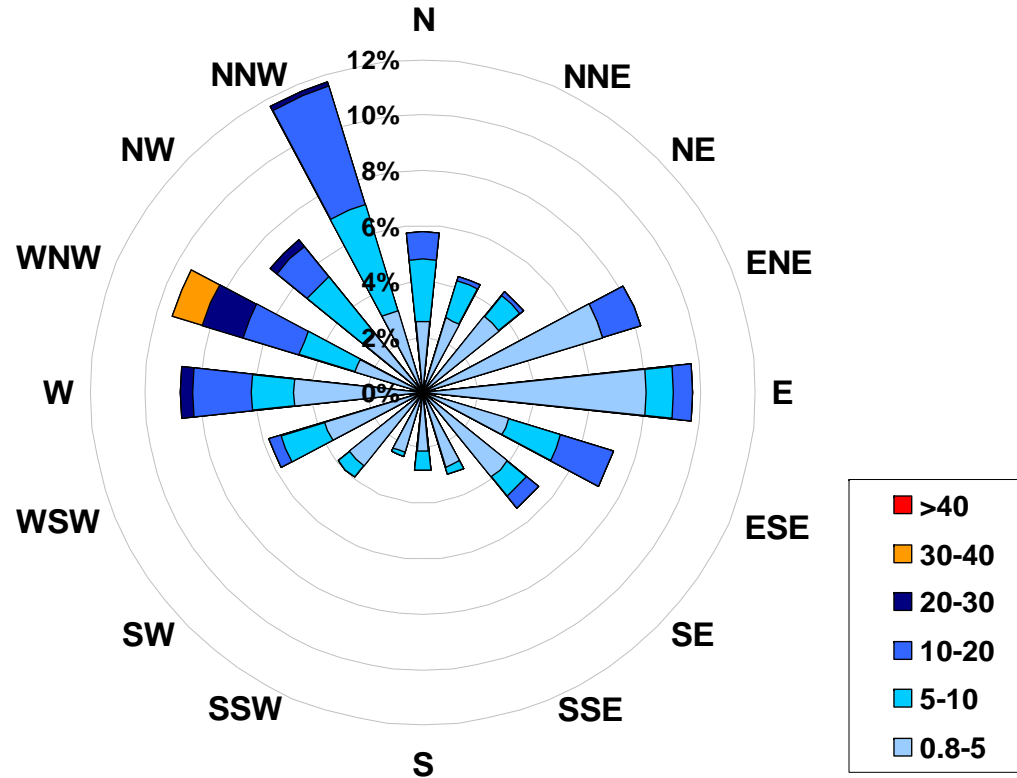
Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | Daily Maximum | |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|------------------|------|
| 1-Jan-08 | 68 | 77 | 76 | 72 | 6 | 13 | 58 | 50 | 15 | 36 | 61 | 60 | 78 | 78 | 80 | 35 | 9 | 64 | 27 | 36 | 42 | 35 | 76 | 59 | 79.7 | |
| 2-Jan-08 | 65 | 20 | 53 | 45 | 59 | 56 | 71 | 73 | 62 | 20 | 46 | 34 | 78 | 17 | 9 | 5 | 4 | 4 | 8 | 3 | 8 | 26 | 63 | 37 | 78.3 | |
| 3-Jan-08 | 26 | 47 | 62 | 39 | 35 | 15 | 88 | 56 | 41 | 36 | 16 | 8 | 8 | 19 | 31 | 29 | 7 | 21 | 36 | 16 | 12 | 30 | 25 | 27 | 87.6 | |
| 4-Jan-08 | 34 | 59 | 52 | 80 | 80 | 29 | 49 | 40 | 28 | 18 | 28 | 22 | 17 | 28 | 32 | 18 | 16 | 34 | 5 | 5 | 6 | 14 | 54 | 14 | 80.5 | |
| 5-Jan-08 | 18 | 38 | 13 | 19 | 93 | 63 | 42 | 5 | 8 | 8 | 5 | 7 | 8 | 8 | 11 | 9 | 32 | 18 | 30 | 37 | 22 | 24 | 36 | 77 | 92.7 | |
| 6-Jan-08 | 56 | 22 | 8 | 8 | 4 | 19 | 9 | 5 | 5 | 4 | 5 | 5 | 25 | 8 | 16 | 13 | 14 | 11 | 22 | 8 | 8 | 9 | 6 | 8 | 55.6 | |
| 7-Jan-08 | 5 | 8 | 6 | 6 | 22 | 51 | 19 | 28 | 54 | 11 | 55 | 9 | 15 | 61 | 84 | 46 | 68 | 83 | 38 | 36 | 76 | 61 | 84 | 83 | 83.8 | |
| 8-Jan-08 | 73 | 64 | 69 | 77 | 77 | 51 | 71 | 66 | 49 | 59 | 76 | 67 | 76 | 60 | 71 | 61 | 46 | 54 | 85 | 51 | 19 | 24 | 44 | 81 | 84.7 | |
| 9-Jan-08 | 76 | 57 | 19 | 73 | 25 | 27 | 27 | 21 | 21 | 10 | 16 | 14 | 10 | 31 | 31 | 16 | 28 | 11 | 43 | 87 | 82 | 84 | 51 | 53 | 87.3 | |
| 10-Jan-08 | 69 | 57 | 24 | 75 | 93 | 88 | 12 | 81 | 41 | 40 | 55 | 74 | 30 | 61 | 13 | 37 | 18 | 67 | 31 | 11 | 47 | 25 | 43 | 68 | 93.1 | |
| 11-Jan-08 | 80 | 77 | 87 | 70 | 57 | 66 | 78 | 49 | 41 | 21 | 15 | 19 | 23 | 33 | 33 | 18 | 26 | 31 | 70 | 5 | 4 | 13 | 52 | 21 | 87.1 | |
| 12-Jan-08 | 66 | 34 | 25 | 31 | 42 | 39 | 13 | 57 | 15 | 84 | 36 | 21 | 63 | 19 | 33 | 55 | 43 | 91 | 80 | 72 | 37 | 24 | 31 | 76 | 90.9 | |
| 13-Jan-08 | 77 | 56 | 65 | 9 | 6 | 14 | 10 | 4 | 10 | 16 | 45 | 16 | 63 | 33 | 9 | 13 | 7 | 14 | 8 | 60 | 88 | 68 | 36 | 40 | 87.6 | |
| 14-Jan-08 | 50 | 59 | 33 | 26 | 21 | 27 | 39 | 31 | 14 | 20 | 56 | 42 | 34 | 81 | 45 | 13 | 8 | 3 | 5 | 5 | 3 | 4 | 7 | 4 | 81.3 | |
| 15-Jan-08 | 4 | 11 | 31 | 24 | 24 | 16 | 5 | 44 | 50 | 25 | 76 | 4 | 3 | 4 | 3 | 3 | 3 | 15 | 58 | 13 | 7 | 6 | 62 | | 76.2 | |
| 16-Jan-08 | 42 | 9 | 7 | 7 | 6 | 5 | 11 | 84 | 22 | 72 | 8 | 14 | 12 | 4 | 4 | 6 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 4 | | 83.6 |
| 17-Jan-08 | 3 | 4 | 17 | 24 | 13 | 16 | 12 | 15 | 25 | 14 | 6 | 10 | 23 | 45 | 49 | 72 | 34 | 17 | 9 | 12 | 13 | 5 | 9 | 16 | | 72.3 |
| 18-Jan-08 | 51 | 14 | 6 | 59 | 43 | 40 | 75 | 52 | 75 | 78 | 47 | 31 | 35 | 71 | 12 | 69 | 73 | 39 | 58 | 75 | 78 | 39 | 39 | 85 | | 84.7 |
| 19-Jan-08 | 10 | 29 | 16 | 9 | 6 | 8 | 6 | 7 | 6 | 7 | 4 | 7 | 5 | 7 | 22 | 76 | 44 | 44 | 22 | 37 | N | N | N | N | | 75.8 |
| 20-Jan-08 | 16 | 46 | 51 | 72 | 33 | 66 | 34 | 9 | 8 | 9 | 5 | 6 | 7 | 5 | 9 | 10 | 12 | 13 | 13 | 17 | 74 | 14 | 15 | 20 | | 73.5 |
| 21-Jan-08 | 16 | 25 | 47 | 19 | 76 | 7 | 18 | 38 | 7 | 3 | 5 | 14 | 75 | 85 | 84 | 71 | 60 | 31 | 6 | 67 | 59 | 12 | 28 | 38 | | 84.8 |
| 22-Jan-08 | 6 | 13 | 7 | 9 | 5 | 4 | 4 | 9 | 25 | 19 | 66 | 35 | 15 | 12 | 25 | 33 | 8 | 11 | 7 | 11 | 27 | 30 | 83 | 27 | | 82.8 |
| 23-Jan-08 | 20 | 50 | 76 | 64 | 83 | 15 | 49 | 85 | 50 | 44 | 38 | 20 | 34 | 41 | 16 | 13 | 7 | 4 | 5 | 7 | 25 | 43 | 43 | 9 | | 85.2 |
| 24-Jan-08 | 9 | 11 | 9 | 6 | 9 | 17 | 13 | 12 | 16 | 8 | 5 | 5 | 7 | 4 | 6 | 6 | 6 | 6 | 5 | 4 | 14 | 17 | 20 | 10 | | 19.9 |
| 25-Jan-08 | 6 | 9 | 31 | 14 | 36 | 37 | 42 | 22 | 20 | 13 | 23 | 27 | 24 | 49 | 81 | 26 | 5 | 5 | 3 | 5 | 5 | 5 | 8 | 6 | | 80.8 |
| 26-Jan-08 | 4 | 7 | 10 | 7 | 6 | 6 | 10 | 11 | 75 | 16 | 22 | 57 | 76 | 72 | 91 | 19 | 21 | 9 | 10 | 11 | 9 | 5 | 6 | 7 | | 91.1 |
| 27-Jan-08 | 6 | 6 | 6 | 9 | 11 | 6 | 12 | 13 | 12 | 11 | 7 | 11 | 16 | 15 | 16 | 15 | 7 | 18 | 20 | 6 | 5 | 3 | 3 | 3 | | 19.8 |
| 28-Jan-08 | 3 | 21 | 22 | 61 | 37 | 15 | 73 | 97 | 81 | 12 | 9 | 77 | 23 | 37 | 57 | 51 | 23 | 6 | 11 | 9 | 12 | 8 | 8 | 38 | | 96.9 |
| 29-Jan-08 | 14 | 19 | 43 | 88 | 15 | 74 | 73 | 64 | 68 | 55 | 70 | 86 | 68 | 72 | 45 | 54 | 28 | 23 | 10 | 21 | 17 | 38 | 46 | 74 | | 88.0 |
| 30-Jan-08 | 12 | 41 | 5 | 4 | 7 | 8 | 22 | 18 | 17 | 35 | 25 | 28 | 19 | 24 | 21 | 63 | 31 | 12 | 42 | 43 | 60 | 24 | 8 | 65 | | 65.2 |
| 31-Jan-08 | 14 | 9 | 33 | 67 | 59 | 32 | 51 | 39 | 32 | 24 | 26 | 31 | 31 | 40 | 18 | 13 | 11 | 7 | 17 | 36 | 66 | 12 | 15 | 17 | | 66.8 |
| Hourly Max | 80 | 77 | 87 | 88 | 93 | 88 | 88 | 97 | 81 | 84 | 76 | 86 | 78 | 85 | 91 | 76 | 73 | 91 | 85 | 87 | 88 | 84 | 84 | 85 | | |

1-hr Average Wind Rose (in km/hr) Located at the Beaverlodge Site for January 2008



Calms: 0%

| Frequency Distribution of Wind in km/hr | | | |
|---|----|----|-----------------|
| Range | | | Frequency (hrs) |
| 0.8 | < | 5 | 442 |
| 5 | to | 10 | 156 |
| 10 | to | 20 | 117 |
| 20 | to | 30 | 17 |
| 30 | to | 40 | 8 |
| | > | 40 | 0 |
| Total Non-Zero Values | | | 740 |

PASZA

Portable – Spirit River Station Monthly Summary Tables, Graphs and Roses

PASZA - Portable-Spirit River Sulphur Dioxide Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

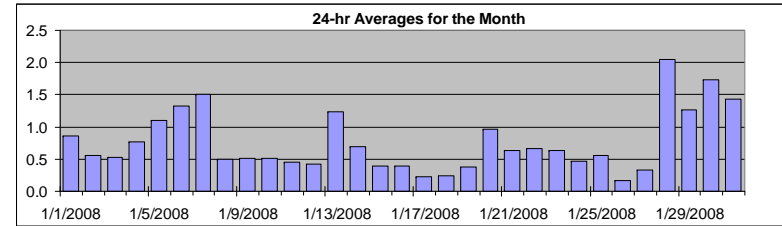
HOURLY AVERAGE TABLE

Sulphur Dioxide (SO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: Alberta Environment: 1-hr 172 ppb 24-hr 57 ppb

| | | | | | |
|------------------------------|-----|-----|--------|-------|-------|
| Number of 1-hr Exceedances: | | 0 | | | |
| Number of 24-hr Exceedances: | | 0 | | | |
| Maximum 1-hr Average: | 4.2 | ppb | 28-Jan | 22:00 | 23:00 |
| Maximum 24-hr Average: | 2.0 | ppb | 28-Jan | | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 33 hrs | Operational Time: | 704 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 99.3% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 3.0 | 2.1 | 1.0 | 0.5 | 0.3 | 0.1 | 0.0 | 0.8 ppb | 0.5 ppb |

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|---------------|---------------|
| | Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | | | 23:00 0:00 |
| 1-Jan-08 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0.9 | 1.5 | |
| 2-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0.6 | 1.1 | |
| 3-Jan-08 | 0 | 0 | 0 | 1 | 0 | A | 1 | 1 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.9 | |
| 4-Jan-08 | 0 | 0 | 0 | A | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | 0.8 | 2.4 | |
| 5-Jan-08 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1.1 | 2.3 | |
| 6-Jan-08 | 2 | A | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.3 | 2.7 | |
| 7-Jan-08 | A | 0 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 2 | 2 | 1.5 | 2.9 | |
| 8-Jan-08 | 2 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | C | C | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.7 | |
| 9-Jan-08 | 0 | 0 | 1 | A | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 1.5 | |
| 10-Jan-08 | 0 | 0 | 0 | A | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.8 | |
| 11-Jan-08 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0.4 | 0.7 | |
| 12-Jan-08 | 0 | A | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.5 | |
| 13-Jan-08 | A | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | A | 1.2 | 3.5 | |
| 14-Jan-08 | 4 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.7 | 4.0 |
| 15-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.4 | 1.1 | |
| 16-Jan-08 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 0.4 | 0.8 |
| 17-Jan-08 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.2 | 0.6 | |
| 18-Jan-08 | 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 | 0.4 | |
| 19-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.5 | |
| 20-Jan-08 | 1 | 0 | 0 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 2.9 | |
| 21-Jan-08 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | A | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0.6 | 1.5 | |
| 22-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | A | 1 | 0 | 1 | 2 | 0 | 0 | 1 | 1 | 0 | 0.7 | 1.6 | |
| 23-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1.3 | |
| 24-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.5 | 1.0 | |
| 25-Jan-08 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | A | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.6 | 1.0 | |
| 26-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | N | N | 0 | 0.2 | 0.6 | |
| 27-Jan-08 | N | 0 | N | N | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0.3 | 1.2 | |
| 28-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 4 | 2 | 2 | 3 | 4 | 3 | 2.0 | 4.2 |
| 29-Jan-08 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1.3 | 3.5 | |
| 30-Jan-08 | 1 | 2 | 2 | 2 | 2 | 2 | A | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1.7 | 2.4 | |
| 31-Jan-08 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1.4 | 2.1 | |
| Hourly Avg | 0.9 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.9 | 0.8 | 0.7 | 0.8 | 0.9 | 0.7 | | | |
| Hourly Max | 4.0 | 2.9 | 1.8 | 1.8 | 2.6 | 2.9 | 2.7 | 2.2 | 2.1 | 1.9 | 2.2 | 3.0 | 2.7 | 2.7 | 2.5 | 2.3 | 2.3 | 2.9 | 4.0 | 2.4 | 2.6 | 2.7 | 4.2 | 3.3 | | | |

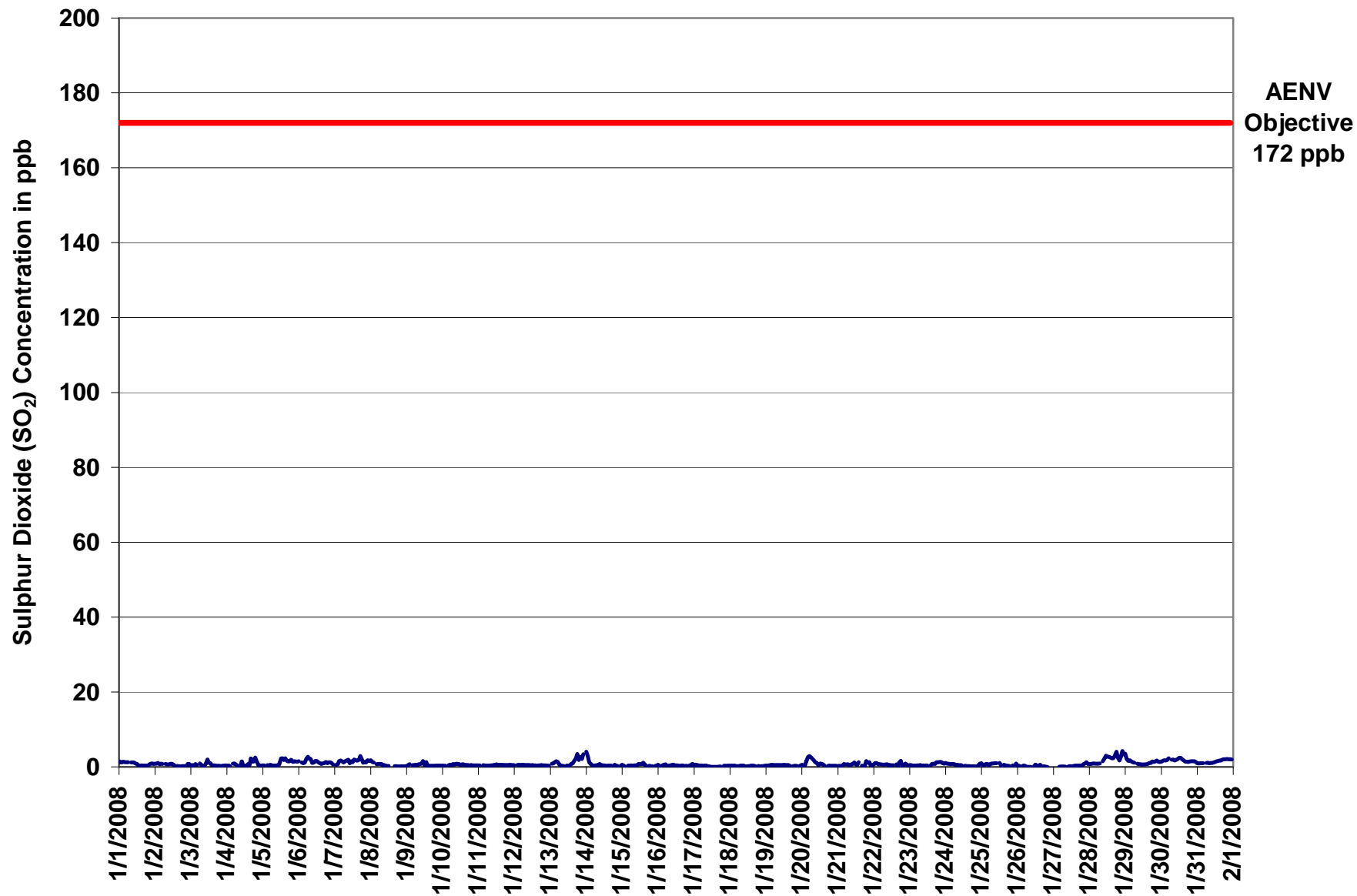


Figure 46. PASZA - Portable-Spirit River Sulphur Dioxide 1-hr Average Monthly Trend

Station: Portable-Spirit River
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

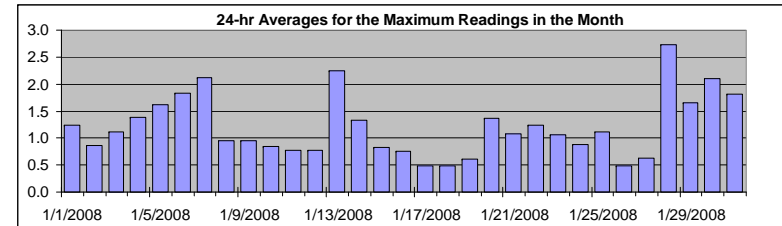
Sulphur Dioxide (SO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-----|-----|--------|-----------|
| Maximum 1-hr Value: | 6.4 | ppb | 14-Jan | 0:00 1:00 |
| Maximum 24-hr Value: | 2.7 | ppb | 28-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 33 hrs | Operational Time: | 704 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 99.3% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 4.9 | 2.9 | 1.4 | 0.9 | 0.5 | 0.4 | 0.3 | 1.2 ppb | 0.9 ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24:00 | 24-hour Average | Daily Maximum |
|------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|------------------|
| 1-Jan-08 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.2 | 2.3 |
| 2-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0.9 | 1.4 |
| 3-Jan-08 | 1 | 1 | 0 | 1 | 1 | A | 1 | 1 | 0 | 1 | 5 | 3 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.1 | 4.7 |
| 4-Jan-08 | 0 | 1 | 0 | A | 2 | 1 | 1 | 0 | 0 | 1 | 3 | 1 | 1 | 0 | 1 | 3 | 3 | 2 | 3 | 3 | 2 | 1 | 1 | 1 | 1.4 | 2.9 |
| 5-Jan-08 | 1 | 1 | A | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 4 | 3 | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 1.6 | 4.4 |
| 6-Jan-08 | 2 | A | 1 | 1 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1.8 | 3.0 |
| 7-Jan-08 | A | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 5 | 5 | 2 | 2 | 2 | 2 | 2 | 2 | 2.1 | 4.8 |
| 8-Jan-08 | 2 | 2 | 2 | A | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | C | C | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 2.2 |
| 9-Jan-08 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 1 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.9 | 3.7 |
| 10-Jan-08 | 0 | 0 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0.8 | 1.0 |
| 11-Jan-08 | 0 | 0 | A | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.0 |
| 12-Jan-08 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0.8 | 0.9 |
| 13-Jan-08 | A | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 3 | 5 | 6 | 4 | 5 | 3 | 5 | A | 1 | 2.2 | 6.4 |
| 14-Jan-08 | 6 | 5 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | A | 1 | 1.3 | 6.4 |
| 15-Jan-08 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | A | 0 | 1 | 0.8 | 2.3 |
| 16-Jan-08 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | A | 1 | 1 | 1 | 0.8 | 1.4 |
| 17-Jan-08 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 0 | 0 | 0 | 0 | 0.5 | 0.9 |
| 18-Jan-08 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 1 | 0 | 0 | 0 | 0 | 0.5 | 0.9 |
| 19-Jan-08 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.6 | 1.0 |
| 20-Jan-08 | 1 | 0 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | A | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1.4 | 3.5 |
| 21-Jan-08 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | A | 1 | 1 | 1 | 2 | 2 | 3 | 1 | 1 | 1.1 | 2.6 |
| 22-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 3 | 1 | 4 | 2 | 1 | 1 | 2 | 1 | 1 | 1.2 | 4.2 |
| 23-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1.1 | 1.8 |
| 24-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0.9 | 3.9 |
| 25-Jan-08 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 1.1 | 3.8 |
| 26-Jan-08 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | A | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | N | N | 0 | 0.5 | 1.3 |
| 27-Jan-08 | N | 0 | N | N | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1.4 |
| 28-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | A | 2 | 3 | 4 | 3 | 3 | 3 | 2 | 3 | 5 | 5 | 3 | 2 | 4 | 6 | 5 | 2.7 | 5.8 |
| 29-Jan-08 | 4 | 4 | 2 | 2 | 2 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1.7 | 4.3 |
| 30-Jan-08 | 2 | 2 | 2 | 2 | 2 | 3 | A | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2.1 | 2.9 |
| 31-Jan-08 | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1.8 | 2.4 |
| Hourly Avg | 1.4 | 1.2 | 1.1 | 1.2 | 1.2 | 1.2 | 1.0 | 1.0 | 1.0 | 1.1 | 1.3 | 1.2 | 1.3 | 1.2 | 1.1 | 1.1 | 1.1 | 1.4 | 1.5 | 1.3 | 1.1 | 1.3 | 1.3 | 1.2 | | |
| Hourly Max | 6.4 | 4.9 | 2.3 | 2.6 | 3.0 | 3.5 | 3.0 | 2.9 | 2.8 | 2.4 | 4.7 | 3.9 | 4.4 | 3.2 | 2.9 | 2.8 | 2.9 | 5.4 | 6.4 | 4.3 | 4.9 | 3.8 | 5.8 | 5.3 | | |

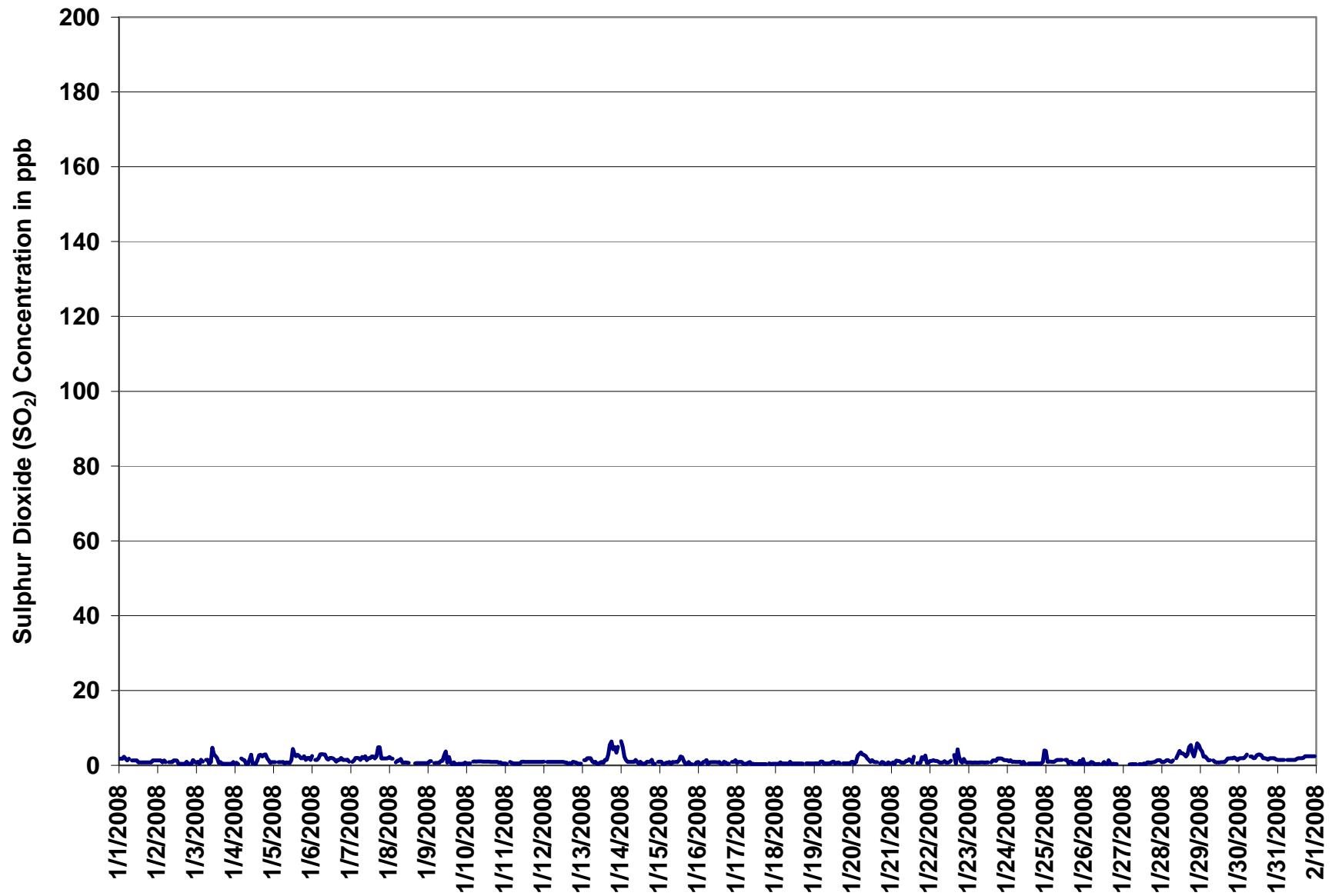
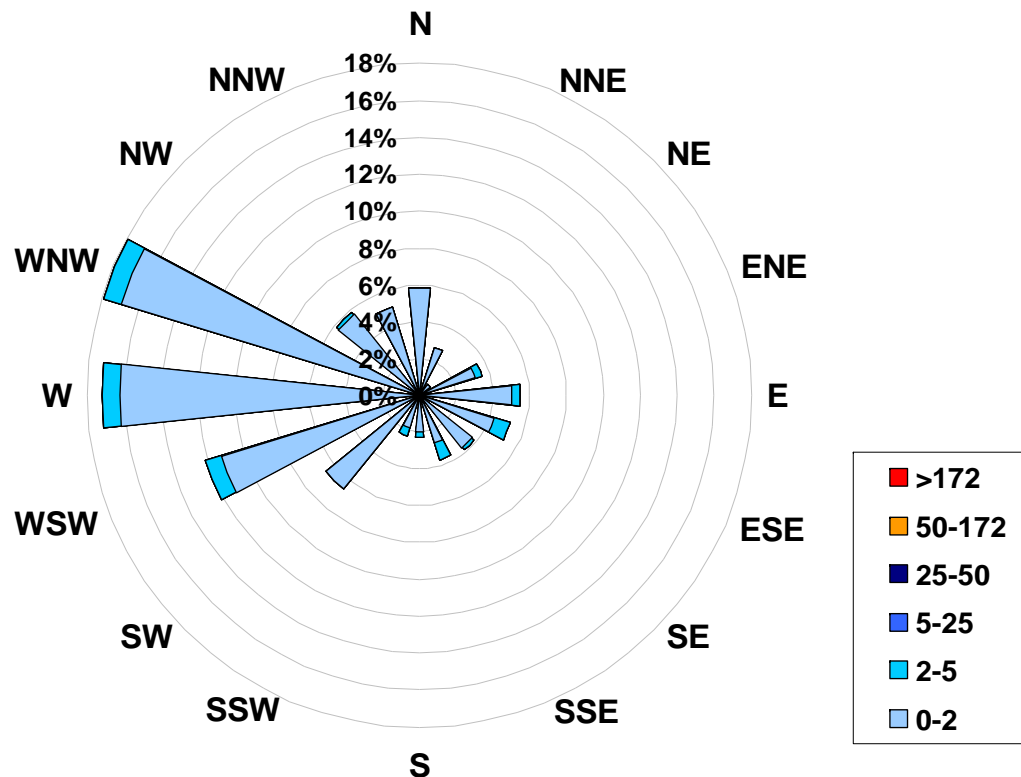


Figure 47. PASZA - Portable-Spirit River Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Portable-Spirit River Site for January 2008



Calms: 0%

| Frequency Distribution of SO ₂ in ppb | | | Frequency (hrs) |
|--|----|-----|-----------------|
| Range | | | |
| 0.0 | < | 2 | 658 |
| 2 | to | 5 | 46 |
| 5 | to | 25 | 0 |
| 25 | to | 50 | 0 |
| 50 | to | 172 | 0 |
| | > | 172 | 0 |
| Total Non-Zero Values | | | 704 |

PASZA - Portable-Spirit River Nitrogen Dioxide Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Nitrogen Dioxide (NO₂)

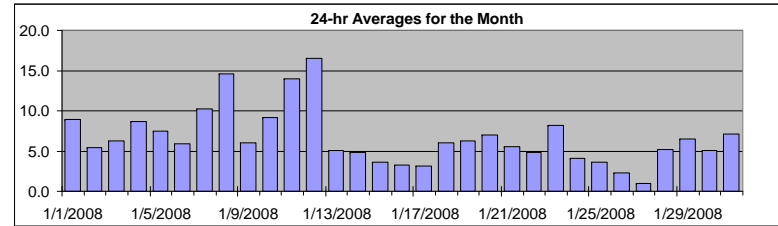
Monitoring Dates: January 1, 2008 to February 1, 2008

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

Summary

| | |
|------------------------------|--------------------------|
| Number of 1-hr Exceedances: | 0 |
| Number of 24-hr Exceedances: | 0 |
| Maximum 1-hr Average: | 51.2 ppb 8-Jan 7:00 8:00 |
| Maximum 24-hr Average: | 16.4 ppb 12-Jan |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 33 hrs | Operational Time: | 701 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 99.2% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 21.3 | 15.8 | 8.5 | 5.2 | 3.3 | 2.0 | 0.8 | 6.6 ppb | 5.2 ppb |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|---------------|---------------|
| | Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | | | 23:00 0:00 |
| 1-Jan-08 | 16 | 16 | 16 | 14 | 14 | 14 | 15 | A | 14 | 13 | 10 | 9 | 8 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 8.9 | 16.4 | |
| 2-Jan-08 | 5 | 5 | 5 | 6 | 7 | 6 | A | 9 | 8 | 9 | 11 | 12 | 8 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5.4 | 11.5 | |
| 3-Jan-08 | 3 | 4 | 4 | 4 | 4 | A | 7 | 4 | 3 | 4 | 7 | 11 | 8 | 9 | 7 | 6 | 7 | 7 | 8 | 7 | 8 | 7 | 7 | 6 | 6.3 | 11.2 | |
| 4-Jan-08 | 6 | 6 | 6 | A | 9 | 8 | 8 | 4 | 4 | 4 | 5 | 8 | 6 | 6 | 4 | 9 | 12 | 13 | 19 | 21 | 15 | 12 | 9 | 6 | 6 | 8.7 | 20.7 |
| 5-Jan-08 | 6 | 6 | A | 8 | 9 | 11 | 8 | 6 | 7 | 7 | 6 | 6 | 7 | 6 | 6 | 7 | 8 | 7 | 8 | 9 | 8 | 9 | 9 | 8 | 7.4 | 10.9 | |
| 6-Jan-08 | 8 | A | 6 | 7 | 6 | 8 | 7 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 6 | 7 | 14 | 6 | 6 | 6 | 5 | 4 | 5.9 | 13.7 | |
| 7-Jan-08 | A | 4 | 4 | 6 | 6 | 6 | 4 | 7 | 8 | 23 | 9 | 7 | 9 | 7 | 8 | 11 | 14 | 15 | 17 | 15 | 13 | 14 | 14 | 15 | 10.2 | 22.8 | |
| 8-Jan-08 | 15 | 14 | 12 | A | 10 | 12 | 12 | 51 | 13 | 15 | 9 | 8 | 6 | C | C | C | C | A | 16 | 14 | 13 | 14 | 13 | 14 | 14.5 | 51.2 | |
| 9-Jan-08 | 13 | 10 | 8 | A | 8 | 6 | 6 | 5 | 6 | 6 | 4 | 4 | 3 | 3 | 3 | 4 | 5 | 6 | 8 | 7 | 8 | 7 | 6 | 6 | 6.1 | 12.8 | |
| 10-Jan-08 | 5 | 5 | 6 | A | 7 | 7 | 9 | 15 | 12 | 9 | 8 | 7 | 6 | 6 | 7 | 7 | 8 | 11 | 15 | 14 | 11 | 11 | 13 | 13 | 9.1 | 14.8 | |
| 11-Jan-08 | 14 | 14 | A | 13 | 11 | 12 | 12 | 14 | 16 | 15 | 12 | 12 | 10 | 8 | 9 | 10 | 12 | 17 | 18 | 19 | 18 | 18 | 18 | 18 | 13.9 | 18.6 | |
| 12-Jan-08 | 18 | A | 18 | 18 | 18 | 17 | 17 | 17 | 18 | 16 | 12 | 9 | 8 | 8 | 9 | 12 | 15 | 19 | 21 | 21 | 21 | 21 | 21 | 21 | 16.4 | 21.3 | |
| 13-Jan-08 | A | 5 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 7 | 14 | 11 | 7 | 6 | 5 | 6 | A | 5.0 | 13.6 | | |
| 14-Jan-08 | 10 | 8 | 5 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 4 | 5 | 4 | 3 | 3 | 4 | 3 | A | 4 | 4.8 | 10.4 | |
| 15-Jan-08 | 3 | 3 | 2 | 3 | 4 | 4 | 2 | 3 | 6 | 4 | 4 | 6 | 5 | 3 | 3 | 4 | 5 | 4 | 5 | 2 | 3 | A | 2 | 2 | 3.6 | 6.1 | |
| 16-Jan-08 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 9 | 10 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | A | 3 | 3 | 3 | 3.2 | 9.5 | |
| 17-Jan-08 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | A | 3 | 3 | 3 | 3 | 3.2 | 5.0 | |
| 18-Jan-08 | 3 | 4 | 4 | 8 | 6 | 9 | 9 | 9 | 9 | 8 | 5 | 6 | 4 | 4 | 4 | 4 | 5 | A | 6 | 6 | 5 | 5 | 5 | 5 | 6.1 | 9.5 | |
| 19-Jan-08 | 5 | 5 | 5 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 4 | A | 24 | 23 | 12 | 11 | 15 | 8 | 6.3 | 23.9 | |
| 20-Jan-08 | 12 | 13 | 4 | 4 | 5 | 6 | 5 | 3 | 4 | 4 | 3 | 2 | 3 | 3 | 6 | 10 | A | 20 | 10 | 8 | 7 | 8 | 11 | 12 | 7.0 | 19.9 | |
| 21-Jan-08 | 12 | 12 | 12 | 11 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 12 | A | 4 | 4 | 5 | 5 | 7 | 5 | 6 | 3 | 5.5 | 12.4 | |
| 22-Jan-08 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | A | 3 | 3 | 6 | 8 | 12 | 10 | 10 | 10 | 8 | 4.8 | 11.9 | |
| 23-Jan-08 | 10 | 10 | 11 | 12 | 12 | 8 | 7 | 11 | 13 | 9 | 7 | 8 | 7 | A | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 7 | 9 | 11 | 8.2 | 12.8 | |
| 24-Jan-08 | 11 | 7 | 7 | 7 | 6 | 4 | 4 | 5 | 4 | 3 | 3 | 2 | A | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 4.1 | 11.5 | |
| 25-Jan-08 | 4 | 6 | 5 | 4 | 4 | 3 | 4 | 6 | 4 | 5 | 5 | A | 6 | 3 | 3 | 5 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3.6 | 5.9 | |
| 26-Jan-08 | 3 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | A | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | N | N | 1 | 2.3 | 4.0 | |
| 27-Jan-08 | N | 1 | N | N | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 0.9 | 2.3 | |
| 28-Jan-08 | 4 | 4 | 3 | 5 | 4 | 3 | 5 | 6 | A | 6 | 5 | N | 3 | 3 | 4 | 5 | 7 | 10 | 12 | 7 | 3 | 5 | 5 | 5 | 5.2 | 12.1 | |
| 29-Jan-08 | 5 | 6 | 8 | 8 | 10 | 11 | 11 | A | 10 | 7 | 4 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 9 | 8 | 14 | 8 | 7 | 6.5 | 13.7 | |
| 30-Jan-08 | 6 | 5 | 9 | 5 | 7 | 7 | A | 6 | 10 | 6 | 5 | 4 | 3 | 3 | 3 | 2 | 2 | 3 | 5 | 5 | 5 | 4 | 4 | 5 | 5.0 | 10.2 | |
| 31-Jan-08 | 9 | 6 | 5 | 5 | 8 | A | 13 | 13 | 12 | 9 | 7 | 5 | 4 | 3 | 4 | 4 | 5 | 5 | 5 | 7 | 8 | 8 | 9 | 10 | 7.1 | 13.0 | |
| Hourly Avg | 7.7 | 6.5 | 6.3 | 6.5 | 6.5 | 6.5 | 6.6 | 7.8 | 7.3 | 7.2 | 5.7 | 5.4 | 5.0 | 4.0 | 4.7 | 5.2 | 5.9 | 7.3 | 8.7 | 8.1 | 7.2 | 7.7 | 7.7 | 7.1 | | | |
| Hourly Max | 18.0 | 16.2 | 18.4 | 17.9 | 17.7 | 17.4 | 17.1 | 51.2 | 17.6 | 22.8 | 12.5 | 11.7 | 9.6 | 9.3 | 11.8 | 11.9 | 14.8 | 19.9 | 23.9 | 22.8 | 21.3 | 21.3 | 21.3 | 20.8 | | | |

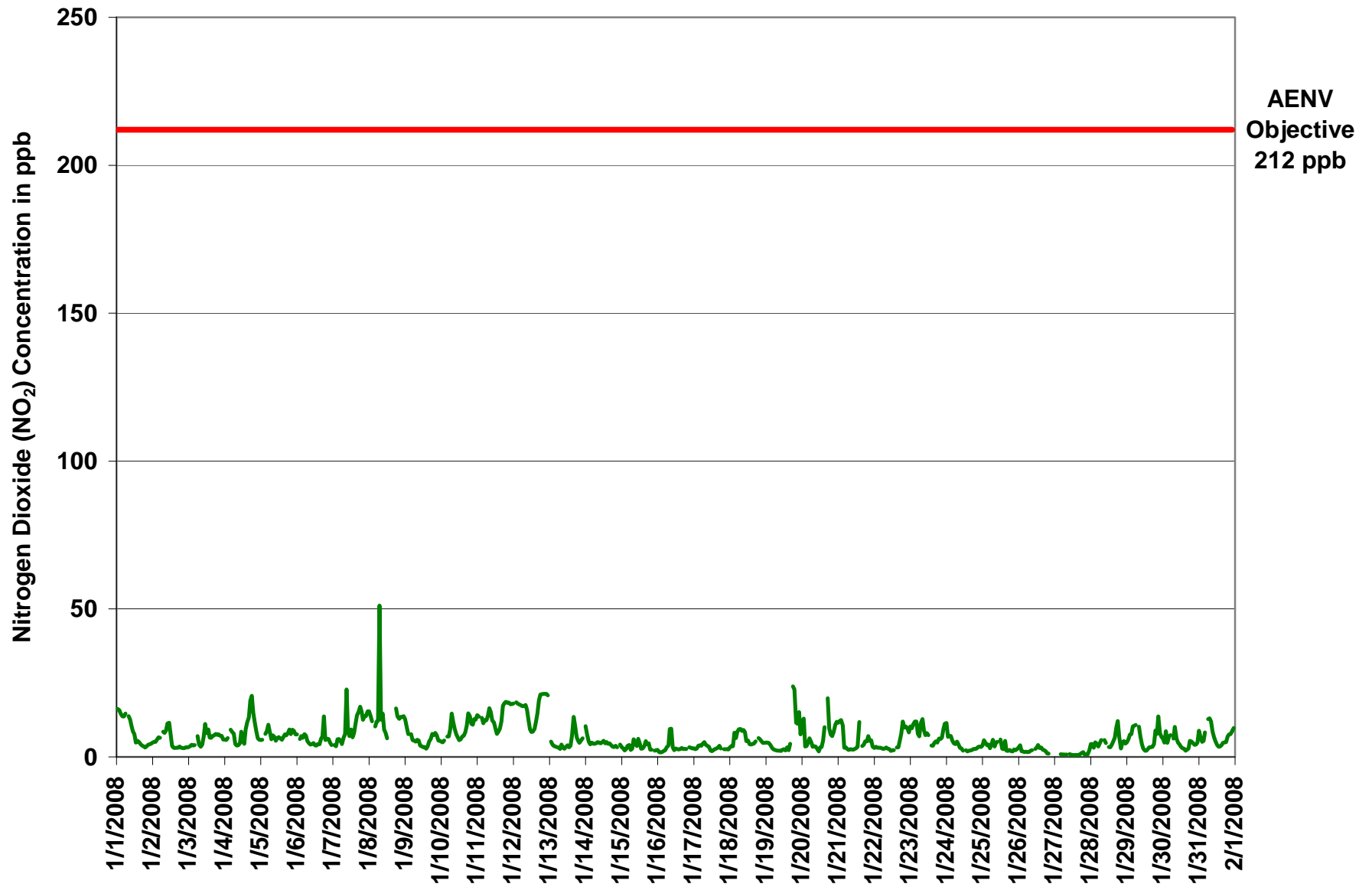


Figure 48. PASZA - Portable-Spirit River Nitrogen Dioxide 1-hr Average Monthly Trend

Station: Portable-Spirit River
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

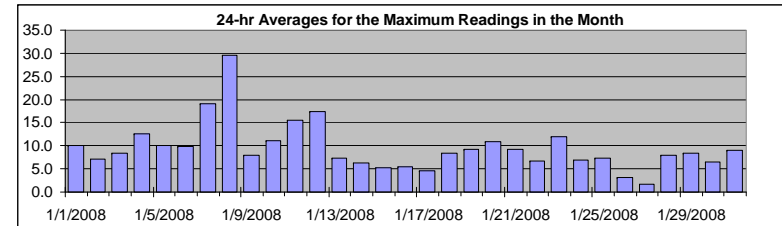
Nitrogen Dioxide (NO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-------|-----|-------|-----------|
| Maximum 1-hr Value: | 290.5 | ppb | 8-Jan | 7:00 8:00 |
| Maximum 24-hr Value: | 29.5 | ppb | 8-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 33 hrs | Operational Time: | 701 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 99.2% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 28.6 | 19.4 | 12.2 | 7.1 | 4.7 | 2.5 | 1.1 | 9.4 ppb | 7.1 ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24-hour Average | Daily Maximum | |
|------------------------|------|------|------|------|------|------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|------------------|-------|
| 1-Jan-08 | 18 | 17 | 17 | 16 | 14 | 14 | A | 14 | 14 | 11 | 10 | 12 | 6 | 10 | 6 | 5 | 4 | 4 | 3 | 4 | 4 | 5 | 5 | 10.0 | 17.8 | |
| 2-Jan-08 | 5 | 6 | 6 | 9 | 7 | 7 | A | 10 | 10 | 13 | 14 | 18 | 12 | 4 | 6 | 4 | 4 | 4 | 9 | 3 | 3 | 4 | 4 | 7.2 | 17.7 | |
| 3-Jan-08 | 4 | 4 | 5 | 5 | 5 | A | 11 | 6 | 5 | 8 | 13 | 15 | 12 | 13 | 7 | 9 | 8 | 8 | 9 | 16 | 9 | 9 | 7 | 8.5 | 16.4 | |
| 4-Jan-08 | 7 | 7 | 9 | A | 12 | 12 | 18 | 5 | 5 | 5 | 8 | 10 | 9 | 8 | 16 | 24 | 25 | 24 | 23 | 21 | 15 | 11 | 8 | 7 | 12.6 | 25.4 |
| 5-Jan-08 | 6 | 7 | A | 11 | 13 | 13 | 11 | 7 | 20 | 8 | 8 | 13 | 9 | 8 | 7 | 8 | 10 | 9 | 10 | 14 | 10 | 12 | 10 | 9 | 10.0 | 20.2 |
| 6-Jan-08 | 9 | A | 10 | 11 | 8 | 9 | 9 | 6 | 5 | 5 | 10 | 4 | 4 | 5 | 5 | 16 | 8 | 59 | 7 | 8 | 7 | 10 | 5 | 9.8 | 58.6 | |
| 7-Jan-08 | A | 6 | 4 | 9 | 7 | 7 | 5 | 14 | 13 | 151 | 16 | 9 | 12 | 14 | 11 | 17 | 19 | 20 | 21 | 19 | 14 | 16 | 17 | 18 | 19.1 | 150.9 |
| 8-Jan-08 | 19 | 16 | 14 | A | 12 | 13 | 13 | 290 | 15 | 18 | 12 | 9 | 8 | C | C | C | C | A | 18 | 16 | 14 | 15 | 14 | 14 | 29.5 | 290.5 |
| 9-Jan-08 | 15 | 13 | 9 | A | 11 | 6 | 6 | 6 | 8 | 7 | 5 | 4 | 4 | 5 | 7 | 7 | 7 | 9 | 11 | 11 | 13 | 10 | 6 | 6 | 8.0 | 14.6 |
| 10-Jan-08 | 6 | 5 | 7 | A | 7 | 9 | 13 | 20 | 13 | 11 | 8 | 8 | 6 | 7 | 7 | 10 | 20 | 20 | 20 | 12 | 12 | 14 | 14 | 11.1 | 20.3 | |
| 11-Jan-08 | 15 | 14 | A | 15 | 12 | 14 | 13 | 16 | 17 | 19 | 14 | 13 | 11 | 9 | 13 | 12 | 16 | 19 | 19 | 20 | 19 | 20 | 18 | 19 | 15.5 | 19.9 |
| 12-Jan-08 | 19 | A | 19 | 20 | 18 | 18 | 18 | 18 | 19 | 18 | 15 | 10 | 9 | 9 | 10 | 13 | 17 | 21 | 22 | 22 | 22 | 22 | 22 | 22 | 17.5 | 22.0 |
| 13-Jan-08 | A | 6 | 5 | 4 | 4 | 4 | 5 | 3 | 9 | 6 | 5 | 5 | 8 | 5 | 6 | 12 | 24 | 14 | 10 | 7 | 6 | 7 | 8 | A | 7.3 | 24.1 |
| 14-Jan-08 | 13 | 12 | 7 | 5 | 5 | 5 | 5 | 7 | 6 | 5 | 5 | 5 | 8 | 5 | 8 | 5 | 5 | 6 | 5 | 6 | 5 | 6 | A | 6 | 6.3 | 13.1 |
| 15-Jan-08 | 5 | 6 | 3 | 7 | 5 | 5 | 3 | 5 | 8 | 7 | 5 | 7 | 6 | 3 | 6 | 6 | 7 | 5 | 6 | 4 | 5 | A | 3 | 4 | 5.3 | 8.0 |
| 16-Jan-08 | 3 | 2 | 2 | 2 | 2 | 4 | 4 | 6 | 11 | 18 | 12 | 3 | 17 | 6 | 4 | 3 | 6 | 3 | 4 | 3 | A | 4 | 4 | 4 | 5.5 | 17.8 |
| 17-Jan-08 | 5 | 3 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 6 | 5 | 3 | 2 | 3 | 3 | 5 | 7 | 9 | 3 | A | 3 | 3 | 3 | 3 | 4.7 | 8.8 |
| 18-Jan-08 | 4 | 4 | 4 | 16 | 14 | 11 | 11 | 12 | 11 | 12 | 10 | 13 | 13 | 5 | 5 | 6 | 5 | 6 | A | 7 | 6 | 6 | 5 | 5 | 8.3 | 16.2 |
| 19-Jan-08 | 5 | 5 | 5 | 5 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 7 | 8 | 4 | 5 | 3 | 11 | A | 29 | 32 | 16 | 27 | 20 | 13 | 9.3 | 32.0 |
| 20-Jan-08 | 18 | 18 | 5 | 4 | 5 | 13 | 12 | 4 | 4 | 10 | 5 | 3 | 4 | 4 | 9 | 19 | A | 26 | 11 | 33 | 8 | 11 | 13 | 13 | 10.9 | 32.7 |
| 21-Jan-08 | 13 | 13 | 13 | 12 | 3 | 4 | 4 | 6 | 7 | 4 | 5 | 3 | 3 | 4 | 52 | A | 5 | 6 | 6 | 10 | 11 | 9 | 9 | 7 | 9.2 | 52.1 |
| 22-Jan-08 | 3 | 4 | 4 | 4 | 5 | 3 | 3 | 5 | 10 | 4 | 4 | 4 | 3 | 3 | A | 4 | 5 | 9 | 15 | 15 | 14 | 13 | 12 | 9 | 6.7 | 15.2 |
| 23-Jan-08 | 15 | 12 | 14 | 17 | 17 | 9 | 9 | 16 | 18 | 17 | 10 | 10 | 11 | A | 6 | 7 | 8 | 13 | 9 | 8 | 7 | 13 | 14 | 14 | 11.9 | 18.3 |
| 24-Jan-08 | 16 | 9 | 9 | 10 | 7 | 5 | 5 | 10 | 11 | 9 | 4 | 4 | A | 7 | 5 | 6 | 8 | 6 | 6 | 3 | 4 | 6 | 6 | 4 | 6.9 | 16.1 |
| 25-Jan-08 | 5 | 7 | 5 | 5 | 5 | 6 | 7 | 44 | 6 | 8 | 7 | A | 9 | 6 | 5 | 16 | 3 | 2 | 4 | 2 | 2 | 7 | 4 | 4 | 7.3 | 44.1 |
| 26-Jan-08 | 4 | 7 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 3 | A | 4 | 5 | 5 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | N | N | 1 | 3.2 | 6.9 |
| 27-Jan-08 | N | 1 | N | N | 1 | 1 | 1 | 1 | 1 | A | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 3 | 1 | 1 | 1 | 7 | 1.7 | 7.3 |
| 28-Jan-08 | 5 | 5 | 4 | 6 | 5 | 4 | 6 | 7 | A | 8 | 16 | N | 7 | 7 | 5 | 15 | 8 | 15 | 16 | 13 | 5 | 7 | 7 | 5 | 8.0 | 16.3 |
| 29-Jan-08 | 5 | 9 | 9 | 9 | 12 | 12 | A | 12 | 9 | 5 | 3 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 13 | 14 | 19 | 14 | 10 | 8.4 | 19.5 |
| 30-Jan-08 | 8 | 7 | 14 | 6 | 8 | 8 | A | 8 | 14 | 10 | 5 | 5 | 4 | 3 | 4 | 2 | 3 | 4 | 9 | 6 | 5 | 8 | 5 | 7 | 6.6 | 14.2 |
| 31-Jan-08 | 13 | 9 | 6 | 8 | 14 | A | 14 | 15 | 14 | 11 | 8 | 6 | 5 | 4 | 4 | 9 | 6 | 5 | 7 | 10 | 10 | 11 | 10 | 11 | 9.1 | 14.8 |
| Hourly Avg | 9.4 | 8.1 | 7.6 | 8.5 | 8.1 | 7.8 | 8.3 | 19.3 | 10.0 | 14.2 | 8.1 | 7.4 | 7.4 | 5.7 | 8.1 | 8.3 | 8.8 | 9.9 | 12.3 | 11.5 | 9.2 | 10.2 | 9.4 | 8.5 | | |
| Hourly Max | 19.2 | 17.7 | 19.3 | 19.6 | 18.2 | 18.0 | 17.8 | 290.5 | 20.2 | 150.9 | 16.5 | 17.7 | 17.1 | 14.3 | 52.1 | 24.0 | 25.4 | 25.9 | 58.6 | 32.7 | 22.0 | 26.9 | 21.7 | 21.7 | | |

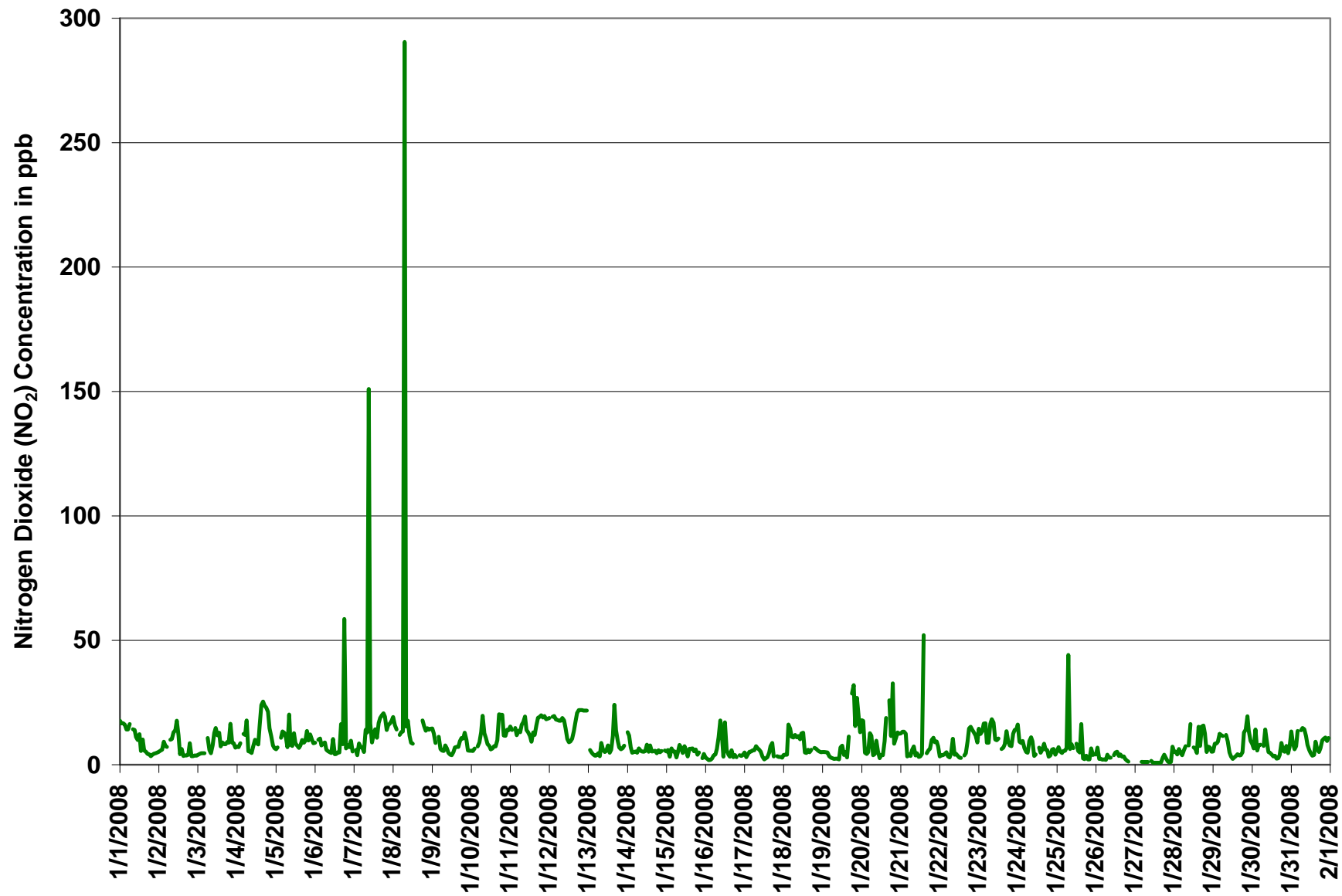
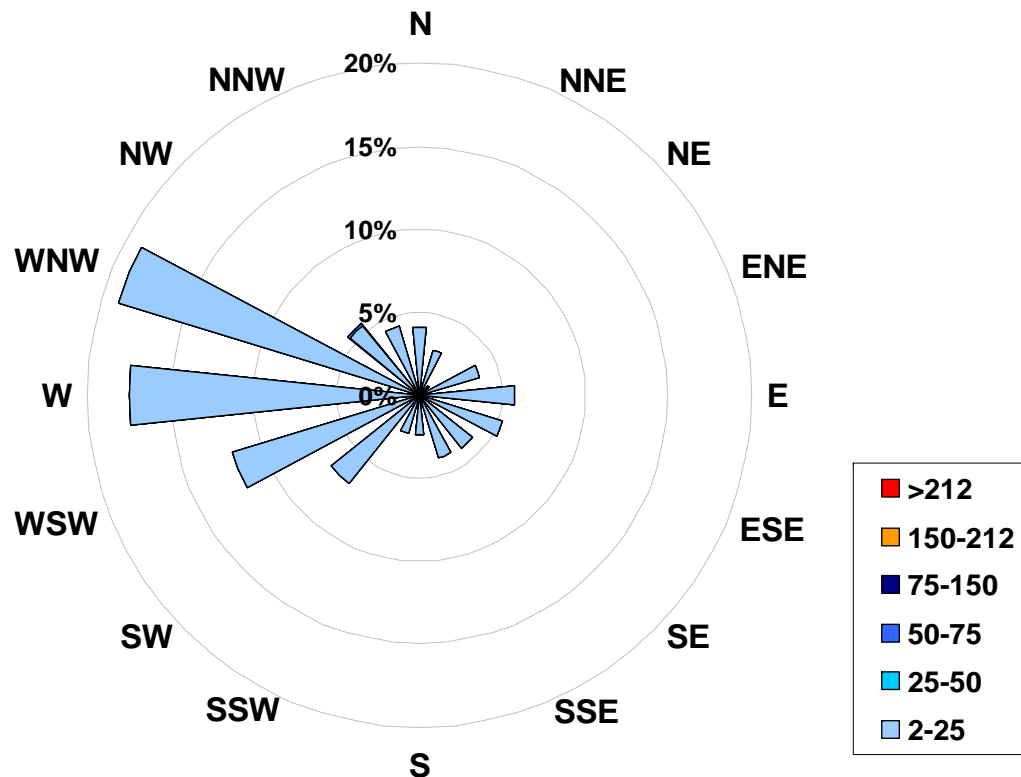


Figure 49. PASZA - Portable-Spirit River Nitrogen Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Nitrogen Dioxide (in ppb) Located at the Portable-Spirit River Site for January 2008



Calms: 0%

| Frequency Distribution of NO ₂ in ppb | | | Frequency (hrs) |
|--|--------|--|-----------------|
| Range | | | |
| 2.0 | < 25 | | 700 |
| 25 | to 50 | | 1 |
| 50 | to 75 | | 0 |
| 75 | to 150 | | 0 |
| 150 | to 212 | | 0 |
| | > 212 | | 0 |
| Total Non-Zero Values | | | 701 |

PASZA - Portable-Spirit River Nitric Oxide Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Nitric Oxide (NO)

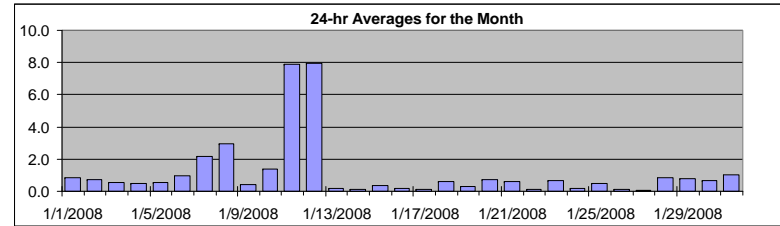
Monitoring Dates: January 1, 2008 to February 1, 2008

Guideline Limit:

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

 Summary

| | | | | |
|------------------------|------|-----|--------|-----------|
| Maximum 1-hr Average: | 34.2 | ppb | 8-Jan | 7:00 8:00 |
| Maximum 24-hr Average: | 8.0 | ppb | 12-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 33 hrs | Operational Time: | 701 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 99.2% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 14.0 | 6.8 | 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | 1.1 ppb | 0.1 ppb |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | | |
|------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|---------------|---------------|-----|
| | Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | | | 23:00 0:00 | |
| 1-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | A | 0 | 1 | 3 | 5 | 5 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 4.7 |
| 2-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 3 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0.7 | 6.8 |
| 3-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 2.4 | |
| 4-Jan-08 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 2.0 | |
| 5-Jan-08 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 2.0 | |
| 6-Jan-08 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 12.0 | |
| 7-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 4 | 4 | 8 | 5 | 5 | 5 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2.2 | 13.1 | |
| 8-Jan-08 | 0 | 0 | 0 | A | 0 | 0 | 0 | 34 | 0 | 2 | 4 | 5 | 6 | C | C | C | C | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.9 | 34.2 | |
| 9-Jan-08 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.6 | |
| 10-Jan-08 | 0 | 0 | 0 | A | 0 | 0 | 0 | 2 | 0 | 1 | 3 | 4 | 4 | 4 | 4 | 3 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1.4 | 4.3 | |
| 11-Jan-08 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 2 | 8 | 13 | 19 | 16 | 11 | 11 | 8 | 5 | 9 | 11 | 15 | 15 | 17 | 11 | 11 | 7.9 | 18.8 | | |
| 12-Jan-08 | 10 | A | 10 | 9 | 8 | 8 | 8 | 9 | 8 | 10 | 14 | 14 | 13 | 13 | 12 | 10 | 7 | 4 | 3 | 2 | 4 | 2 | 2 | 1 | 8.0 | 14.2 | | |
| 13-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0.2 | 0.7 | | |
| 14-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0.1 | 0.8 | |
| 15-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0.4 | 2.3 | |
| 16-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0.2 | 1.9 | |
| 17-Jan-08 | 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 | 0.1 | 0.4 | |
| 18-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 3.3 | |
| 19-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 0 | A | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0.3 | 1.6 | |
| 20-Jan-08 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 2 | 3 | 4 | A | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0.7 | 3.8 | |
| 21-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 8 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 8.4 | |
| 22-Jan-08 | 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 | 0.1 | 0.3 | |
| 23-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 4 | 4 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 4.4 | |
| 24-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.8 | |
| 25-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | A | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 4.7 | |
| 26-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | N | N | 0 | 0.1 | 0.7 | |
| 27-Jan-08 | N | 0 | N | N | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.6 | |
| 28-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 1 | 3 | N | 3 | 3 | 3 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 3.5 | |
| 29-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0.8 | 2.7 | |
| 30-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 1 | 2 | 3 | 3 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 2.8 | |
| 31-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 2 | 4 | 4 | 4 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.1 | 4.2 | |
| Hourly Avg | 0.5 | 0.1 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 1.9 | 0.5 | 1.6 | 2.3 | 3.0 | 3.1 | 2.1 | 2.4 | 1.8 | 0.9 | 0.7 | 1.0 | 0.8 | 0.7 | 0.8 | 0.5 | 0.5 | | | | |
| Hourly Max | 9.9 | 0.2 | 10.2 | 9.1 | 8.4 | 8.2 | 8.1 | 34.2 | 8.2 | 13.1 | 14.2 | 18.8 | 16.0 | 13.0 | 11.8 | 10.0 | 7.3 | 8.8 | 12.0 | 15.0 | 15.4 | 16.9 | 10.5 | 11.3 | | | | |

PASZA - Portable-Spirit River Oxides of Nitrogen Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

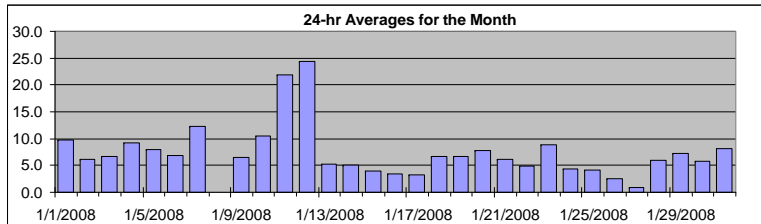
HOURLY AVERAGE TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: January 1, 2008 to February 1, 2008

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

| | | | |
|------------------------|------|-----|-----------------|
| Summary | | | |
| Maximum 1-hr Average: | 85.4 | ppb | 8-Jan 7:00 8:00 |
| Maximum 24-hr Average: | 24.4 | ppb | 12-Jan |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 33 hrs | Operational Time: | 700 hrs | | | | | | |
| Calibration Time: | 5 hrs | AMD Operational Uptime: | 99.2% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 28.8 | 21.9 | 9.8 | 5.6 | 3.6 | 2.1 | 0.7 | 7.7 ppb | 5.6 ppb |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------|------------------------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|-------|
| | Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | | | 23:00 |
| 1-Jan-08 | 17 | 16 | 16 | 15 | 14 | 14 | 15 | A | 14 | 14 | 14 | 13 | 12 | 6 | 7 | 6 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 9.7 | 16.7 |
| 2-Jan-08 | 5 | 5 | 5 | 6 | 7 | 7 | A | 9 | 8 | 9 | 14 | 18 | 11 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 6.1 | 18.3 | |
| 3-Jan-08 | 3 | 4 | 4 | 4 | 4 | A | 7 | 4 | 4 | 4 | 8 | 13 | 10 | 12 | 8 | 7 | 7 | 7 | 8 | 8 | 8 | 7 | 7 | 6 | 6.8 | 13.5 | |
| 4-Jan-08 | 6 | 6 | 7 | A | 9 | 8 | 8 | 4 | 4 | 4 | 5 | 10 | 8 | 5 | 11 | 13 | 14 | 19 | 21 | 15 | 12 | 9 | 6 | 6 | 9.2 | 20.9 | |
| 5-Jan-08 | 6 | 6 | A | 8 | 9 | 11 | 9 | 6 | 8 | 7 | 6 | 8 | 9 | 8 | 7 | 8 | 8 | 7 | 8 | 10 | 8 | 10 | 9 | 8 | 8.0 | 11.0 | |
| 6-Jan-08 | 8 | A | 6 | 7 | 7 | 8 | 7 | 5 | 5 | 4 | 5 | 7 | 5 | 5 | 5 | 5 | 8 | 7 | 26 | 6 | 6 | 6 | 5 | 4 | 6.8 | 25.6 | |
| 7-Jan-08 | A | 4 | 4 | 6 | 6 | 6 | 4 | 7 | 8 | 36 | 13 | 11 | 17 | 12 | 13 | 16 | 16 | 16 | 17 | 17 | 13 | 14 | 14 | 15 | 12.3 | 35.9 | |
| 8-Jan-08 | 16 | 14 | 12 | A | 10 | 12 | 12 | 85 | 13 | 17 | 13 | 13 | C | C | C | C | A | 17 | 14 | 13 | 14 | 14 | 14 | N | 85.4 | | |
| 9-Jan-08 | 13 | 10 | 8 | A | 8 | 6 | 6 | 5 | 6 | 7 | 5 | 5 | 5 | 5 | 4 | 5 | 6 | 6 | 8 | 7 | 8 | 7 | 6 | 6 | 6.5 | 12.8 | |
| 10-Jan-08 | 5 | 5 | 6 | A | 7 | 7 | 10 | 17 | 12 | 10 | 11 | 11 | 10 | 10 | 11 | 10 | 10 | 13 | 15 | 14 | 11 | 11 | 13 | 13 | 10.5 | 16.9 | |
| 11-Jan-08 | 14 | 14 | A | 13 | 11 | 12 | 12 | 14 | 18 | 23 | 25 | 30 | 26 | 18 | 19 | 18 | 17 | 26 | 29 | 34 | 34 | 35 | 28 | 29 | 21.8 | 35.3 | |
| 12-Jan-08 | 28 | A | 29 | 27 | 26 | 26 | 25 | 26 | 26 | 26 | 27 | 23 | 22 | 22 | 21 | 22 | 22 | 24 | 24 | 23 | 25 | 24 | 24 | 22 | 24.4 | 28.6 | |
| 13-Jan-08 | A | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 8 | 14 | 11 | 7 | 6 | 5 | 6 | A | 5.2 | 14.2 | | |
| 14-Jan-08 | 10 | 8 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | A | 4 | 5.0 | 10.5 | |
| 15-Jan-08 | 3 | 3 | 2 | 3 | 4 | 4 | 2 | 3 | 6 | 5 | 4 | 8 | 7 | 4 | 4 | 4 | 6 | 4 | 5 | 2 | 2 | A | 2 | 2 | 3.9 | 8.5 | |
| 16-Jan-08 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 10 | 10 | 4 | 3 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | A | 3 | 3 | 3 | 3.4 | 10.4 | |
| 17-Jan-08 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | A | 3 | 3 | 3 | 3 | 3.3 | 5.1 | |
| 18-Jan-08 | 3 | 4 | 4 | 8 | 6 | 9 | 9 | 10 | 9 | 11 | 11 | 7 | 9 | 6 | 5 | 5 | 5 | 5 | A | 6 | 6 | 5 | 5 | 5 | 6.7 | 11.4 | |
| 19-Jan-08 | 5 | 5 | 5 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 3 | 4 | 3 | 5 | A | 24 | 24 | 12 | 12 | 15 | 8 | 6.6 | 24.5 | |
| 20-Jan-08 | 13 | 13 | 4 | 4 | 5 | 6 | 5 | 4 | 4 | 4 | 4 | 2 | 5 | 5 | 8 | 14 | A | 20 | 10 | 9 | 7 | 8 | 11 | 12 | 7.7 | 20.5 | |
| 21-Jan-08 | 12 | 12 | 13 | 11 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 20 | A | 4 | 4 | 5 | 5 | 7 | 6 | 6 | 4 | 6.1 | 20.2 | |
| 22-Jan-08 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | A | 3 | 3 | 6 | 8 | 12 | 10 | 10 | 10 | 8 | 4.9 | 12.0 | | |
| 23-Jan-08 | 10 | 10 | 11 | 12 | 12 | 8 | 7 | 12 | 13 | 10 | 10 | 12 | 11 | A | 5 | 4 | 5 | 5 | 5 | 6 | 6 | 7 | 10 | 11 | 8.8 | 13.0 | |
| 24-Jan-08 | 12 | 7 | 7 | 7 | 6 | 5 | 4 | 5 | 4 | 3 | 3 | 3 | A | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 3 | 4.3 | 11.5 | |
| 25-Jan-08 | 4 | 6 | 5 | 4 | 4 | 3 | 4 | 10 | 4 | 5 | 6 | A | 8 | 3 | 3 | 7 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 4.1 | 10.5 | |
| 26-Jan-08 | 3 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | A | 3 | 4 | 5 | 4 | 4 | 3 | 2 | 2 | 1 | 1 | N | N | 1 | 2.5 | 4.8 | |
| 27-Jan-08 | N | 1 | N | N | 1 | 1 | 1 | 1 | 1 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 1.0 | 2.3 | |
| 28-Jan-08 | 4 | 4 | 3 | 5 | 4 | 3 | 5 | 6 | A | 7 | 7 | N | 6 | 6 | 7 | 9 | 8 | 10 | 12 | 7 | 3 | 5 | 5 | 5 | 6.0 | 12.2 | |
| 29-Jan-08 | 5 | 6 | 8 | 8 | 10 | 11 | 11 | A | 11 | 9 | 7 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 9 | 8 | 14 | 8 | 7 | 7.2 | 14.4 | |
| 30-Jan-08 | 6 | 5 | 9 | 5 | 7 | 7 | A | 6 | 10 | 7 | 7 | 7 | 6 | 5 | 5 | 3 | 3 | 3 | 6 | 5 | 5 | 4 | 4 | 5 | 5.7 | 10.4 | |
| 31-Jan-08 | 9 | 7 | 5 | 5 | 8 | A | 13 | 13 | 12 | 11 | 11 | 9 | 8 | 6 | 6 | 6 | 6 | 5 | 5 | 7 | 8 | 8 | 9 | 10 | 8.2 | 13.2 | |
| Hourly Avg | 8.2 | 6.6 | 6.8 | 6.9 | 6.8 | 6.8 | 7.0 | 9.7 | 7.8 | 8.9 | 8.0 | 8.4 | 7.9 | 6.2 | 7.1 | 7.0 | 6.8 | 7.9 | 9.7 | 8.9 | 7.9 | 8.5 | 8.2 | 7.5 | | | |
| Hourly Max | 28.0 | 16.3 | 28.6 | 27.0 | 26.0 | 25.6 | 25.3 | 85.4 | 25.8 | 35.9 | 26.7 | 30.4 | 25.5 | 21.5 | 21.2 | 21.8 | 22.1 | 26.1 | 28.8 | 33.6 | 33.6 | 35.3 | 28.3 | 29.2 | | | |

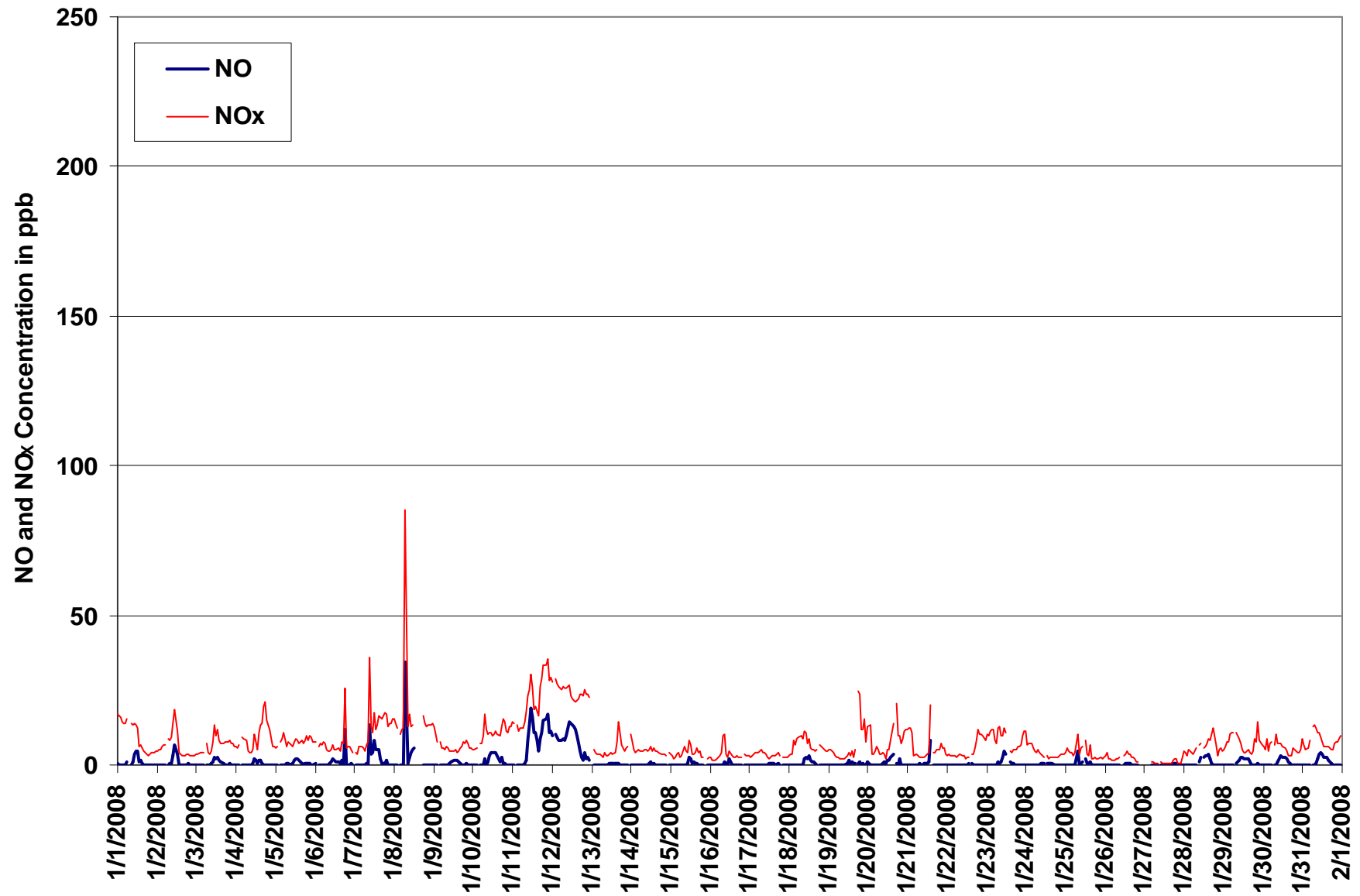


Figure 50. PASZA - Portable-Spirit River Oxides of Nitrogen 1-hr Average Monthly Trend

Station: Portable-Spirit River
 Station Owner: PASZA

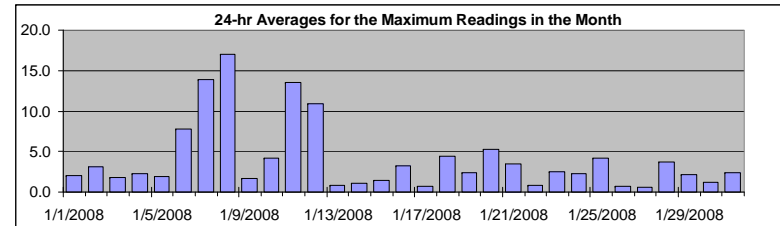
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Nitric Oxide (NO)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-------|-----|-------|-----------|
| Maximum 1-hr Value: | 270.8 | ppb | 8-Jan | 7:00 8:00 |
| Maximum 24-hr Value: | 17.0 | ppb | 8-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 33 hrs | Operational Time: | 701 hrs | | | | | | |
| Calibration Time: | 4 hrs | AMD Operational Uptime: | 99.2% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 47.0 | 15.5 | 2.9 | 0.8 | 0.2 | 0.0 | 0.0 | 3.9 ppb | 0.8 ppb |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 2 | 0 | 1 | 2 | 0 | 1 | 4 | A | 0 | 2 | 4 | 5 | 14 | 1 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 14.3 |
| 2-Jan-08 | 0 | 1 | 1 | 0 | 1 | 0 | A | 2 | 3 | 2 | 8 | 22 | 8 | 1 | 5 | 0 | 0 | 0 | 0 | 18 | 0 | 1 | 0 | 0 | 3.1 | 21.6 |
| 3-Jan-08 | 0 | 0 | 0 | 0 | 0 | A | 0 | 2 | 2 | 6 | 5 | 5 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 0 | 7 | 0 | 0 | 1 | 1.8 | 6.6 |
| 4-Jan-08 | 0 | 3 | 1 | A | 2 | 2 | 0 | 1 | 5 | 0 | 4 | 3 | 2 | 5 | 5 | 9 | 4 | 0 | 1 | 1 | 1 | 1 | 0 | 2 | 2.3 | 9.0 |
| 5-Jan-08 | 0 | 1 | A | 1 | 1 | 0 | 1 | 2 | 4 | 0 | 3 | 9 | 3 | 3 | 2 | 2 | 1 | 0 | 5 | 1 | 1 | 2 | 1 | 1 | 1.9 | 9.5 |
| 6-Jan-08 | 2 | A | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 9 | 2 | 1 | 2 | 1 | 24 | 0 | 125 | 0 | 0 | 0 | 7 | 0 | 7.8 | 125.0 |
| 7-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 167 | 26 | 7 | 12 | 21 | 10 | 12 | 4 | 1 | 4 | 47 | 0 | 2 | 0 | 0 | 13.9 | 167.3 |
| 8-Jan-08 | 1 | 0 | 1 | A | 1 | 0 | 0 | 271 | 3 | 6 | 5 | 7 | 7 | C | C | C | C | A | 1 | 0 | 0 | 1 | 1 | 0 | 17.0 | 270.8 |
| 9-Jan-08 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 3 | 4 | 6 | 5 | 3 | 4 | 1 | 0 | 5 | 0 | 0 | 0 | 1.6 | 6.4 |
| 10-Jan-08 | 0 | 1 | 1 | A | 1 | 0 | 1 | 16 | 1 | 2 | 5 | 5 | 5 | 5 | 5 | 4 | 2 | 33 | 3 | 3 | 3 | 1 | 0 | 0 | 4.2 | 33.1 |
| 11-Jan-08 | 0 | 0 | A | 0 | 0 | 0 | 1 | 2 | 4 | 27 | 18 | 21 | 22 | 15 | 28 | 21 | 8 | 21 | 19 | 28 | 23 | 23 | 15 | 16 | 13.6 | 27.9 |
| 12-Jan-08 | 12 | A | 13 | 11 | 10 | 10 | 11 | 11 | 18 | 14 | 17 | 16 | 14 | 14 | 14 | 12 | 10 | 6 | 6 | 6 | 12 | 4 | 3 | 7 | 10.9 | 18.5 |
| 13-Jan-08 | A | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | A | 0.8 | 2.6 |
| 14-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 0 | 2 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | A | 0 | 1.1 | 6.0 |
| 15-Jan-08 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 3 | 2 | 3 | 1 | 3 | 3 | 1 | 6 | 3 | 2 | 0 | 2 | 0 | 0 | A | 0 | 0 | 1.4 | 5.9 |
| 16-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 6 | 2 | 1 | 54 | 1 | 1 | 0 | 2 | 0 | 1 | 0 | A | 0 | 0 | 0 | 3.2 | 53.8 |
| 17-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 1 | 2 | 2 | 5 | 0 | A | 0 | 0 | 0 | 0 | 0.8 | 4.7 |
| 18-Jan-08 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 2 | 47 | 3 | 11 | 26 | 2 | 2 | 2 | 1 | 0 | A | 0 | 1 | 0 | 0 | 0 | 4.4 | 46.7 |
| 19-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 26 | 2 | 2 | 1 | 2 | A | 3 | 5 | 0 | 8 | 0 | 1 | 2.4 | 25.9 |
| 20-Jan-08 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 2 | 2 | 2 | 5 | 12 | A | 2 | 0 | 73 | 2 | 0 | 2 | 0 | 5.2 | 72.9 |
| 21-Jan-08 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 7 | 2 | 0 | 1 | 1 | 1 | 1 | 53 | A | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 6 | 3.5 | 52.6 |
| 22-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 1 | 1 | A | 1 | 1 | 0 | 1 | 1 | 2 | 0 | 2 | 0 | 0.8 | 7.1 |
| 23-Jan-08 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 19 | 2 | 4 | 6 | 6 | 6 | A | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 2.6 | 19.1 |
| 24-Jan-08 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 1 | 2 | A | 12 | 2 | 11 | 8 | 4 | 0 | 0 | 0 | 0 | 2 | 0 | 2.2 | 12.4 |
| 25-Jan-08 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 67 | 1 | 5 | 3 | A | 4 | 2 | 2 | 6 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 4.2 | 67.2 |
| 26-Jan-08 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | A | 1 | 1 | 2 | 1 | 4 | 0 | 1 | 1 | 0 | 0 | N | N | 0 | 0.7 | 3.6 |
| 27-Jan-08 | N | 0 | N | N | 0 | 0 | 0 | 0 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 2 | 0 | 0 | 0 | 1 | 0.6 | 3.6 |
| 28-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 2 | 19 | N | 10 | 9 | 4 | 24 | 3 | 1 | 1 | 0 | 4 | 1 | 1 | 2 | 3.7 | 24.0 |
| 29-Jan-08 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | A | 8 | 5 | 4 | 3 | 2 | 9 | 3 | 3 | 1 | 0 | 0 | 0 | 1 | 3 | 2 | 1 | 2.2 | 9.4 |
| 30-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | A | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 3 | 0 | 0 | 2 | 0 | 0 | 1.2 | 3.4 |
| 31-Jan-08 | 0 | 1 | 0 | 0 | 0 | A | 0 | 2 | 2 | 4 | 5 | 5 | 4 | 3 | 3 | 8 | 3 | 1 | 2 | 5 | 1 | 5 | 0 | 0 | 2.4 | 8.4 |
| Hourly Avg | 1.0 | 0.6 | 0.9 | 0.7 | 0.7 | 0.6 | 0.8 | 14.4 | 2.6 | 10.7 | 5.0 | 5.4 | 8.2 | 4.4 | 6.3 | 5.2 | 2.9 | 3.1 | 6.3 | 6.6 | 2.2 | 2.1 | 1.4 | 1.3 | | |
| Hourly Max | 12.1 | 2.5 | 12.5 | 11.2 | 9.7 | 10.0 | 10.5 | 270.8 | 18.5 | 167.3 | 25.9 | 21.6 | 53.8 | 21.0 | 52.6 | 24.0 | 24.5 | 33.1 | 125.0 | 72.9 | 23.4 | 22.9 | 15.2 | 16.1 | | |

Station: Portable-Spirit River
 Station Owner: PASZA

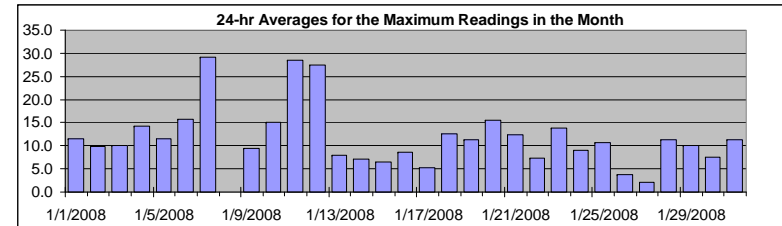
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Oxides of Nitrogen (NO_x)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-------|-----|-------|-----------|
| Maximum 1-hr Value: | 484.7 | ppb | 8-Jan | 7:00 8:00 |
| Maximum 24-hr Value: | 29.2 | ppb | 7-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|----------|---------|
| AIC Time: | 33 hrs | Operational Time: | 700 hrs | | | | | | |
| Calibration Time: | 5 hrs | AMD Operational Uptime: | 99.2% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 57.1 | 31.4 | 14.1 | 8.7 | 5.2 | 2.5 | 1.1 | 12.7 ppb | 8.7 ppb |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 19 | 17 | 17 | 18 | 14 | 15 | 20 | A | 14 | 14 | 14 | 14 | 26 | 7 | 17 | 6 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 11.6 | 26.0 |
| 2-Jan-08 | 5 | 6 | 7 | 9 | 8 | 7 | A | 11 | 12 | 15 | 21 | 38 | 19 | 5 | 9 | 4 | 4 | 4 | 4 | 23 | 4 | 4 | 4 | 4 | 9.9 | 38.4 |
| 3-Jan-08 | 4 | 4 | 5 | 5 | 5 | A | 11 | 6 | 7 | 13 | 16 | 19 | 15 | 16 | 9 | 11 | 9 | 9 | 9 | 23 | 9 | 9 | 7 | 10.0 | 22.8 | |
| 4-Jan-08 | 7 | 9 | 9 | A | 12 | 12 | 18 | 6 | 9 | 5 | 10 | 12 | 11 | 13 | 20 | 31 | 29 | 24 | 24 | 22 | 16 | 11 | 8 | 8 | 14.2 | 30.7 |
| 5-Jan-08 | 6 | 7 | A | 11 | 13 | 13 | 11 | 9 | 24 | 8 | 10 | 22 | 12 | 10 | 9 | 10 | 11 | 9 | 12 | 14 | 10 | 12 | 10 | 10 | 11.5 | 23.6 |
| 6-Jan-08 | 11 | A | 10 | 11 | 8 | 9 | 9 | 6 | 5 | 6 | 6 | 19 | 6 | 6 | 6 | 5 | 40 | 8 | 146 | 7 | 8 | 7 | 16 | 5 | 15.7 | 146.4 |
| 7-Jan-08 | A | 6 | 4 | 9 | 7 | 7 | 5 | 16 | 13 | 261 | 41 | 16 | 24 | 35 | 21 | 29 | 20 | 21 | 22 | 47 | 14 | 18 | 17 | 18 | 29.2 | 261.2 |
| 8-Jan-08 | 21 | 16 | 14 | A | 12 | 13 | 13 | 485 | 18 | 21 | 15 | 16 | C | C | C | C | C | A | 19 | 16 | 14 | 15 | 15 | 14 | N | 484.7 |
| 9-Jan-08 | 15 | 13 | 9 | A | 11 | 6 | 6 | 6 | 10 | 7 | 5 | 5 | 7 | 9 | 13 | 10 | 9 | 13 | 12 | 11 | 17 | 10 | 6 | 6 | 9.4 | 17.3 |
| 10-Jan-08 | 6 | 6 | 8 | A | 8 | 9 | 14 | 35 | 13 | 12 | 12 | 11 | 11 | 13 | 11 | 11 | 53 | 23 | 23 | 14 | 13 | 14 | 14 | 15.0 | 53.4 | |
| 11-Jan-08 | 16 | 14 | A | 15 | 12 | 14 | 14 | 17 | 21 | 43 | 31 | 34 | 32 | 24 | 40 | 31 | 24 | 40 | 37 | 48 | 42 | 42 | 33 | 32 | 28.5 | 47.7 |
| 12-Jan-08 | 30 | A | 31 | 31 | 28 | 27 | 28 | 28 | 37 | 31 | 28 | 26 | 23 | 23 | 24 | 23 | 24 | 26 | 27 | 28 | 33 | 26 | 25 | 26 | 27.5 | 36.7 |
| 13-Jan-08 | A | 6 | 5 | 4 | 4 | 4 | 5 | 4 | 9 | 6 | 7 | 6 | 10 | 6 | 7 | 13 | 26 | 15 | 10 | 7 | 6 | 7 | 8 | A | 7.9 | 25.6 |
| 14-Jan-08 | 13 | 12 | 7 | 5 | 5 | 5 | 5 | 8 | 6 | 6 | 5 | 7 | 13 | 5 | 13 | 5 | 6 | 6 | 5 | 9 | 5 | 6 | A | 6 | 7.2 | 13.4 |
| 15-Jan-08 | 6 | 6 | 4 | 7 | 5 | 5 | 3 | 8 | 10 | 9 | 5 | 10 | 8 | 4 | 11 | 8 | 8 | 5 | 8 | 4 | 5 | A | 3 | 5 | 6.5 | 10.6 |
| 16-Jan-08 | 3 | 2 | 2 | 2 | 2 | 4 | 4 | 7 | 11 | 23 | 14 | 4 | 70 | 7 | 5 | 3 | 8 | 3 | 5 | 3 | A | 4 | 4 | 4 | 8.5 | 70.1 |
| 17-Jan-08 | 5 | 3 | 4 | 5 | 5 | 6 | 6 | 8 | 9 | 6 | 6 | 4 | 2 | 3 | 4 | 6 | 8 | 11 | 4 | A | 4 | 3 | 4 | 3 | 5.2 | 10.8 |
| 18-Jan-08 | 4 | 4 | 4 | 16 | 16 | 11 | 12 | 12 | 13 | 57 | 12 | 24 | 39 | 7 | 6 | 8 | 5 | 6 | A | 7 | 7 | 6 | 5 | 5 | 12.5 | 57.0 |
| 19-Jan-08 | 5 | 5 | 5 | 5 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 10 | 33 | 6 | 7 | 3 | 12 | A | 30 | 36 | 16 | 33 | 21 | 13 | 11.3 | 36.3 |
| 20-Jan-08 | 22 | 18 | 5 | 4 | 5 | 13 | 12 | 4 | 4 | 15 | 8 | 4 | 6 | 6 | 14 | 31 | A | 28 | 12 | 101 | 10 | 11 | 14 | 13 | 15.6 | 101.2 |
| 21-Jan-08 | 13 | 13 | 14 | 14 | 3 | 4 | 4 | 13 | 9 | 4 | 5 | 4 | 4 | 5 | 105 | A | 5 | 6 | 7 | 10 | 11 | 10 | 10 | 13 | 12.4 | 104.7 |
| 22-Jan-08 | 3 | 4 | 4 | 4 | 5 | 4 | 3 | 5 | 17 | 4 | 5 | 4 | 3 | 3 | A | 4 | 5 | 9 | 14 | 16 | 16 | 13 | 13 | 9 | 7.3 | 17.3 |
| 23-Jan-08 | 15 | 12 | 14 | 17 | 17 | 9 | 9 | 33 | 19 | 18 | 16 | 16 | 16 | A | 9 | 9 | 9 | 14 | 10 | 9 | 9 | 13 | 14 | 14 | 13.9 | 32.7 |
| 24-Jan-08 | 16 | 9 | 10 | 10 | 7 | 5 | 5 | 11 | 11 | 15 | 4 | 6 | A | 19 | 7 | 15 | 16 | 10 | 6 | 3 | 4 | 6 | 8 | 4 | 9.0 | 19.3 |
| 25-Jan-08 | 6 | 7 | 5 | 5 | 6 | 6 | 7 | 96 | 8 | 13 | 10 | A | 12 | 8 | 7 | 23 | 3 | 2 | 4 | 2 | 2 | 9 | 4 | 4 | 10.8 | 95.9 |
| 26-Jan-08 | 4 | 8 | 2 | 2 | 2 | 2 | 2 | 6 | 3 | 3 | A | 5 | 6 | 7 | 4 | 8 | 4 | 4 | 3 | 2 | 1 | N | N | 1 | 3.8 | 8.1 |
| 27-Jan-08 | N | 1 | N | N | 1 | 1 | 1 | 1 | 1 | A | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 7 | 4 | 2 | 1 | 1 | 8 | 2.1 | 7.9 |
| 28-Jan-08 | 5 | 5 | 4 | 6 | 5 | 4 | 6 | 7 | A | 8 | 36 | N | 17 | 16 | 8 | 39 | 9 | 15 | 16 | 13 | 9 | 8 | 7 | 7 | 11.4 | 39.1 |
| 29-Jan-08 | 5 | 9 | 9 | 9 | 12 | 13 | 12 | A | 18 | 14 | 7 | 6 | 4 | 10 | 6 | 7 | 4 | 4 | 5 | 13 | 15 | 23 | 14 | 10 | 10.0 | 22.8 |
| 30-Jan-08 | 8 | 7 | 14 | 6 | 8 | 8 | A | 8 | 14 | 10 | 8 | 8 | 7 | 6 | 7 | 4 | 4 | 4 | 12 | 6 | 5 | 9 | 5 | 7 | 7.6 | 14.4 |
| 31-Jan-08 | 13 | 9 | 6 | 8 | 14 | A | 14 | 16 | 16 | 16 | 13 | 10 | 9 | 7 | 7 | 18 | 9 | 6 | 8 | 15 | 11 | 15 | 10 | 11 | 11.2 | 17.6 |
| Hourly Avg | 10.2 | 8.3 | 8.3 | 9.1 | 8.5 | 8.2 | 8.9 | 30.1 | 12.1 | 22.2 | 12.5 | 12.4 | 15.5 | 9.8 | 14.1 | 13.0 | 11.3 | 12.6 | 16.9 | 17.1 | 11.2 | 12.0 | 10.5 | 9.6 | | |
| Hourly Max | 29.8 | 18.3 | 31.1 | 30.8 | 27.9 | 26.9 | 27.8 | 484.7 | 36.7 | 261.2 | 41.5 | 38.4 | 70.1 | 34.8 | 104.7 | 39.1 | 40.2 | 53.4 | 146.4 | 101.2 | 42.3 | 42.4 | 33.2 | 32.3 | | |

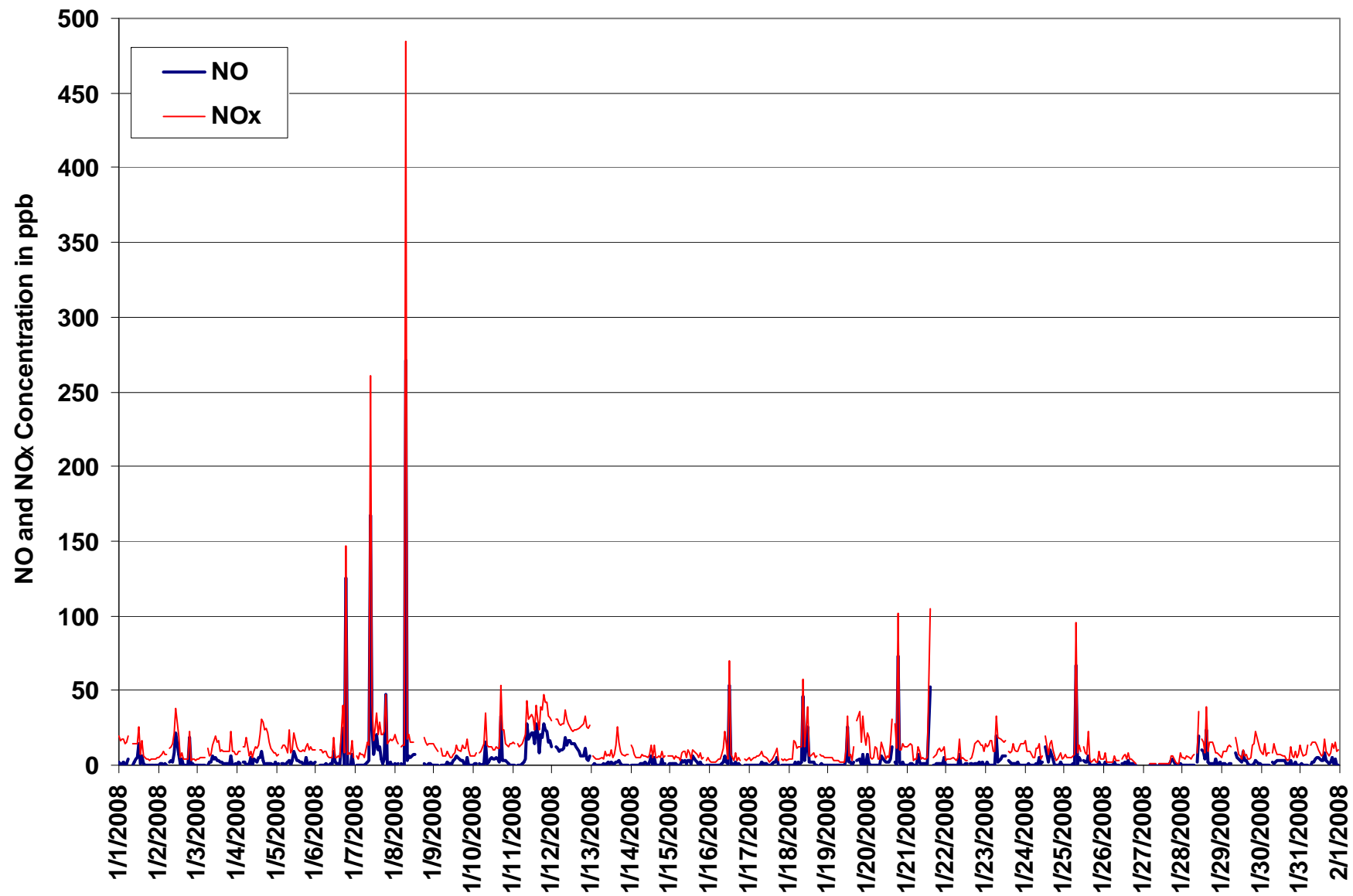


Figure 51. PASZA - Portable-Spirit River Oxides of Nitrogen Instantaneous (30 Second) Maximum Value Monthly Trend

PASZA - Portable-Spirit River Ozone Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Ozone (O₃)

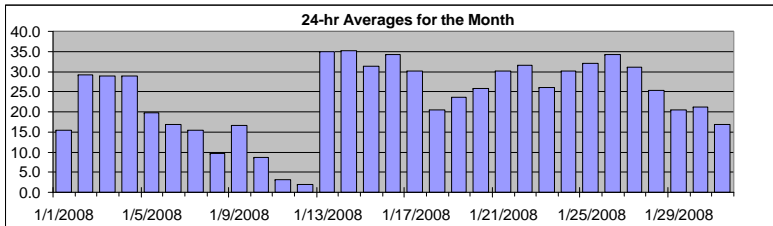
Monitoring Dates: January 1, 2008 to February 1, 2008

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

Summary

| | | | |
|-----------------------------|----------|--------|-------------|
| Number of 1-hr Exceedances: | 0 | | |
| Maximum 1-hr Average: | 41.3 ppb | 4-Jan | 13:00 14:00 |
| Maximum 24-hr Average: | 35.1 ppb | 14-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|------|------|-----|-----|----------|----------|
| AIC Time: | 33 hrs | Operational Time: | 703 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 99.2% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 38.6 | 37.3 | 32.5 | 24.5 | 17.2 | 3.7 | 0.0 | 23.5 ppb | 24.5 ppb |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum |
|------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|-----------------|---------------|
| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | | |
| 1-Jan-08 | 2 | 3 | 2 | 5 | 4 | 4 | 3 | A | 4 | 6 | 9 | 12 | 14 | 21 | 21 | 23 | 26 | 27 | 28 | 29 | 29 | 28 | 28 | 27 | 15.4 | 28.7 |
| 2-Jan-08 | 26 | 26 | 26 | 23 | 22 | 22 | A | 19 | 19 | 18 | 15 | 15 | 20 | 37 | 38 | 38 | 39 | 39 | 38 | 38 | 38 | 39 | 38 | 37 | 29.1 | 38.9 |
| 3-Jan-08 | 37 | 37 | 36 | 37 | 36 | A | 33 | 36 | 37 | 34 | 31 | 29 | 29 | 26 | 24 | 23 | 23 | 22 | 21 | 21 | 22 | 23 | 25 | 28.8 | 37.1 | |
| 4-Jan-08 | 24 | 24 | 23 | A | 20 | 20 | 26 | 37 | 38 | 39 | 39 | 34 | 38 | 41 | 35 | 33 | 31 | 22 | 18 | 24 | 25 | 24 | 26 | 25 | 28.9 | 41.3 |
| 5-Jan-08 | 25 | 25 | A | 23 | 22 | 21 | 23 | 27 | 25 | 25 | 27 | 23 | 19 | 20 | 19 | 18 | 17 | 16 | 15 | 13 | 14 | 12 | 12 | 13 | 19.8 | 27.3 |
| 6-Jan-08 | 13 | A | 15 | 14 | 15 | 13 | 14 | 15 | 16 | 17 | 17 | 18 | 19 | 19 | 18 | 19 | 17 | 16 | 16 | 18 | 17 | 18 | 20 | 22 | 16.7 | 21.7 |
| 7-Jan-08 | A | 22 | 22 | 20 | 20 | 20 | 21 | 19 | 17 | 14 | 17 | 19 | 17 | 20 | 18 | 14 | 12 | 10 | 7 | 8 | 11 | 10 | 10 | 7 | 15.4 | 22.3 |
| 8-Jan-08 | 8 | 9 | 10 | A | 11 | 9 | 9 | 22 | 8 | 5 | 11 | 12 | 13 | 13 | 12 | 12 | 8 | 7 | 5 | 7 | 8 | 8 | 8 | 8 | 9.6 | 22.2 |
| 9-Jan-08 | 9 | 15 | 18 | A | 19 | 21 | 21 | 21 | 20 | 19 | C | C | A | 20 | 19 | 18 | 16 | 15 | 13 | 13 | 12 | 12 | 14 | 13 | 16.5 | 21.4 |
| 10-Jan-08 | 13 | 13 | 12 | A | 10 | 10 | 8 | 3 | 5 | 7 | 9 | 11 | 12 | 12 | 11 | 11 | 10 | 8 | 4 | 5 | 6 | 6 | 5 | 4 | 8.6 | 13.2 |
| 11-Jan-08 | 3 | 4 | A | 4 | 4 | 3 | 3 | 2 | 0 | 1 | 4 | 5 | 7 | 9 | 8 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 8.6 |
| 12-Jan-08 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 7 | 8 | 9 | 8 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 8.7 |
| 13-Jan-08 | A | 32 | 34 | 35 | 35 | 35 | 36 | 38 | 36 | 38 | 38 | 38 | 38 | 37 | 37 | 34 | 28 | 31 | 34 | 36 | 36 | 33 | 33 | A | 35.0 | 38.3 |
| 14-Jan-08 | 28 | 30 | 33 | 36 | 35 | 36 | 36 | 36 | 35 | 34 | 34 | 34 | 34 | 36 | 35 | 37 | 37 | 37 | 38 | 37 | 36 | 37 | A | 35 | 35.1 | 37.8 |
| 15-Jan-08 | 36 | 35 | 34 | 33 | 30 | 30 | 30 | 30 | 27 | 29 | 30 | 27 | 28 | 32 | 33 | 32 | 31 | 32 | 31 | 33 | 33 | A | 35 | 34 | 31.4 | 35.7 |
| 16-Jan-08 | 33 | 35 | 35 | 35 | 34 | 34 | 30 | 30 | 25 | 24 | 33 | 35 | 35 | 36 | 37 | 38 | 36 | 37 | 37 | 37 | A | 37 | 37 | 37 | 34.2 | 37.5 |
| 17-Jan-08 | 37 | 36 | 36 | 36 | 37 | 37 | 34 | 33 | 35 | 35 | 32 | 27 | 26 | 26 | 26 | 25 | 24 | 23 | 25 | A | 26 | 25 | 26 | 26 | 30.2 | 37.3 |
| 18-Jan-08 | 25 | 24 | 24 | 18 | 20 | 18 | 17 | 17 | 18 | 16 | 17 | 21 | 20 | 22 | 24 | 24 | 23 | 22 | A | 20 | 20 | 21 | 21 | 22 | 20.5 | 24.8 |
| 19-Jan-08 | 22 | 22 | 22 | 25 | 27 | 28 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 26 | 27 | 26 | A | 8 | 9 | 21 | 21 | 18 | 25 | 23.7 | 27.8 |
| 20-Jan-08 | 22 | 22 | 31 | 30 | 27 | 25 | 27 | 29 | 29 | 33 | 36 | 37 | 29 | 30 | 30 | 26 | A | 19 | 22 | 20 | 20 | 18 | 16 | 16 | 25.7 | 36.6 |
| 21-Jan-08 | 16 | 16 | 15 | 18 | 34 | 33 | 34 | 34 | 34 | 34 | 35 | 35 | 35 | 35 | 33 | A | 35 | 33 | 31 | 30 | 29 | 31 | 29 | 33 | 30.0 | 35.3 |
| 22-Jan-08 | 33 | 32 | 34 | 33 | 32 | 32 | 32 | 33 | 33 | 34 | 36 | 37 | 37 | 37 | A | 36 | 36 | 34 | 30 | 24 | 26 | 23 | 22 | 23 | 31.7 | 36.7 |
| 23-Jan-08 | 21 | 21 | 19 | 18 | 18 | 23 | 24 | 19 | 18 | 22 | 22 | 24 | 28 | A | 37 | 37 | 36 | 35 | 34 | 33 | 31 | 30 | 26 | 24 | 26.0 | 37.1 |
| 24-Jan-08 | 24 | 27 | 26 | 25 | 26 | 27 | 26 | 24 | 28 | 30 | 29 | 32 | A | 34 | 35 | 35 | 35 | 34 | 34 | 34 | 33 | 32 | 32 | 33 | 30.2 | 35.0 |
| 25-Jan-08 | 30 | 27 | 28 | 29 | 29 | 31 | 29 | 30 | 30 | 28 | 27 | A | 28 | 34 | 35 | 31 | 36 | 35 | 35 | 36 | 37 | 37 | 36 | 35 | 32.0 | 37.3 |
| 26-Jan-08 | 35 | 35 | 37 | 38 | 39 | 39 | 39 | 38 | 38 | 38 | A | 37 | 36 | 35 | 36 | 29 | 25 | 26 | 28 | 29 | 30 | N | N | 30 | 34.2 | 39.0 |
| 27-Jan-08 | N | 30 | N | N | 30 | 31 | 31 | 31 | 30 | A | 31 | 32 | 32 | 32 | 32 | 32 | 32 | 31 | 31 | 31 | 32 | 32 | 31 | 28 | 31.1 | 32.1 |
| 28-Jan-08 | 26 | 26 | 27 | 25 | 25 | 26 | 24 | 24 | A | 25 | 27 | N | 28 | 27 | 27 | 25 | 24 | 22 | 20 | 25 | 28 | 26 | 25 | 25 | 25.3 | 28.4 |
| 29-Jan-08 | 24 | 22 | 20 | 20 | 18 | 16 | 15 | A | 15 | 18 | 21 | 23 | 25 | 25 | 24 | 23 | 23 | 23 | 23 | 18 | 19 | 14 | 19 | 20 | 20.4 | 24.9 |
| 30-Jan-08 | 20 | 21 | 17 | 21 | 19 | 18 | A | 20 | 16 | 20 | 21 | 22 | 23 | 24 | 24 | 25 | 24 | 24 | 21 | 21 | 21 | 22 | 21 | 20 | 21.2 | 25.1 |
| 31-Jan-08 | 16 | 18 | 19 | 18 | 15 | A | 10 | 10 | 11 | 15 | 17 | 19 | 20 | 21 | 21 | 21 | 20 | 20 | 20 | 18 | 17 | 16 | 15 | 14 | 17.0 | 21.4 |
| Hourly Avg | 21.8 | 23.7 | 23.5 | 23.8 | 23.0 | 22.8 | 22.8 | 24.2 | 22.5 | 22.8 | 24.0 | 24.6 | 25.0 | 26.6 | 26.2 | 25.4 | 24.5 | 23.3 | 22.2 | 22.2 | 22.5 | 21.9 | 21.5 | 22.1 | | |
| Hourly Max | 37.3 | 36.9 | 37.4 | 38.2 | 39.0 | 38.7 | 38.6 | 37.9 | 38.1 | 38.8 | 38.8 | 37.8 | 37.9 | 41.3 | 38.2 | 38.1 | 38.6 | 38.9 | 38.1 | 37.7 | 38.0 | 38.5 | 37.8 | 37.4 | | |

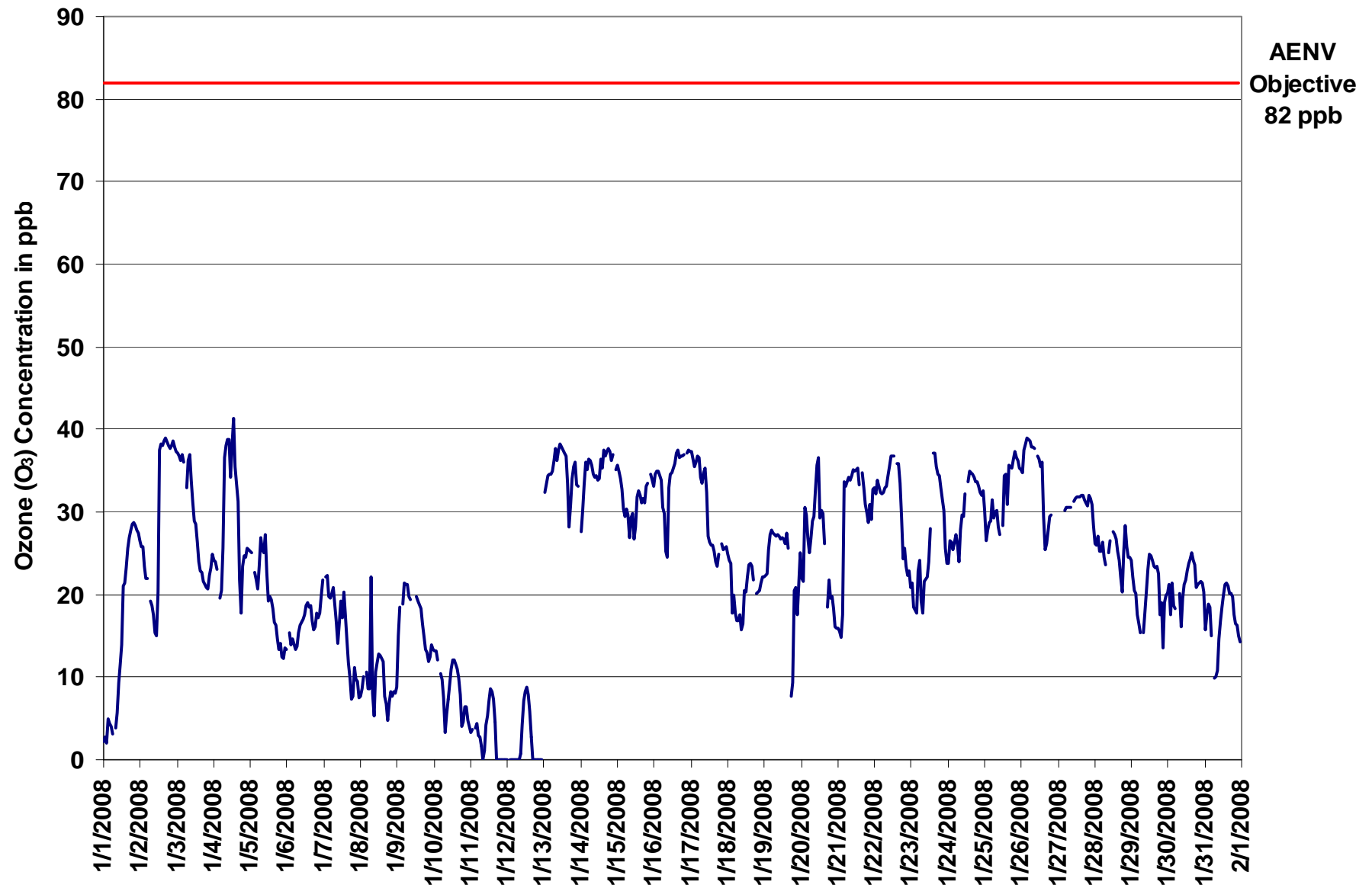


Figure 52. PASZA - Portable-Spirit River Ozone 1-hr Average Monthly Trend

Station: Portable-Spirit River
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

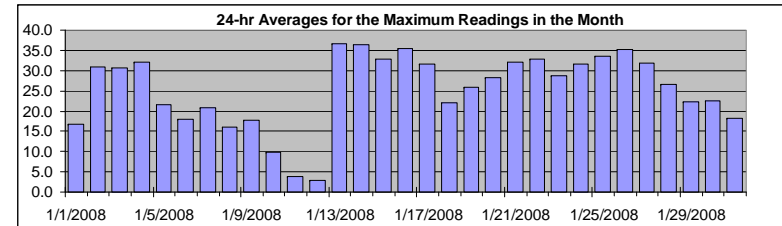
Ozone (O₃)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-------|-----|--------|-----------|
| Maximum 1-hr Value: | 132.3 | ppb | 8-Jan | 7:00 8:00 |
| Maximum 24-hr Value: | 36.6 | ppb | 13-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|------|------|-----|-----|----------|----------|
| AIC Time: | 33 hrs | Operational Time: | 703 hrs | | | | | | |
| Calibration Time: | 2 hrs | AMD Operational Uptime: | 99.2% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 39.8 | 38.4 | 34.2 | 26.3 | 19.2 | 4.7 | 0.0 | 25.3 ppb | 26.3 ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | 3 | 4 | 3 | 10 | 8 | 5 | 4 | A | 4 | 8 | 10 | 13 | 20 | 22 | 23 | 25 | 26 | 28 | 28 | 29 | 29 | 29 | 28 | 28 | 16.9 | 29.3 |
| 2-Jan-08 | 27 | 27 | 27 | 25 | 23 | 23 | A | 21 | 20 | 19 | 17 | 18 | 38 | 38 | 39 | 39 | 39 | 39 | 39 | 38 | 39 | 39 | 38 | 38 | 30.9 | 39.5 |
| 3-Jan-08 | 38 | 37 | 37 | 38 | 37 | A | 35 | 37 | 38 | 37 | 36 | 34 | 34 | 29 | 25 | 24 | 24 | 23 | 23 | 23 | 23 | 24 | 24 | 26 | 30.7 | 37.9 |
| 4-Jan-08 | 26 | 25 | 25 | A | 22 | 23 | 35 | 38 | 39 | 40 | 40 | 37 | 42 | 42 | 42 | 40 | 38 | 28 | 22 | 25 | 26 | 26 | 27 | 26 | 32.1 | 42.4 |
| 5-Jan-08 | 26 | 26 | A | 24 | 24 | 24 | 26 | 30 | 29 | 27 | 28 | 27 | 20 | 21 | 20 | 20 | 18 | 18 | 16 | 16 | 16 | 14 | 13 | 15 | 21.6 | 29.9 |
| 6-Jan-08 | 15 | A | 16 | 16 | 16 | 15 | 15 | 16 | 17 | 18 | 18 | 19 | 19 | 20 | 19 | 19 | 18 | 18 | 18 | 19 | 19 | 19 | 21 | 23 | 17.9 | 22.7 |
| 7-Jan-08 | A | 23 | 23 | 22 | 20 | 21 | 22 | 21 | 19 | 89 | 20 | 21 | 20 | 22 | 20 | 18 | 14 | 13 | 11 | 10 | 13 | 12 | 12 | 13 | 20.9 | 89.5 |
| 8-Jan-08 | 11 | 12 | 13 | A | 12 | 10 | 10 | 132 | 12 | 9 | 12 | 13 | 14 | 14 | 13 | 13 | 11 | 8 | 6 | 9 | 9 | 8 | 8 | 9 | 16.0 | 132.3 |
| 9-Jan-08 | 10 | 20 | 20 | A | 21 | 22 | 22 | 22 | 21 | 20 | C | C | A | 20 | 20 | 19 | 18 | 16 | 15 | 14 | 14 | 14 | 14 | 14 | 17.8 | 22.0 |
| 10-Jan-08 | 14 | 14 | 13 | A | 11 | 10 | 10 | 6 | 7 | 8 | 10 | 12 | 12 | 12 | 12 | 11 | 9 | 9 | 6 | 7 | 7 | 6 | 5 | 9.8 | 13.9 | |
| 11-Jan-08 | 4 | 4 | A | 5 | 5 | 4 | 3 | 3 | 0 | 3 | 5 | 6 | 8 | 9 | 9 | 9 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3.7 | 9.3 |
| 12-Jan-08 | 0 | A | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | 6 | 8 | 9 | 9 | 8 | 7 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2.8 | 9.3 |
| 13-Jan-08 | A | 34 | 35 | 35 | 35 | 36 | 38 | 38 | 38 | 39 | 39 | 39 | 39 | 38 | 38 | 37 | 33 | 34 | 36 | 38 | 38 | 36 | 35 | A | 36.6 | 39.1 |
| 14-Jan-08 | 30 | 34 | 36 | 37 | 36 | 37 | 37 | 37 | 36 | 35 | 35 | 34 | 37 | 38 | 37 | 39 | 38 | 38 | 39 | 39 | 37 | 39 | A | 36 | 36.4 | 38.5 |
| 15-Jan-08 | 37 | 36 | 35 | 34 | 33 | 31 | 31 | 31 | 30 | 32 | 31 | 29 | 31 | 33 | 34 | 33 | 33 | 33 | 33 | 34 | 35 | A | 35 | 35 | 32.9 | 36.5 |
| 16-Jan-08 | 34 | 35 | 35 | 35 | 35 | 34 | 32 | 31 | 30 | 29 | 35 | 35 | 36 | 37 | 38 | 38 | 37 | 37 | 37 | 37 | A | 38 | 38 | 38 | 35.4 | 38.4 |
| 17-Jan-08 | 38 | 38 | 37 | 37 | 38 | 38 | 35 | 35 | 36 | 37 | 37 | 28 | 27 | 27 | 27 | 26 | 25 | 25 | 25 | A | 27 | 26 | 26 | 28 | 31.5 | 38.4 |
| 18-Jan-08 | 26 | 25 | 24 | 23 | 22 | 20 | 19 | 19 | 19 | 18 | 21 | 22 | 21 | 24 | 24 | 24 | 24 | 23 | A | 20 | 21 | 21 | 22 | 22 | 22.0 | 26.4 |
| 19-Jan-08 | 23 | 23 | 23 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 29 | 28 | A | 16 | 17 | 24 | 27 | 23 | 29 | 25.8 | 29.5 |
| 20-Jan-08 | 27 | 29 | 32 | 31 | 28 | 27 | 28 | 29 | 31 | 34 | 37 | 37 | 37 | 33 | 32 | 31 | A | 24 | 24 | 22 | 21 | 19 | 19 | 18 | 28.3 | 37.3 |
| 21-Jan-08 | 18 | 18 | 16 | 34 | 35 | 34 | 35 | 35 | 35 | 35 | 36 | 36 | 36 | 36 | 36 | A | 35 | 34 | 32 | 32 | 33 | 34 | 31 | 34 | 32.2 | 36.3 |
| 22-Jan-08 | 34 | 33 | 35 | 35 | 33 | 33 | 33 | 34 | 34 | 36 | 37 | 37 | 37 | 37 | A | 36 | 36 | 36 | 32 | 26 | 27 | 27 | 24 | 24 | 32.9 | 37.3 |
| 23-Jan-08 | 23 | 24 | 21 | 23 | 23 | 25 | 27 | 24 | 22 | 26 | 25 | 27 | 30 | A | 38 | 38 | 37 | 36 | 36 | 34 | 34 | 32 | 29 | 27 | 28.7 | 38.1 |
| 24-Jan-08 | 26 | 28 | 29 | 28 | 28 | 28 | 28 | 26 | 31 | 31 | 31 | 33 | A | 35 | 36 | 36 | 35 | 35 | 35 | 34 | 34 | 33 | 33 | 33 | 31.6 | 35.8 |
| 25-Jan-08 | 33 | 28 | 29 | 29 | 31 | 32 | 31 | 32 | 32 | 29 | 28 | A | 30 | 36 | 36 | 36 | 36 | 36 | 36 | 37 | 38 | 38 | 37 | 37 | 33.5 | 38.3 |
| 26-Jan-08 | 36 | 37 | 38 | 39 | 40 | 40 | 40 | 39 | 39 | 39 | A | 38 | 37 | 36 | 37 | 35 | 26 | 28 | 29 | 30 | 30 | N | N | 31 | 35.3 | 39.7 |
| 27-Jan-08 | N | 31 | N | N | 31 | 31 | 31 | 31 | 31 | A | 32 | 32 | 32 | 32 | 32 | 32 | 33 | 32 | 32 | 32 | 32 | 32 | 32 | 31 | 31.8 | 32.6 |
| 28-Jan-08 | 27 | 27 | 28 | 27 | 26 | 27 | 26 | 25 | A | 26 | 27 | N | 28 | 28 | 27 | 26 | 25 | 24 | 22 | 29 | 30 | 27 | 27 | 26 | 26.6 | 29.5 |
| 29-Jan-08 | 25 | 25 | 22 | 21 | 20 | 18 | 17 | A | 17 | 20 | 23 | 25 | 26 | 26 | 25 | 24 | 24 | 24 | 24 | 22 | 22 | 23 | 21 | 22 | 22.3 | 25.6 |
| 30-Jan-08 | 22 | 22 | 21 | 22 | 20 | 19 | A | 21 | 21 | 21 | 22 | 23 | 25 | 25 | 26 | 26 | 25 | 25 | 23 | 22 | 22 | 23 | 22 | 22 | 22.6 | 26.0 |
| 31-Jan-08 | 18 | 19 | 20 | 20 | 19 | A | 12 | 12 | 14 | 17 | 19 | 20 | 21 | 22 | 22 | 22 | 21 | 21 | 21 | 20 | 18 | 17 | 16 | 15 | 18.3 | 22.0 |
| Hourly Avg | 23.2 | 25.4 | 24.8 | 26.1 | 24.4 | 24.1 | 24.5 | 29.4 | 24.5 | 27.1 | 25.7 | 26.0 | 27.4 | 27.7 | 27.5 | 27.1 | 26.1 | 25.0 | 23.9 | 23.8 | 23.9 | 23.6 | 22.8 | 23.4 | | |
| Hourly Max | 38.4 | 37.6 | 38.2 | 39.2 | 39.7 | 39.6 | 39.5 | 132.3 | 39.4 | 89.5 | 39.9 | 39.0 | 41.7 | 41.9 | 42.4 | 39.8 | 39.0 | 39.5 | 38.9 | 38.5 | 38.9 | 39.3 | 38.4 | 37.9 | | |

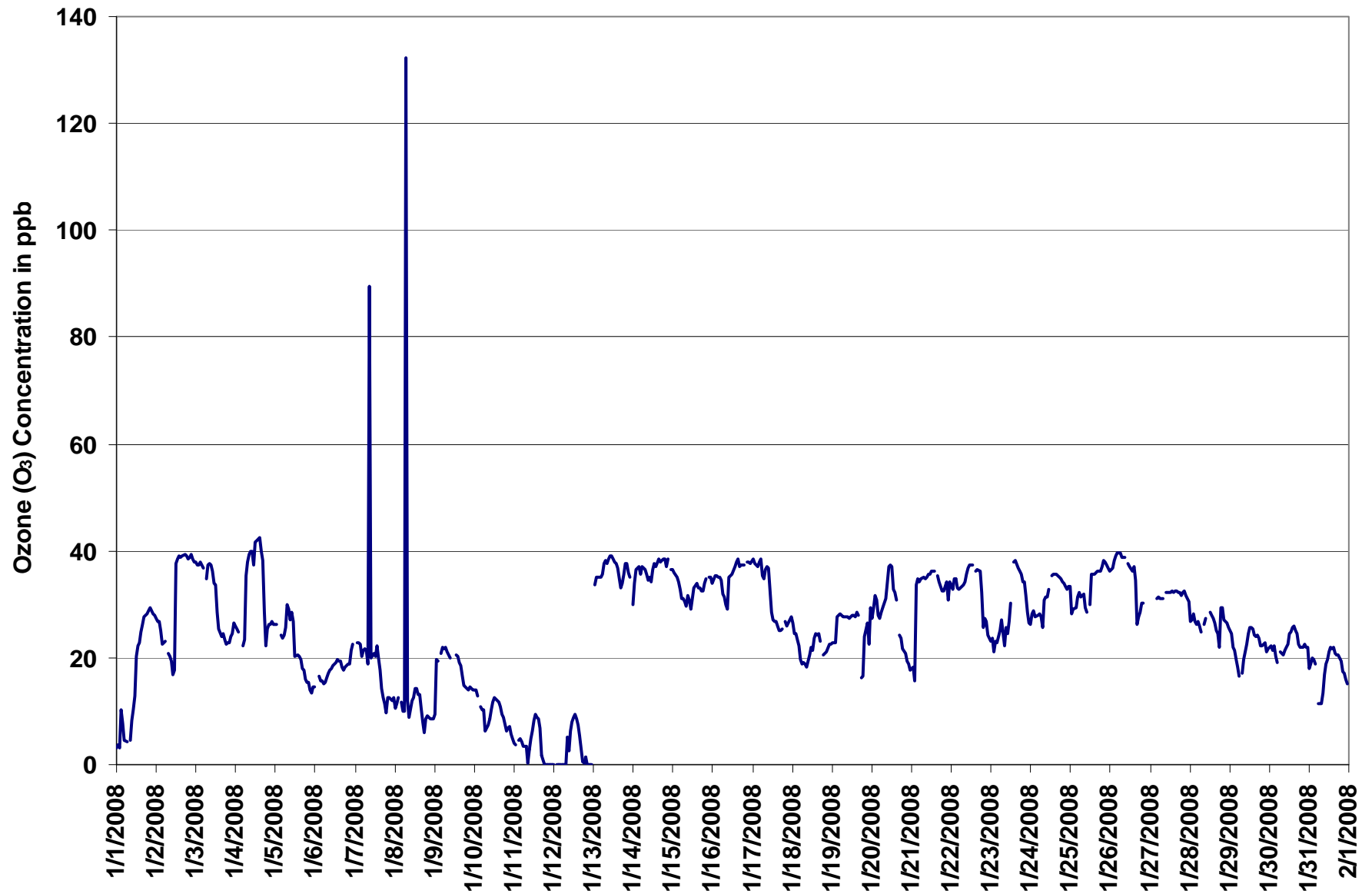
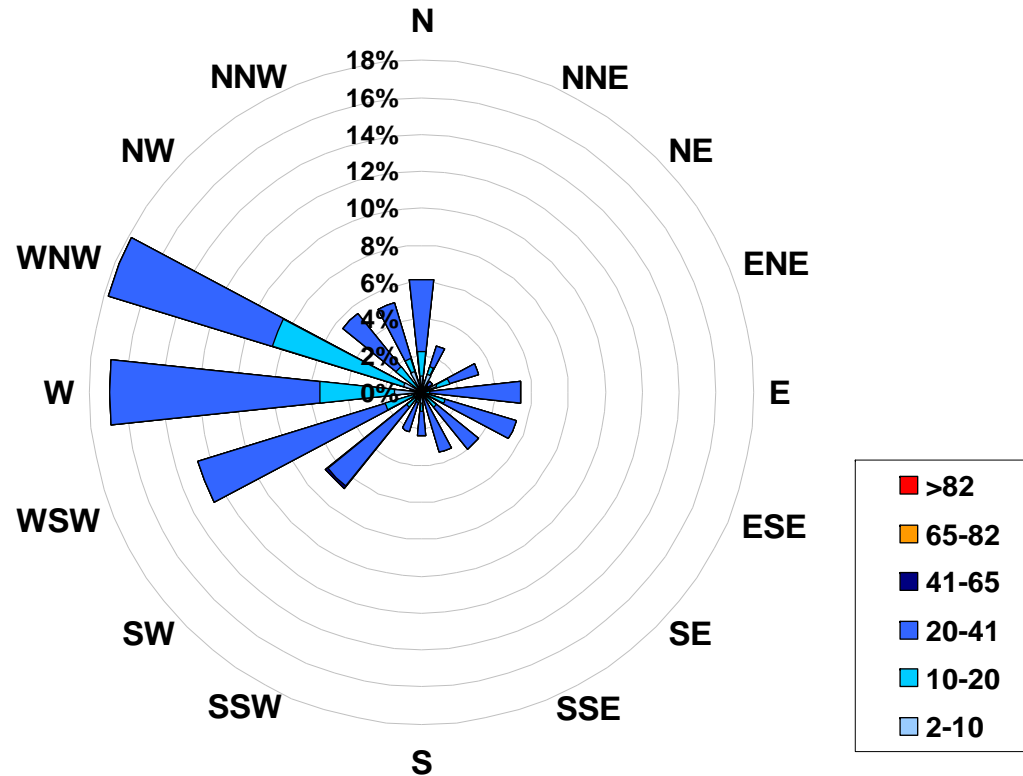


Figure 53. PASZA - Portable-Spirit River Ozone Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Ozone (in ppb) Located at the Portable-Spirit River Site for January 2008



Calms: 0%

| Frequency Distribution of O ₃ in ppb | | | |
|---|----|----|-----------------|
| Range | | | Frequency (hrs) |
| 2.0 | < | 10 | 93 |
| 10 | to | 20 | 144 |
| 20 | to | 41 | 464 |
| 41 | to | 65 | 1 |
| 65 | to | 82 | 0 |
| | > | 82 | 0 |
| Total Non-Zero Values | | | 702 |

PASZA - Portable-Spirit River Ozone Eight Hour Average Summary

Station: Portable-Spirit River
 Station Owner: PASZA

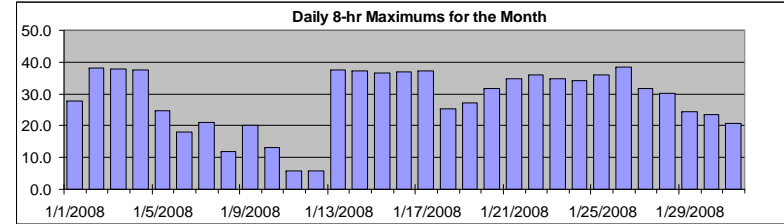
EIGHT HOUR RUNNING AVERAGE TABLE

Ozone (O₃)

Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: Alberta Environment: 8-hr 65 ppb

| | |
|-----------------------------|-----------------------------|
| Number of 8-hr Exceedances: | 0 |
| Maximum 8-hr Average: | 38.3 ppb 26-Jan 10:00 11:00 |



| | | | | | | | |
|------------|------|------|------|------|------|-----|-----|
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 |
| | 37.9 | 36.8 | 31.8 | 24.3 | 17.7 | 4.1 | 0.0 |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | Daily Maximum | | |
|-----------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|----------------|---------------|
| | Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | | 22:00 23:00 | 23:00 0:00 |
| 1-Jan-08 | 5 | 5 | 5 | 6 | 6 | 6 | 3 | 3 | 4 | 4 | 5 | 6 | 7 | 10 | 12 | 14 | 16 | 19 | 21 | 24 | 25 | 26 | 27 | 28 | 27.6 | |
| 2-Jan-08 | 28 | 28 | 27 | 27 | 26 | 25 | 25 | 24 | 22 | 21 | 20 | 19 | 18 | 21 | 23 | 25 | 28 | 30 | 33 | 36 | 38 | 38 | 38 | 38 | 38.3 | |
| 3-Jan-08 | 38 | 38 | 37 | 37 | 37 | 37 | 36 | 36 | 36 | 36 | 35 | 34 | 33 | 32 | 31 | 29 | 27 | 26 | 25 | 24 | 23 | 22 | 22 | 22 | 37.9 | |
| 4-Jan-08 | 22 | 23 | 23 | 23 | 23 | 23 | 23 | 25 | 27 | 29 | 31 | 32 | 34 | 36 | 38 | 37 | 36 | 34 | 32 | 30 | 29 | 27 | 25 | 24 | 37.6 | |
| 5-Jan-08 | 24 | 24 | 25 | 25 | 24 | 24 | 23 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 23 | 22 | 21 | 20 | 18 | 17 | 17 | 16 | 15 | 14 | 24.8 | |
| 6-Jan-08 | 14 | 13 | 13 | 14 | 14 | 14 | 14 | 14 | 15 | 15 | 15 | 16 | 16 | 17 | 17 | 18 | 18 | 18 | 18 | 18 | 17 | 17 | 17 | 18 | 17.9 | |
| 7-Jan-08 | 18 | 19 | 20 | 20 | 20 | 21 | 21 | 20 | 20 | 19 | 18 | 18 | 18 | 18 | 18 | 17 | 16 | 16 | 15 | 13 | 13 | 11 | 10 | 9 | 20.9 | |
| 8-Jan-08 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 12 | 11 | 11 | 11 | 10 | 9 | 9 | 8 | 8 | 7 | 12.0 | |
| 9-Jan-08 | 7 | 8 | 10 | 11 | 12 | 14 | 16 | 18 | 19 | 20 | N | N | N | N | N | N | N | N | N | 16 | 16 | 15 | 14 | 14 | 20.0 | |
| 10-Jan-08 | 13 | 13 | 13 | 13 | 13 | 12 | 11 | 10 | 9 | 8 | 8 | 8 | 8 | 8 | 9 | 10 | 11 | 11 | 10 | 9 | 8 | 8 | 7 | 6 | 13.3 | |
| 11-Jan-08 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 5 | 5 | 6 | 6 | 5 | 4 | 4 | 3 | 1 | 1 | 5.8 | |
| 12-Jan-08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 5 | 5 | 6 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | 5.7 | |
| 13-Jan-08 | 0 | 5 | 10 | 14 | 19 | 24 | 30 | 35 | 35 | 36 | 36 | 37 | 37 | 37 | 37 | 37 | 36 | 35 | 34 | 34 | 34 | 34 | 33 | 33 | 37.4 | |
| 14-Jan-08 | 33 | 33 | 33 | 33 | 33 | 33 | 34 | 34 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 36 | 36 | 37 | 37 | 37 | 37 | 37.1 | |
| 15-Jan-08 | 37 | 36 | 36 | 35 | 34 | 33 | 33 | 32 | 31 | 30 | 30 | 29 | 29 | 29 | 29 | 30 | 30 | 30 | 31 | 31 | 32 | 32 | 32 | 33 | 36.6 | |
| 16-Jan-08 | 33 | 33 | 34 | 34 | 34 | 34 | 34 | 33 | 32 | 31 | 31 | 31 | 31 | 31 | 32 | 33 | 34 | 36 | 36 | 37 | 37 | 37 | 37 | 37 | 37.0 | |
| 17-Jan-08 | 37 | 37 | 37 | 37 | 37 | 37 | 36 | 36 | 35 | 35 | 35 | 34 | 33 | 31 | 30 | 29 | 28 | 26 | 25 | 25 | 25 | 25 | 25 | 25 | 37.1 | |
| 18-Jan-08 | 25 | 25 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 18 | 18 | 18 | 19 | 20 | 21 | 22 | 22 | 22 | 22 | 22 | 22 | 21 | 25.2 | |
| 19-Jan-08 | 21 | 21 | 21 | 22 | 23 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 24 | 21 | 21 | 20 | 18 | 18 | 27.2 | |
| 20-Jan-08 | 18 | 18 | 21 | 23 | 24 | 25 | 26 | 26 | 27 | 29 | 29 | 30 | 31 | 31 | 32 | 31 | 31 | 29 | 27 | 25 | 24 | 22 | 20 | 19 | 31.6 | |
| 21-Jan-08 | 18 | 18 | 17 | 17 | 18 | 20 | 23 | 25 | 27 | 29 | 32 | 34 | 34 | 35 | 35 | 35 | 35 | 35 | 34 | 33 | 32 | 32 | 31 | 31 | 34.7 | |
| 22-Jan-08 | 31 | 31 | 31 | 32 | 32 | 32 | 33 | 33 | 33 | 33 | 33 | 34 | 34 | 35 | 35 | 36 | 36 | 36 | 35 | 33 | 32 | 30 | 29 | 27 | 35.9 | |
| 23-Jan-08 | 25 | 24 | 22 | 22 | 21 | 21 | 21 | 20 | 20 | 20 | 20 | 21 | 22 | 22 | 24 | 27 | 29 | 31 | 33 | 34 | 35 | 34 | 33 | 31 | 34.7 | |
| 24-Jan-08 | 30 | 29 | 28 | 27 | 26 | 26 | 26 | 26 | 26 | 27 | 27 | 28 | 28 | 29 | 30 | 32 | 33 | 33 | 34 | 34 | 34 | 34 | 34 | 33 | 34.3 | |
| 25-Jan-08 | 33 | 32 | 31 | 30 | 30 | 30 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 34 | 34 | 35 | 35 | 36 | 36.1 | |
| 26-Jan-08 | 36 | 36 | 36 | 36 | 37 | 37 | 37 | 37 | 38 | 38 | 38 | 38 | 38 | 38 | 37 | 37 | 36 | 34 | 32 | 32 | 31 | 30 | 29 | N | N | 38.3 |
| 27-Jan-08 | N | N | N | N | N | N | N | N | N | N | N | N | N | N | 31 | 31 | 31 | 32 | 32 | 32 | 32 | 32 | 32 | 31 | 31 | 31.8 |
| 28-Jan-08 | 30 | 30 | 29 | 28 | 28 | 27 | 26 | 26 | 25 | 25 | 25 | N | N | N | N | N | N | 26 | 26 | 25 | 25 | 25 | 25 | 24 | 24 | 30.3 |
| 29-Jan-08 | 24 | 24 | 24 | 24 | 22 | 21 | 20 | 19 | 18 | 18 | 18 | 18 | 18 | 19 | 20 | 22 | 22 | 23 | 23 | 24 | 23 | 22 | 21 | 20 | 20 | 24.4 |
| 30-Jan-08 | 19 | 19 | 18 | 19 | 19 | 20 | 20 | 20 | 19 | 19 | 19 | 19 | 19 | 20 | 21 | 21 | 22 | 23 | 23 | 23 | 23 | 23 | 23 | 22 | 22 | 23.4 |
| 31-Jan-08 | 21 | 20 | 20 | 19 | 19 | 18 | 17 | 15 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 17 | 18 | 19 | 20 | 20 | 20 | 19 | 18 | 17 | 20.8 | |

Hourly Max 37.9 37.7 37.4 37.4 37.1 36.9 37.1 37.5 37.8 38.2 38.3 38.1 37.7 37.3 37.6 37.2 36.4 35.8 36.2 36.5 38.1 38.3 38.2 38.1

PASZA - Portable-Spirit River Relative Humidity Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

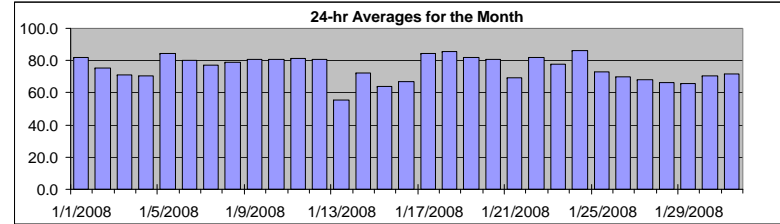
HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|---|--------|-----------|
| Maximum 1-hr Average: | 94.8 | % | 17-Jan | 2:00 3:00 |
| Maximum 24-hr Value: | 86.2 | % | 24-Jan | |



| | | | | | | | | | |
|-------------------|-------|-------------------------|---------|------|------|------|------|---------|--------|
| AIC Time: | 0 hrs | Operational Time: | 739 hrs | | | | | | |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 99.3% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 91.6 | 88.1 | 83.2 | 77.8 | 68.0 | 58.8 | 51.4 | 75.3 % | 77.8 % |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|---------------|------|
| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | | |
| 1-Jan-08 | 79 | 78 | 77 | 79 | 77 | 76 | 77 | 76 | 77 | 77 | 78 | 78 | 79 | 82 | 82 | 84 | 86 | 87 | 88 | 89 | 89 | 89 | 89 | 88 | 81.7 | 89.3 |
| 2-Jan-08 | 87 | 87 | 87 | 85 | 85 | 85 | 84 | 86 | 83 | 84 | 84 | 84 | 84 | 73 | 67 | 68 | 66 | 63 | 63 | 64 | 62 | 59 | 60 | 62 | 75.5 | 86.8 |
| 3-Jan-08 | 62 | 63 | 63 | 59 | 63 | 60 | 64 | 61 | 61 | 66 | 65 | 62 | 69 | 69 | 75 | 76 | 79 | 82 | 84 | 84 | 87 | 85 | 85 | 84 | 71.2 | 86.5 |
| 4-Jan-08 | 85 | 85 | 85 | 83 | 84 | 82 | 72 | 61 | 63 | 62 | 61 | 67 | 56 | 47 | 53 | 51 | 55 | 73 | 75 | 73 | 74 | 79 | 82 | 80 | 70.3 | 84.9 |
| 5-Jan-08 | 81 | 81 | 82 | 81 | 81 | 80 | 85 | 88 | 90 | 90 | 88 | 86 | 83 | 82 | 82 | 82 | 82 | 85 | 85 | 89 | 86 | 87 | 87 | 87 | 84.3 | 90.0 |
| 6-Jan-08 | 88 | 88 | 89 | 89 | 87 | 82 | 81 | 80 | 79 | 80 | 78 | 75 | 74 | 74 | 74 | 75 | 75 | 76 | 76 | 77 | 80 | 81 | 83 | 82 | 80.2 | 89.1 |
| 7-Jan-08 | 83 | 80 | 79 | 79 | 78 | 78 | 78 | 80 | 81 | 81 | 77 | 73 | 66 | 68 | 63 | 61 | 75 | 76 | 77 | 84 | 84 | 84 | 83 | 83 | 77.1 | 84.1 |
| 8-Jan-08 | 83 | 82 | 81 | 80 | 80 | 82 | 79 | 78 | 78 | 77 | 77 | 77 | 76 | 77 | 78 | 79 | 79 | 79 | 81 | 80 | 79 | 80 | 81 | 81 | 79.2 | 83.5 |
| 9-Jan-08 | 81 | 82 | 82 | 82 | 82 | 82 | 82 | 82 | 82 | 82 | 81 | 81 | 81 | 81 | 80 | 80 | 79 | 78 | 78 | 78 | 78 | 78 | 79 | 79 | 80.5 | 82.3 |
| 10-Jan-08 | 79 | 79 | 78 | 78 | 78 | 77 | 78 | 79 | 79 | 80 | 80 | 80 | 81 | 79 | 81 | 82 | 82 | 83 | 83 | 83 | 83 | 83 | 82 | 82 | 80.4 | 83.4 |
| 11-Jan-08 | 83 | 83 | 84 | 84 | 83 | 84 | 83 | 83 | 82 | 82 | 81 | 79 | 77 | 76 | 70 | 69 | 79 | 83 | 84 | 84 | 82 | 83 | 84 | 84 | 81.1 | 84.1 |
| 12-Jan-08 | 84 | 83 | 84 | 84 | 84 | 84 | 85 | 82 | 85 | 83 | 79 | 74 | 64 | 62 | 70 | 80 | 83 | 85 | 86 | 85 | 85 | 84 | 84 | 85 | 81.0 | 86.0 |
| 13-Jan-08 | 73 | 66 | 60 | 60 | 60 | 59 | 54 | 54 | 53 | 51 | 52 | 52 | 48 | 51 | 48 | 49 | 51 | 52 | 57 | 56 | 54 | 59 | 56 | 59 | 55.6 | 73.1 |
| 14-Jan-08 | 65 | 64 | 68 | 69 | 71 | 69 | 72 | 75 | 76 | 75 | 75 | 74 | 69 | 62 | 72 | 77 | 75 | 59 | 52 | 71 | 92 | 90 | 85 | 86 | 72.6 | 92.5 |
| 15-Jan-08 | 84 | 73 | 60 | 61 | 69 | 68 | 73 | 72 | 71 | 69 | 66 | 63 | 59 | 56 | 55 | 56 | 55 | 59 | 62 | 62 | 60 | 59 | 60 | 65 | 64.0 | 83.8 |
| 16-Jan-08 | 66 | 65 | 65 | 67 | 68 | 72 | 81 | 85 | 81 | 77 | 70 | 67 | 63 | 61 | 60 | 60 | 61 | 60 | 63 | 62 | 61 | 62 | 63 | 63 | 66.8 | 84.6 |
| 17-Jan-08 | 63 | 74 | 95 | 87 | 81 | 89 | 92 | 91 | 82 | 75 | 76 | 82 | 84 | 81 | 83 | 84 | 89 | 92 | 90 | 87 | 85 | 85 | 85 | 86 | 84.2 | 94.8 |
| 18-Jan-08 | 86 | 87 | 87 | 88 | 89 | 85 | 85 | 85 | 84 | 83 | 83 | 83 | 81 | 83 | 85 | 85 | 85 | 86 | 86 | 86 | 86 | 86 | 87 | 87 | 85.3 | 88.7 |
| 19-Jan-08 | 87 | 87 | 88 | 88 | 87 | 86 | 85 | 84 | 83 | 82 | 81 | 80 | 80 | 64 | 66 | 82 | 85 | 86 | 84 | 82 | 81 | 80 | 80 | 80 | 81.9 | 88.2 |
| 20-Jan-08 | 80 | 81 | 81 | 80 | 81 | 81 | 81 | 81 | 80 | 82 | 81 | 78 | 78 | 80 | 79 | 72 | 81 | 82 | 85 | 82 | 82 | 82 | 83 | 82 | 80.5 | 85.2 |
| 21-Jan-08 | 81 | 82 | 82 | 82 | 74 | 75 | 75 | 72 | 71 | 68 | 64 | 62 | 62 | 61 | 60 | 59 | 61 | 65 | 68 | 69 | 70 | 69 | 70 | 68 | 69.6 | 81.9 |
| 22-Jan-08 | 68 | 70 | 69 | 72 | 75 | 77 | 79 | 82 | 83 | 84 | 85 | 83 | 84 | 86 | 83 | 83 | 85 | 86 | 91 | 91 | 90 | 89 | 88 | 87 | 82.1 | 91.5 |
| 23-Jan-08 | 88 | 87 | 85 | 85 | 86 | 87 | 87 | 87 | 86 | 86 | 86 | 87 | 92 | 89 | 60 | 56 | 59 | 59 | 63 | 65 | 68 | 70 | 72 | 80 | 77.9 | 92.1 |
| 24-Jan-08 | 77 | 79 | 76 | 79 | 84 | 86 | 88 | 89 | 92 | 92 | 92 | 91 | 90 | 88 | 88 | 86 | 85 | 86 | 87 | 87 | 87 | 88 | 87 | 86 | 86.2 | 92.4 |
| 25-Jan-08 | 86 | 88 | 86 | 83 | 83 | 83 | 83 | 83 | 84 | 84 | 83 | 77 | 73 | 59 | 59 | 64 | 59 | 60 | 60 | 60 | 60 | 63 | 61 | 68 | 72.9 | 88.4 |
| 26-Jan-08 | 88 | 87 | 70 | 61 | 58 | 61 | 60 | 61 | 61 | 64 | 66 | 60 | 59 | 59 | 60 | 75 | 83 | 87 | 84 | 81 | 77 | N | N | 72 | 69.8 | 87.5 |
| 27-Jan-08 | N | 74 | N | N | 74 | 73 | 72 | 70 | 68 | 70 | 68 | 64 | 61 | 60 | 60 | 59 | 62 | 70 | 72 | 73 | 71 | 71 | 70 | 70 | 68.2 | 73.9 |
| 28-Jan-08 | 72 | 72 | 70 | 70 | 70 | 70 | 69 | 68 | 69 | 69 | 67 | 64 | 58 | 63 | 64 | 62 | 62 | 62 | 64 | 66 | 65 | 64 | 64 | 69 | 66.2 | 71.7 |
| 29-Jan-08 | 71 | 68 | 67 | 66 | 66 | 66 | 65 | 65 | 65 | 65 | 66 | 65 | 63 | 62 | 63 | 63 | 64 | 64 | 65 | 67 | 68 | 68 | 68 | 68 | 65.9 | 71.2 |
| 30-Jan-08 | 69 | 69 | 70 | 71 | 71 | 70 | 70 | 69 | 70 | 70 | 67 | 68 | 66 | 68 | 68 | 69 | 71 | 72 | 73 | 73 | 72 | 72 | 73 | 75 | 70.3 | 74.7 |
| 31-Jan-08 | 74 | 74 | 74 | 74 | 73 | 73 | 71 | 71 | 72 | 73 | 72 | 71 | 70 | 70 | 69 | 68 | 70 | 71 | 71 | 71 | 72 | 72 | 72 | 72 | 71.7 | 74.1 |
| Hourly Avg | 78.4 | 78.0 | 77.5 | 76.9 | 76.8 | 76.8 | 77.1 | 76.8 | 76.5 | 76.3 | 75.1 | 73.8 | 71.9 | 70.0 | 69.5 | 70.8 | 73.0 | 74.4 | 75.3 | 76.0 | 76.6 | 76.7 | 76.7 | 77.3 | | |
| Hourly Max | 87.7 | 88.5 | 94.8 | 89.1 | 88.7 | 88.6 | 92.5 | 90.7 | 92.3 | 92.4 | 91.7 | 91.0 | 92.1 | 89.1 | 87.7 | 86.5 | 89.4 | 91.8 | 90.7 | 91.5 | 92.5 | 89.5 | 88.8 | 87.6 | | |

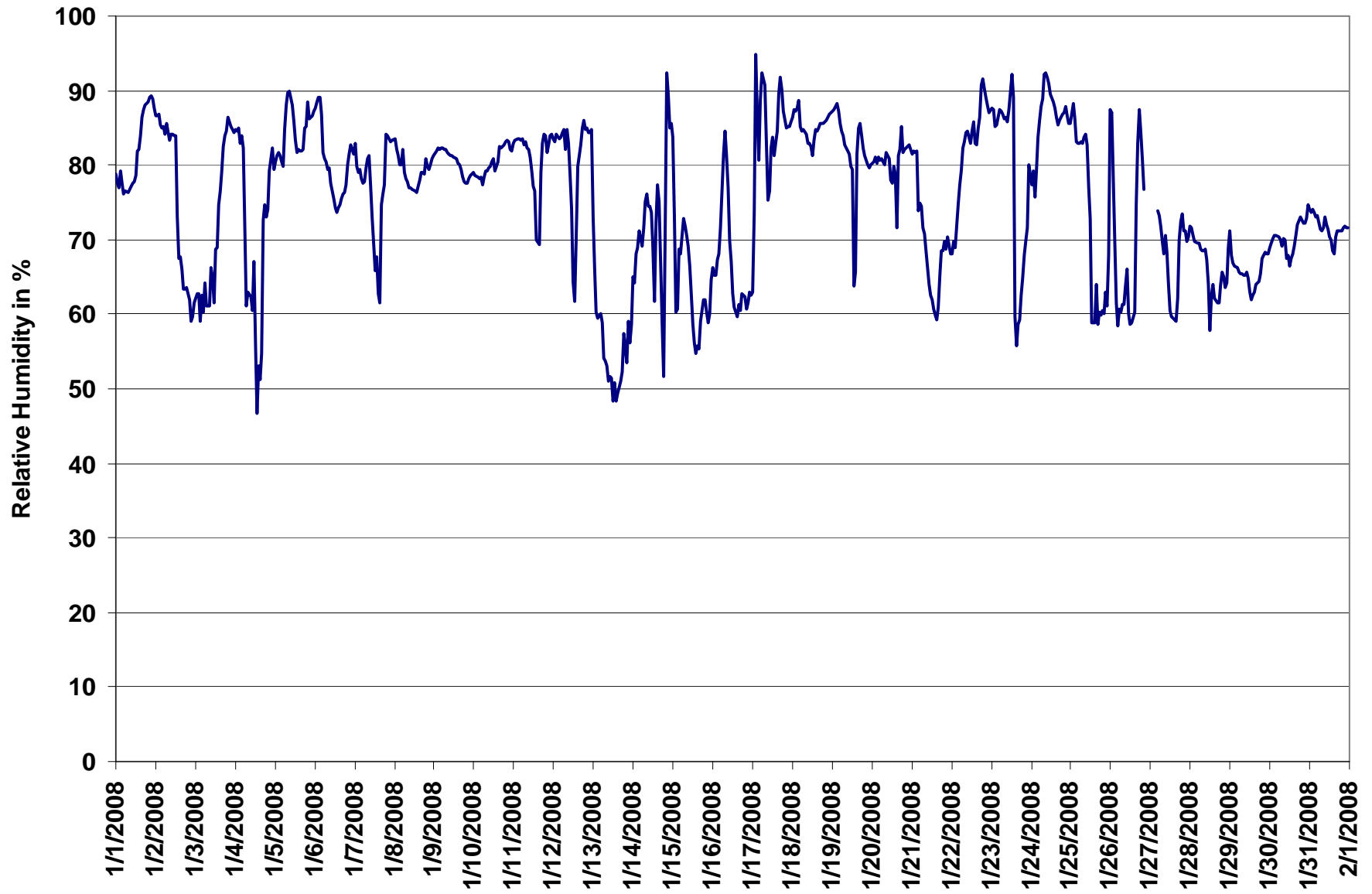


Figure 54. PASZA - Portable-Spirit River Relative Humidity 1-hr Average Monthly Trend

PASZA - Portable-Spirit River Temperature Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

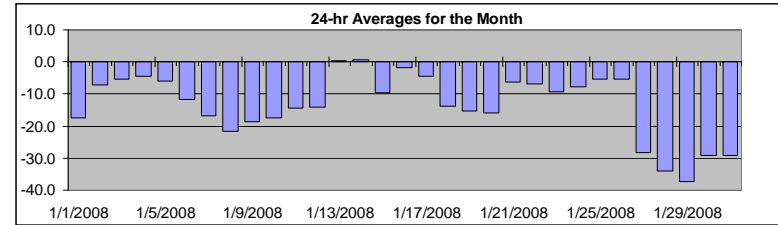
HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|-----|----|--------|-------------|
| Maximum 1-hr Average: | 4.0 | °C | 14-Jan | 13:00 14:00 |
| Maximum 24-hr Value: | 0.6 | °C | 14-Jan | |



| | | | | | | | | | |
|-------------------|-------|-------------------------|---------|-------|-------|-------|-------|----------|----------|
| AIC Time: | 0 hrs | Operational Time: | 739 hrs | | | | | | |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 99.3% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 3.3 | 1.0 | -5.7 | -12.4 | -18.6 | -32.9 | -39.7 | -13.3 °C | -12.4 °C |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | | |
|------------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|-------|-------|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | |
| 1-Jan-08 | -21 | -21 | -22 | -21 | -22 | -23 | -23 | -23 | -22 | -22 | -20 | -19 | -19 | -16 | -16 | -15 | -13 | -12 | -12 | -11 | -11 | -10 | -11 | -12 | -12 | -17.3 | -10.4 |
| 2-Jan-08 | -12 | -12 | -12 | -14 | -14 | -14 | -15 | -14 | -15 | -15 | -14 | -13 | -13 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | -1 | -7.2 | 1.2 |
| 3-Jan-08 | -1 | -1 | -1 | -1 | -3 | -2 | -4 | -2 | -2 | -4 | -4 | -2 | -5 | -5 | -8 | -9 | -10 | -10 | -10 | -10 | -9 | -9 | -8 | -8 | -5.4 | -0.7 | |
| 4-Jan-08 | -8 | -8 | -8 | -8 | -9 | -8 | -5 | 0 | 0 | 0 | 0 | -4 | -1 | 2 | 0 | 0 | -1 | -7 | -7 | -6 | -6 | -7 | -7 | -6 | -6 | -4.3 | 2.0 |
| 5-Jan-08 | -6 | -6 | -6 | -5 | -5 | -5 | -5 | -5 | -5 | -5 | -4 | -4 | -4 | -5 | -5 | -6 | -6 | -6 | -7 | -7 | -8 | -8 | -8 | -8 | -6.0 | -4.4 | |
| 6-Jan-08 | -9 | -9 | -9 | -9 | -9 | -9 | -10 | -12 | -13 | -13 | -13 | -13 | -13 | -12 | -12 | -12 | -12 | -12 | -13 | -13 | -13 | -13 | -13 | -13 | -11.6 | -8.7 | |
| 7-Jan-08 | -13 | -15 | -16 | -15 | -15 | -16 | -17 | -18 | -19 | -19 | -18 | -17 | -16 | -16 | -15 | -14 | -16 | -16 | -17 | -20 | -20 | -20 | -20 | -21 | -16.9 | -13.4 | |
| 8-Jan-08 | -21 | -21 | -22 | -23 | -23 | -23 | -22 | -24 | -24 | -23 | -23 | -23 | -21 | -22 | -21 | -20 | -20 | -20 | -20 | -21 | -20 | -20 | -19 | -18 | -21.5 | -18.4 | |
| 9-Jan-08 | -18 | -17 | -17 | -17 | -17 | -17 | -17 | -17 | -17 | -18 | -18 | -18 | -17 | -18 | -18 | -18 | -19 | -20 | -21 | -21 | -21 | -21 | -21 | -20 | -18.5 | -16.8 | |
| 10-Jan-08 | -19 | -20 | -20 | -20 | -19 | -21 | -21 | -19 | -19 | -19 | -18 | -17 | -15 | -15 | -15 | -14 | -15 | -16 | -16 | -16 | -16 | -16 | -15 | -16 | -17 | -17.4 | -14.1 |
| 11-Jan-08 | -15 | -15 | -14 | -14 | -15 | -15 | -15 | -16 | -16 | -16 | -17 | -17 | -15 | -13 | -12 | -10 | -10 | -14 | -14 | -14 | -14 | -14 | -15 | -16 | -15 | -14.4 | -9.9 |
| 12-Jan-08 | -15 | -16 | -16 | -16 | -15 | -16 | -16 | -17 | -17 | -16 | -16 | -15 | -12 | -11 | -14 | -15 | -15 | -13 | -12 | -11 | -11 | -11 | -11 | -11 | -14.0 | -10.7 | |
| 13-Jan-08 | -2 | 1 | 1 | 0 | -1 | -1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0.4 | 1.6 |
| 14-Jan-08 | -1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 1 | 1 | 0 | -1 | -3 | -4 | -4 | -6 | 0.6 | 4.0 | |
| 15-Jan-08 | -6 | -6 | -7 | -9 | -10 | -11 | -12 | -13 | -14 | -13 | -12 | -11 | -10 | -9 | -8 | -8 | -8 | -10 | -11 | -10 | -9 | -7 | -8 | -9 | -9.6 | -6.0 | |
| 16-Jan-08 | -9 | -7 | -6 | -6 | -5 | -6 | -11 | -11 | -9 | -7 | -3 | 0 | 1 | 2 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | -1.8 | 3.8 | |
| 17-Jan-08 | 3 | 2 | 0 | 1 | 1 | 1 | 0 | -1 | -1 | 0 | -2 | -6 | -7 | -7 | -7 | -8 | -8 | -9 | -10 | -11 | -11 | -10 | -10 | -10 | -4.6 | 3.1 | |
| 18-Jan-08 | -11 | -12 | -11 | -12 | -14 | -15 | -15 | -15 | -15 | -16 | -16 | -15 | -15 | -15 | -15 | -15 | -14 | -14 | -13 | -13 | -13 | -12 | -12 | -12 | -13.8 | -10.8 | |
| 19-Jan-08 | -11 | -11 | -11 | -11 | -12 | -12 | -13 | -13 | -14 | -15 | -15 | -15 | -16 | -12 | -13 | -16 | -16 | -18 | -19 | -19 | -20 | -20 | -21 | -20 | -15.2 | -11.1 | |
| 20-Jan-08 | -19 | -19 | -18 | -18 | -17 | -17 | -17 | -17 | -15 | -13 | -13 | -12 | -16 | -15 | -14 | -11 | -12 | -14 | -17 | -18 | -17 | -17 | -16 | -16 | -15.8 | -11.3 | |
| 21-Jan-08 | -16 | -15 | -14 | -12 | -6 | -7 | -7 | -6 | -6 | -6 | -4 | -4 | -3 | -3 | -3 | -3 | -3 | -4 | -5 | -5 | -6 | -6 | -5 | -3 | -6.2 | -2.6 | |
| 22-Jan-08 | -4 | -5 | -4 | -5 | -6 | -7 | -7 | -7 | -6 | -5 | -5 | -5 | -5 | -5 | -5 | -5 | -5 | -7 | -9 | -10 | -11 | -12 | -13 | -14 | -6.9 | -3.9 | |
| 23-Jan-08 | -13 | -14 | -15 | -15 | -14 | -13 | -13 | -13 | -14 | -14 | -14 | -13 | -7 | -4 | -2 | -2 | -3 | -3 | -5 | -6 | -6 | -7 | -7 | -10 | -9.4 | -1.6 | |
| 24-Jan-08 | -8 | -9 | -8 | -9 | -9 | -9 | -10 | -10 | -9 | -9 | -9 | -8 | -8 | -8 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -6 | -7.9 | -6.2 | |
| 25-Jan-08 | -6 | -7 | -6 | -6 | -6 | -6 | -6 | -6 | -7 | -9 | -8 | -8 | -7 | -4 | -4 | -5 | -3 | -4 | -4 | -5 | -4 | -4 | -4 | -4 | -5.5 | -3.2 | |
| 26-Jan-08 | -5 | -5 | -3 | -2 | -1 | -2 | -1 | -1 | -1 | -2 | -3 | -1 | -1 | -1 | -1 | -4 | -8 | -11 | -13 | -14 | -16 | N | N | -21 | -5.3 | -0.7 | |
| 27-Jan-08 | N | -23 | N | N | -25 | -26 | -27 | -27 | -28 | -28 | -29 | -29 | -29 | -29 | -29 | -29 | -29 | -29 | -29 | -29 | -30 | -30 | -30 | -32 | -28.4 | -22.8 | |
| 28-Jan-08 | -33 | -34 | -34 | -33 | -33 | -34 | -35 | -36 | -36 | -37 | -35 | -33 | -31 | -33 | -33 | -32 | -32 | -31 | -33 | -33 | -33 | -34 | -36 | -39 | -33.9 | -30.7 | |
| 29-Jan-08 | -38 | -39 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -39 | -38 | -37 | -37 | -37 | -36 | -35 | -34 | -34 | -33 | -32 | -32 | -32 | -37.2 | -31.8 | |
| 30-Jan-08 | -32 | -31 | -30 | -30 | -29 | -29 | -29 | -29 | -29 | -29 | -29 | -29 | -28 | -28 | -28 | -28 | -28 | -28 | -28 | -28 | -28 | -28 | -29 | -29 | -29.0 | -27.9 | |
| 31-Jan-08 | -30 | -31 | -31 | -32 | -32 | -32 | -33 | -33 | -32 | -31 | -30 | -29 | -29 | -28 | -27 | -27 | -27 | -27 | -27 | -27 | -27 | -27 | -26 | -26 | -29.2 | -26.2 | |
| Hourly Avg | -13.3 | -13.6 | -13.3 | -13.3 | -13.7 | -13.9 | -14.3 | -14.2 | -14.3 | -14.2 | -13.7 | -13.3 | -12.7 | -11.6 | -11.6 | -11.7 | -12.1 | -12.7 | -13.3 | -13.4 | -13.5 | -13.4 | -13.5 | -14.0 | | | |
| Hourly Max | 3.1 | 1.8 | 1.1 | 2.5 | 2.4 | 3.3 | 3.1 | 2.5 | 2.1 | 2.5 | 2.8 | 2.8 | 3.3 | 4.0 | 3.1 | 3.6 | 3.2 | 3.5 | 3.3 | 3.5 | 3.8 | 3.5 | 2.9 | 2.9 | | | |

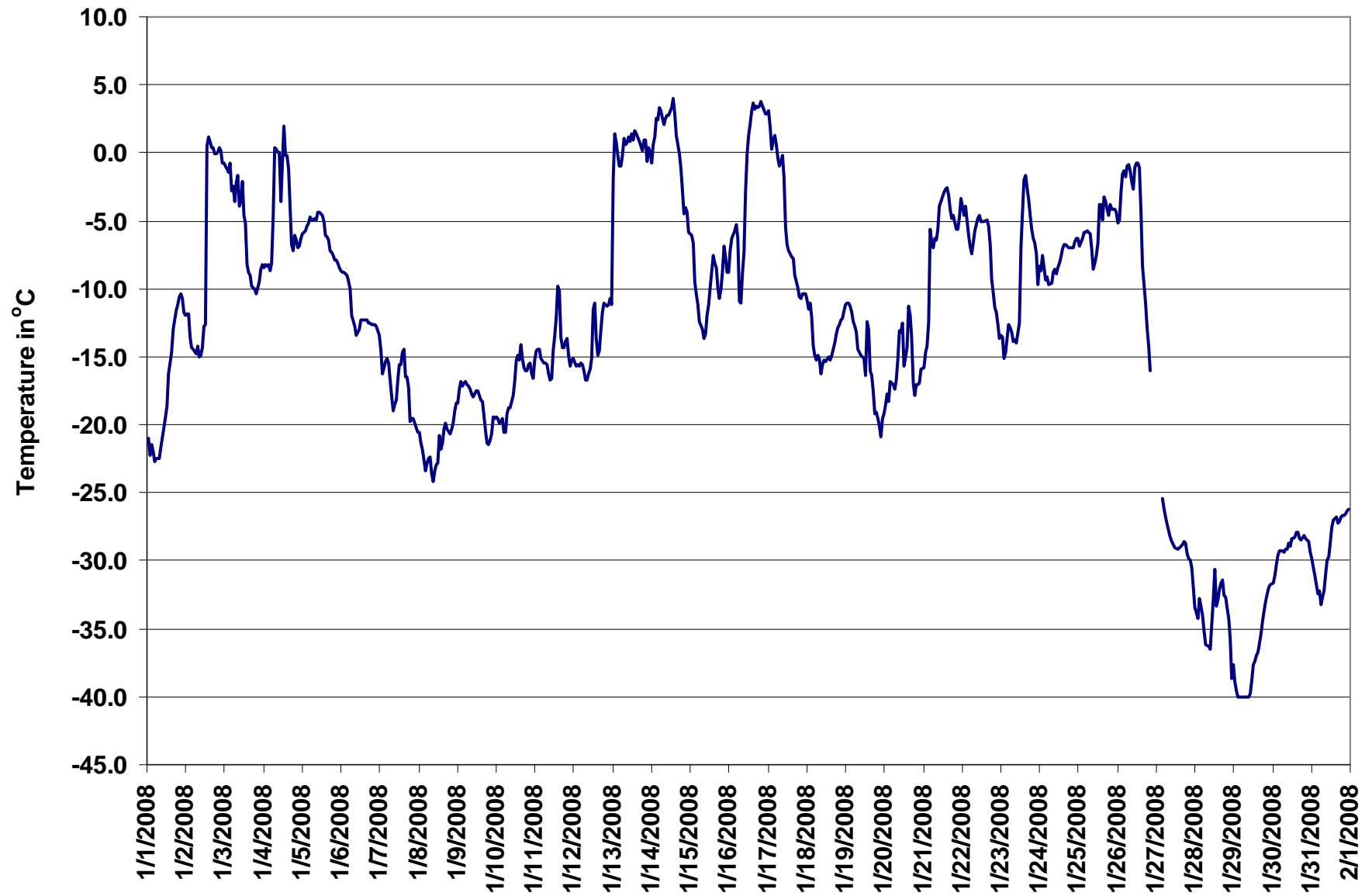


Figure 55. PASZA - Portable-Spirit River Temperature 1-hr Average Monthly Trend

PASZA - Portable-Spirit River Scalar Wind Speed Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

HOURLY AVERAGE TABLE

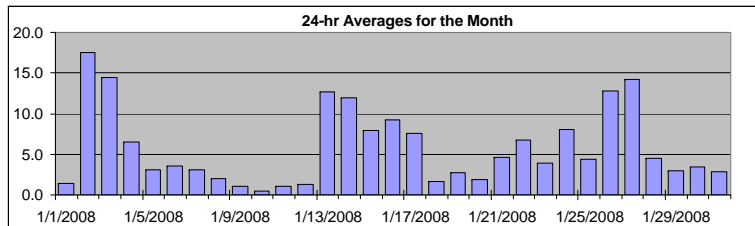
Wind Speed (WSs)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|-------|-------|-----------|
| Maximum 1-hr Average: | 54.4 | km/hr | 3-Jan | 2:00 3:00 |
| Maximum 24-hr Value: | 17.5 | km/hr | 2-Jan | |

| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|-----------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 738 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 90.0% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | AverageS |
| | 36.6 | 19.3 | 6.7 | 3.4 | 1.7 | 0.6 | 0.0 | 5.7 km/hr |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hr Scalar Average | Daily Max | |
|--------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------------------|--------------|---------------|
| | Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | | | 23:00 0:00 |
| 1-Jan-08 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1.4 | 3.0 |
| 2-Jan-08 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 3 | 29 | 50 | 35 | 28 | 32 | 34 | 24 | 31 | 45 | 53 | 38 | 17.5 | 52.8 | |
| 3-Jan-08 | 47 | 41 | 54 | 38 | 17 | 17 | 13 | 26 | 24 | 15 | 8 | 5 | 4 | 4 | 3 | 3 | 2 | 2 | 3 | 2 | 4 | 6 | 3 | 4 | 14.4 | 54.4 | |
| 4-Jan-08 | 4 | 3 | 3 | 6 | 7 | 5 | 9 | 15 | 12 | 13 | 10 | 6 | 8 | 9 | 4 | 8 | 5 | 6 | 7 | 3 | 3 | 4 | 5 | 3 | 6.6 | 15.0 | |
| 5-Jan-08 | 3 | 4 | 2 | 2 | 4 | 2 | 4 | 3 | 2 | 2 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 2 | 4 | 2 | 2 | 3.1 | 4.3 | |
| 6-Jan-08 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 5 | 3 | 4 | 5 | 4 | 5 | 4 | 3 | 3 | 4 | 5 | 4 | 3 | 4 | 3 | 4 | 3.5 | 5.4 | |
| 7-Jan-08 | 3 | 4 | 4 | 3 | 4 | 3 | 1 | 3 | 7 | 4 | 3 | 4 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 5 | 6 | 4 | 3 | 3 | 3.1 | 6.6 | |
| 8-Jan-08 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2.0 | 4.2 | |
| 9-Jan-08 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1.0 | 2.7 | |
| 10-Jan-08 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0.5 | 1.1 | |
| 11-Jan-08 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 1.1 | 2.6 | |
| 12-Jan-08 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 1 | 1 | 3 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 1.3 | 2.6 | |
| 13-Jan-08 | 14 | 18 | 14 | 12 | 11 | 11 | 21 | 25 | 21 | 25 | 19 | 11 | 9 | 7 | 9 | 11 | 10 | 12 | 8 | 9 | 7 | 6 | 7 | 8 | 12.7 | 25.3 | |
| 14-Jan-08 | 7 | 8 | 9 | 20 | 23 | 30 | 25 | 11 | 10 | 18 | 17 | 14 | 14 | 15 | 7 | 8 | 6 | 8 | 6 | 7 | 6 | 10 | 4 | 5 | 11.9 | 30.1 | |
| 15-Jan-08 | 6 | 11 | 8 | 4 | 3 | 4 | 5 | 5 | 11 | 11 | 6 | 1 | 2 | 3 | 5 | 10 | 14 | 13 | 14 | 13 | 12 | 8 | 11 | 10 | 7.9 | 14.1 | |
| 16-Jan-08 | 9 | 10 | 8 | 7 | 9 | 3 | 4 | 3 | 2 | 3 | 6 | 8 | 9 | 8 | 8 | 11 | 13 | 14 | 14 | 14 | 14 | 15 | 17 | 14 | 9.3 | 17.1 | |
| 17-Jan-08 | 12 | 18 | 13 | 6 | 7 | 3 | 4 | 3 | 5 | 4 | 11 | 12 | 10 | 7 | 6 | 8 | 5 | 10 | 11 | 13 | 6 | 2 | 3 | 3 | 7.6 | 18.3 | |
| 18-Jan-08 | 6 | 5 | 1 | 3 | 4 | 3 | 3 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1.6 | 6.3 | |
| 19-Jan-08 | 1 | 1 | 2 | 6 | 7 | 8 | 8 | 6 | 6 | 4 | 3 | 2 | 2 | 1 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 0 | 2.7 | 7.8 | |
| 20-Jan-08 | 1 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 2 | 1 | 2 | 4 | 4 | 3 | 1 | 4 | 4 | 4 | 2 | 3 | 2 | 2 | 2 | 1.9 | 4.2 | |
| 21-Jan-08 | 2 | 3 | 1 | 2 | 5 | 4 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 5 | 6 | 6 | 5 | 3 | 5 | 2 | 4 | 4 | 8 | 4.7 | 8.3 | |
| 22-Jan-08 | 9 | 6 | 5 | 5 | 5 | 6 | 6 | 6 | 5 | 3 | 3 | 3 | 6 | 9 | 13 | 9 | 13 | 13 | 10 | 8 | 7 | 6 | 4 | 4 | 6.8 | 13.3 | |
| 23-Jan-08 | 7 | 7 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 4 | 5 | 6 | 4 | 4 | 8 | 9 | 5 | 6 | 2 | 3 | 3.9 | 9.0 | |
| 24-Jan-08 | 3 | 4 | 3 | 4 | 3 | 3 | 4 | 2 | 8 | 10 | 12 | 15 | 13 | 13 | 17 | 19 | 15 | 9 | 9 | 6 | 4 | 5 | 8 | 5 | 8.1 | 19.3 | |
| 25-Jan-08 | 2 | 2 | 4 | 3 | 3 | 2 | 3 | 6 | 9 | 8 | 7 | 4 | 5 | 4 | 2 | 3 | 5 | 5 | 4 | 4 | 6 | 8 | 3 | 3 | 4.4 | 8.5 | |
| 26-Jan-08 | 7 | 9 | 9 | 15 | 19 | 16 | 21 | 11 | 10 | 7 | 4 | 2 | 5 | 6 | 5 | 13 | 12 | 11 | 12 | 27 | 29 | N | N | 31 | 12.7 | 31.4 | |
| 27-Jan-08 | N | 21 | N | N | 22 | 21 | 21 | 19 | 20 | 17 | 19 | 19 | 20 | 19 | 16 | 16 | 9 | 2 | 2 | 4 | 9 | 8 | 9 | 5 | 14.2 | 22.5 | |
| 28-Jan-08 | 5 | 5 | 4 | 2 | 3 | 5 | 6 | 8 | 10 | 9 | 8 | 3 | 2 | 4 | 4 | 3 | 2 | 5 | 5 | 4 | 3 | 5 | 2 | 2 | 4.5 | 9.8 | |
| 29-Jan-08 | 4 | 2 | 2 | 4 | 3 | 3 | 4 | 5 | 7 | 4 | N | 2 | 1 | 2 | 3 | 5 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3.0 | 6.6 | |
| 30-Jan-08 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 3 | 3 | 6 | 9 | 6 | 7 | 6 | 2 | 4 | 4 | 5 | 4 | 3 | 3.4 | 8.7 | |
| 31-Jan-08 | 3 | 2 | 5 | 6 | 6 | 5 | 5 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 2 | 2 | 3 | 4 | 3 | 2 | 1 | 1 | 2.9 | 6.5 | |
| 1-hr Average | 5.5 | 6.4 | 5.6 | 5.5 | 6.0 | 5.6 | 6.0 | 6.0 | 6.2 | 5.9 | 5.6 | 4.7 | 4.7 | 5.7 | 6.1 | 6.3 | 5.8 | 5.9 | 5.8 | 6.0 | 5.9 | 5.6 | 5.4 | 5.5 | | | |
| Hourly Max | 47.3 | 41.5 | 54.4 | 37.8 | 23.2 | 30.1 | 24.9 | 26.1 | 24.0 | 25.3 | 19.0 | 18.6 | 19.8 | 29.4 | 50.3 | 34.5 | 28.3 | 32.2 | 34.3 | 26.8 | 31.2 | 45.4 | 52.8 | 38.1 | | | |

PASZA - Portable-Spirit River Vector Wind Speed Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

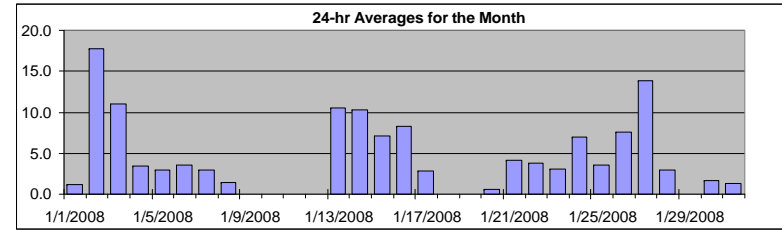
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|-------|-------|-----------|
| Maximum 1-hr Average: | 54.3 | km/hr | 3-Jan | 2:00 3:00 |
| Maximum 24-hr Value: | 17.7 | km/hr | 2-Jan | |



| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|-----------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 738 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 90.0% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | AverageV |
| | 36.5 | 19.2 | 6.4 | 3.1 | 1.5 | 0.4 | 0.2 | 9.8 km/hr |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | 24-hr Vector Average | Daily Max | | |
|-------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------------|-----------|----------------|---------------|
| | Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | | | 22:00 23:00 | 23:00 0:00 |
| 1-Jan-08 | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1.1 | 2.9 | |
| 2-Jan-08 | 0 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 29 | 50 | 34 | 28 | 32 | 34 | 24 | 31 | 45 | 53 | 38 | 17.7 | 52.6 | |
| 3-Jan-08 | 47 | 41 | 54 | 38 | 13 | 15 | 8 | 25 | 23 | 3 | 6 | 3 | 2 | 2 | 3 | 2 | 1 | 2 | 3 | 2 | 4 | 5 | 3 | 4 | 11.0 | 54.3 | |
| 4-Jan-08 | 4 | 3 | 3 | 6 | 6 | 4 | 9 | 15 | 12 | 13 | 9 | 6 | 8 | 9 | 3 | 8 | 5 | 5 | 6 | 2 | 3 | 2 | 4 | 2 | 3.5 | 15.0 | |
| 5-Jan-08 | 3 | 4 | 2 | 2 | 3 | 2 | 4 | 3 | 2 | 2 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 2 | 4 | 2 | 2 | 2 | 3.0 | 4.1 | |
| 6-Jan-08 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 5 | 3 | 4 | 5 | 4 | 4 | 4 | 3 | 3 | 4 | 5 | 4 | 3 | 4 | 3 | 4 | 3.5 | 5.3 | |
| 7-Jan-08 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 7 | 4 | 3 | 4 | 0 | 1 | 0 | 0 | 2 | 3 | 1 | 4 | 6 | 4 | 3 | 3 | 3.0 | 6.5 | |
| 8-Jan-08 | 2 | 3 | 2 | 3 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1.4 | 4.2 | |
| 9-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0.0 | 2.7 | |
| 10-Jan-08 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0.0 | 1.1 | |
| 11-Jan-08 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 2 | 2 | 1 | 0 | 2 | 1 | 0.0 | 2.6 | |
| 12-Jan-08 | 1 | 1 | 2 | 2 | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 1 | 0 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 0 | 2 | 0.0 | 2.5 | |
| 13-Jan-08 | 13 | 18 | 14 | 11 | 11 | 11 | 20 | 25 | 21 | 25 | 19 | 11 | 9 | 7 | 9 | 11 | 10 | 11 | 7 | 9 | 6 | 5 | 7 | 7 | 10.6 | 25.1 | |
| 14-Jan-08 | 6 | 6 | 6 | 20 | 23 | 30 | 25 | 11 | 9 | 18 | 17 | 14 | 14 | 14 | 7 | 7 | 6 | 8 | 6 | 7 | 6 | 9 | 4 | 5 | 10.3 | 30.0 | |
| 15-Jan-08 | 6 | 11 | 8 | 4 | 3 | 4 | 5 | 5 | 11 | 11 | 6 | 1 | 2 | 3 | 5 | 10 | 13 | 13 | 14 | 14 | 12 | 12 | 8 | 11 | 10 | 7.1 | 14.1 |
| 16-Jan-08 | 9 | 10 | 8 | 7 | 9 | 3 | 4 | 3 | 2 | 3 | 6 | 8 | 9 | 8 | 8 | 11 | 13 | 14 | 14 | 14 | 14 | 15 | 17 | 14 | 8.3 | 17.1 | |
| 17-Jan-08 | 8 | 18 | 9 | 6 | 7 | 3 | 4 | 3 | 5 | 4 | 6 | 12 | 10 | 6 | 6 | 8 | 4 | 9 | 10 | 12 | 6 | 1 | 3 | 3 | 2.8 | 18.2 | |
| 18-Jan-08 | 6 | 5 | 1 | 3 | 4 | 3 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 2 | 1 | 0.0 | 6.0 | |
| 19-Jan-08 | 1 | 1 | 2 | 6 | 7 | 8 | 8 | 6 | 6 | 4 | 3 | 2 | 2 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 0 | 0 | 0.0 | 7.7 | |
| 20-Jan-08 | 1 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 1 | 1 | 2 | 2 | 3 | 3 | 1 | 4 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 0.6 | 4.1 | |
| 21-Jan-08 | 1 | 2 | 1 | 1 | 5 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 5 | 3 | 4 | 1 | 4 | 4 | 8 | 4.2 | 8.3 | |
| 22-Jan-08 | 9 | 6 | 5 | 5 | 5 | 6 | 6 | 6 | 5 | 3 | 3 | 2 | 6 | 8 | 13 | 9 | 12 | 12 | 10 | 8 | 7 | 2 | 4 | 4 | 3.7 | 13.1 | |
| 23-Jan-08 | 7 | 5 | 4 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 4 | 4 | 6 | 4 | 4 | 7 | 9 | 4 | 6 | 2 | 2 | 3.1 | 9.0 | |
| 24-Jan-08 | 2 | 4 | 2 | 3 | 2 | 2 | 4 | 2 | 8 | 10 | 12 | 15 | 13 | 13 | 17 | 19 | 15 | 9 | 8 | 6 | 4 | 5 | 8 | 2 | 6.9 | 19.2 | |
| 25-Jan-08 | 2 | 2 | 4 | 3 | 3 | 2 | 3 | 6 | 8 | 8 | 7 | 3 | 5 | 4 | 2 | 1 | 5 | 5 | 4 | 4 | 6 | 8 | 3 | 2 | 3.6 | 8.5 | |
| 26-Jan-08 | 6 | 8 | 9 | 15 | 19 | 16 | 21 | 11 | 10 | 1 | 3 | 2 | 5 | 5 | 5 | 13 | 12 | 11 | 12 | 27 | 29 | N | N | 31 | 7.6 | 31.3 | |
| 27-Jan-08 | N | 21 | N | N | 22 | 21 | 21 | 19 | 20 | 17 | 19 | 19 | 20 | 19 | 16 | 15 | 9 | 2 | 2 | 4 | 9 | 8 | 9 | 5 | 13.8 | 22.4 | |
| 28-Jan-08 | 5 | 5 | 4 | 2 | 3 | 5 | 6 | 8 | 10 | 9 | 8 | 3 | 1 | 4 | 4 | 3 | 2 | 5 | 5 | 3 | 2 | 4 | 1 | 1 | 2.9 | 9.8 | |
| 29-Jan-08 | 4 | 2 | 2 | 4 | 3 | 3 | 3 | 5 | 6 | 4 | N | 2 | 1 | 2 | 3 | 5 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | N | 6.5 | 6.5 |
| 30-Jan-08 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 3 | 3 | 6 | 9 | 6 | 7 | 6 | 2 | 4 | 4 | 5 | 4 | 2 | 1.6 | 8.6 | |
| 31-Jan-08 | 3 | 2 | 5 | 6 | 6 | 5 | 5 | 3 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 0 | 1.3 | 6.4 | |
| 1-hr Vector | 4.5 | 3.5 | 5.0 | 4.8 | 4.2 | 4.0 | 3.6 | 4.6 | 4.9 | 3.7 | 2.3 | 1.0 | 0.8 | 2.4 | 2.4 | 2.4 | 2.6 | 2.2 | 2.1 | 2.1 | 2.4 | 3.6 | 3.4 | 3.1 | | | |
| Hourly Max | 47.2 | 41.4 | 54.3 | 37.7 | 23.2 | 30.0 | 24.9 | 25.1 | 23.4 | 25.1 | 18.8 | 18.5 | 19.7 | 29.4 | 50.2 | 34.5 | 28.2 | 31.9 | 34.2 | 26.6 | 31.1 | 45.3 | 52.6 | 38.0 | | | |

PASZA - Portable-Spirit River Wind Direction Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-------|------|-----|---------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 738 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 90.0% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average |
| | 357.8 | 340.8 | 287.2 | 257.7 | 155.4 | 31.2 | 3.9 | 259 deg |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 24-hour Average | WD Sector | |
|------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-----------|---|
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | |
| 1-Jan-08 | 188 | 30 | 60 | 191 | 21 | 190 | 205 | 18 | 34 | 15 | 22 | 101 | 137 | 107 | 92 | 102 | 101 | 101 | 93 | 91 | 101 | 99 | 98 | 133 | 103 | ESE | |
| 2-Jan-08 | 172 | 334 | 285 | 254 | 244 | 248 | 249 | 253 | 276 | 263 | 261 | 360 | 336 | 259 | 252 | 255 | 258 | 254 | 248 | 260 | 258 | 250 | 237 | 229 | 250 | WSW | |
| 3-Jan-08 | 232 | 231 | 235 | 238 | 178 | 205 | 128 | 236 | 240 | 180 | 141 | 179 | 133 | 8 | 31 | 296 | 338 | 333 | 304 | 320 | 264 | 304 | 330 | 336 | 228 | SW | |
| 4-Jan-08 | 244 | 299 | 263 | 229 | 259 | 292 | 219 | 223 | 220 | 220 | 212 | 127 | 198 | 216 | 154 | 160 | 117 | 98 | 105 | 104 | 23 | 341 | 342 | 326 | 212 | SSW | |
| 5-Jan-08 | 286 | 270 | 289 | 282 | 263 | 302 | 299 | 309 | 282 | 291 | 312 | 283 | 295 | 281 | 278 | 276 | 282 | 287 | 296 | 311 | 298 | 315 | 293 | 304 | 291 | WNW | |
| 6-Jan-08 | 304 | 299 | 288 | 288 | 289 | 283 | 284 | 282 | 270 | 285 | 277 | 271 | 276 | 282 | 282 | 283 | 283 | 288 | 287 | 289 | 287 | 288 | 286 | 287 | 284 | WNW | |
| 7-Jan-08 | 288 | 277 | 277 | 283 | 285 | 278 | 292 | 279 | 256 | 268 | 264 | 246 | 243 | 84 | 66 | 215 | 211 | 201 | 272 | 307 | 284 | 287 | 282 | 281 | 273 | W | |
| 8-Jan-08 | 287 | 303 | 291 | 299 | 286 | 280 | 276 | 305 | 354 | 250 | 337 | 299 | 297 | 267 | 350 | 250 | 255 | 331 | 30 | 153 | 78 | 54 | 287 | 2 | 301 | WNW | |
| 9-Jan-08 | 97 | 185 | 121 | 54 | 93 | 124 | 134 | 84 | 146 | 144 | 167 | 165 | 80 | 301 | 76 | 70 | 80 | 74 | 23 | 249 | 281 | 262 | 12 | 4 | - | - | |
| 10-Jan-08 | 7 | 10 | 360 | 316 | 318 | 270 | 264 | 344 | 343 | 2 | 331 | 2 | 123 | 283 | 359 | 74 | 64 | 74 | 67 | 112 | 126 | 65 | 142 | 187 | - | - | |
| 11-Jan-08 | 37 | 27 | 31 | 357 | 337 | 221 | 339 | 269 | 288 | 272 | 265 | 267 | 342 | 359 | 333 | 214 | 187 | 197 | 268 | 267 | 215 | 90 | 279 | 291 | - | - | |
| 12-Jan-08 | 327 | 301 | 283 | 289 | 295 | 277 | 315 | 319 | 270 | 304 | 358 | 12 | 62 | 102 | 287 | 267 | 291 | 307 | 2 | 154 | 69 | 286 | 77 | 21 | - | W | |
| 13-Jan-08 | 223 | 215 | 219 | 218 | 219 | 223 | 248 | 247 | 240 | 240 | 249 | 244 | 214 | 218 | 201 | 177 | 167 | 160 | 147 | 163 | 155 | 110 | 163 | 184 | 216 | SW | |
| 14-Jan-08 | 158 | 197 | 230 | 234 | 232 | 237 | 235 | 237 | 230 | 223 | 225 | 229 | 237 | 253 | 285 | 286 | 284 | 300 | 300 | 292 | 280 | 319 | 290 | 290 | 244 | WSW | |
| 15-Jan-08 | 304 | 321 | 313 | 300 | 278 | 284 | 281 | 278 | 256 | 257 | 265 | 295 | 286 | 286 | 267 | 251 | 240 | 233 | 238 | 247 | 263 | 257 | 244 | 242 | 261 | W | |
| 16-Jan-08 | 225 | 257 | 263 | 273 | 264 | 289 | 61 | 129 | 155 | 28 | 273 | 272 | 269 | 272 | 279 | 266 | 261 | 264 | 267 | 268 | 267 | 264 | 261 | 265 | 265 | 265 | W |
| 17-Jan-08 | 322 | 5 | 284 | 278 | 301 | 288 | 285 | 288 | 302 | 306 | 34 | 91 | 83 | 85 | 103 | 81 | 139 | 87 | 87 | 81 | 106 | 238 | 5 | 143 | 40 | NE | |
| 18-Jan-08 | 127 | 114 | 127 | 276 | 273 | 284 | 281 | 260 | 291 | 339 | 234 | 275 | 254 | 59 | 126 | 113 | 102 | 124 | 100 | 13 | 342 | 345 | 357 | 4 | - | ENE | |
| 19-Jan-08 | 348 | 354 | 13 | 86 | 85 | 76 | 72 | 71 | 99 | 75 | 107 | 158 | 165 | 167 | 358 | 238 | 249 | 246 | 242 | 221 | 214 | 218 | 255 | 261 | - | WNW | |
| 20-Jan-08 | 247 | 250 | 335 | 253 | 256 | 251 | 286 | 280 | 250 | 251 | 238 | 240 | 79 | 155 | 145 | 198 | 165 | 109 | 36 | 314 | 296 | 275 | 274 | 275 | 203 | SSW | |
| 21-Jan-08 | 153 | 146 | 31 | 340 | 278 | 287 | 280 | 272 | 268 | 274 | 282 | 290 | 284 | 286 | 284 | 283 | 285 | 285 | 295 | 289 | 306 | 318 | 298 | 280 | 284 | WNW | |
| 22-Jan-08 | 278 | 281 | 290 | 285 | 277 | 275 | 271 | 279 | 278 | 288 | 308 | 269 | 230 | 204 | 202 | 219 | 178 | 153 | 128 | 131 | 125 | 210 | 283 | 281 | 224 | SW | |
| 23-Jan-08 | 259 | 335 | 258 | 264 | 230 | 266 | 296 | 175 | 289 | 345 | 293 | 235 | 268 | 280 | 274 | 264 | 275 | 274 | 258 | 258 | 352 | 227 | 244 | 158 | 268 | W | |
| 24-Jan-08 | 237 | 278 | 334 | 27 | 349 | 61 | 77 | 91 | 89 | 109 | 109 | 96 | 103 | 115 | 111 | 104 | 108 | 120 | 117 | 118 | 112 | 97 | 114 | 94 | 104 | ESE | |
| 25-Jan-08 | 262 | 256 | 255 | 271 | 293 | 295 | 271 | 251 | 247 | 227 | 205 | 209 | 155 | 270 | 287 | 43 | 278 | 278 | 274 | 273 | 265 | 255 | 270 | 280 | 255 | WSW | |
| 26-Jan-08 | 201 | 174 | 233 | 249 | 245 | 252 | 252 | 262 | 255 | 298 | 117 | 233 | 237 | 238 | 351 | 317 | 310 | 307 | 312 | 349 | 351 | N | N | 4 | 294 | WNW | |
| 27-Jan-08 | N | 349 | N | N | 341 | 336 | 346 | 341 | 337 | 334 | 356 | 2 | 6 | 5 | 359 | 2 | 351 | 312 | 315 | 325 | 351 | 358 | 5 | 307 | 349 | N | |
| 28-Jan-08 | 288 | 270 | 272 | 293 | 285 | 263 | 260 | 250 | 255 | 259 | 249 | 269 | 248 | 107 | 83 | 73 | 198 | 168 | 158 | 184 | 240 | 242 | 241 | 291 | 247 | WSW | |
| 29-Jan-08 | 271 | 320 | 335 | 297 | 295 | 305 | 296 | 291 | 296 | 307 | N | 306 | 1 | 218 | 240 | 242 | 251 | 229 | 268 | 282 | 276 | 307 | 303 | 273 | - | - | |
| 30-Jan-08 | 276 | 291 | 286 | 287 | 287 | 284 | 276 | 281 | 302 | 344 | 31 | 76 | 72 | 93 | 90 | 103 | 80 | 80 | 135 | 90 | 122 | 115 | 122 | 180 | 94 | E | |
| 31-Jan-08 | 218 | 291 | 288 | 284 | 270 | 270 | 272 | 288 | 300 | 315 | 309 | 343 | 358 | 356 | 81 | 124 | 157 | 154 | 104 | 127 | 110 | 170 | 246 | 238 | 277 | W | |
| Hourly Avg | 243 | 271 | 256 | 256 | 263 | 264 | 264 | 261 | 259 | 254 | 255 | 255 | 241 | 257 | 252 | 256 | 241 | 233 | 246 | 274 | 286 | 266 | 258 | 274 | | | |

PASZA - Portable-Spirit River Standard Deviation of Wind Direction Monthly Summary

Station: Portable-Spirit River
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| |
|--|
| |
| |

Determined by the Yamartino 15-min interval calculation

| | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 738 hrs | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 90.0% | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 |
| | 80.7 | 65.7 | 31.9 | 15.7 | 8.5 | 4.3 | 2.2 |

Status Flag Characters

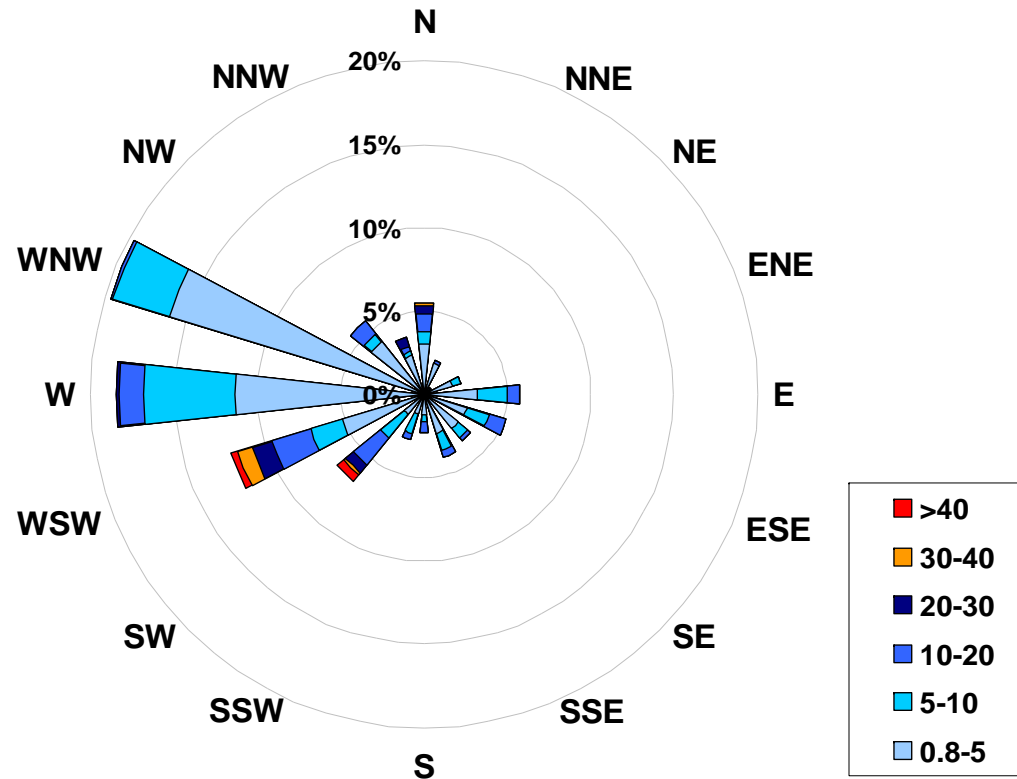
| | | | |
|---|----------------------------|---|-------------------------|
| C | Calibration | A | AIC - Zero / Span Check |
| S | Instrument out of Service | X | Filter Exchange |
| N | No Data | M | Equipment Maintenance |
| D | Excessive Instrument Drift | P | Power Failure |

Day Mountain Standard Time

| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 23:00 | 0:00 | Daily Maximum |
|------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|---------------|
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | 0:00 | | |
| 1-Jan-08 | 2 | 60 | 50 | 27 | 54 | 74 | 87 | 18 | 78 | 81 | 27 | 40 | 15 | 16 | 48 | 17 | 8 | 9 | 11 | 18 | 12 | 13 | 10 | 10 | | 86.8 | |
| 2-Jan-08 | 74 | 40 | 25 | 33 | 23 | 23 | 21 | 29 | 49 | 37 | 30 | 75 | 46 | 3 | 4 | 3 | 4 | 7 | 5 | 5 | 6 | 3 | 5 | 3 | | 74.5 | |
| 3-Jan-08 | 4 | 2 | 2 | 5 | 50 | 57 | 50 | 48 | 23 | 90 | 46 | 54 | 71 | 62 | 24 | 55 | 32 | 49 | 10 | 17 | 21 | 27 | 52 | 37 | | 90.1 | |
| 4-Jan-08 | 31 | 15 | 34 | 16 | 29 | 32 | 27 | 2 | 3 | 2 | 30 | 19 | 27 | 5 | 51 | 13 | 20 | 29 | 26 | 50 | 20 | 56 | 57 | 70 | | 69.5 | |
| 5-Jan-08 | 19 | 20 | 36 | 30 | 24 | 12 | 16 | 11 | 16 | 10 | 9 | 18 | 10 | 9 | 10 | 17 | 12 | 17 | 15 | 8 | 14 | 10 | 17 | 12 | | 36.4 | |
| 6-Jan-08 | 16 | 16 | 17 | 13 | 12 | 14 | 14 | 7 | 11 | 24 | 10 | 12 | 21 | 12 | 10 | 12 | 20 | 8 | 8 | 16 | 14 | 9 | 17 | 13 | | 23.8 | |
| 7-Jan-08 | 22 | 11 | 13 | 13 | 13 | 18 | 35 | 17 | 11 | 18 | 14 | 20 | 74 | 34 | 78 | 71 | 39 | 14 | 65 | 17 | 5 | 8 | 14 | 7 | | 78.0 | |
| 8-Jan-08 | 15 | 13 | 14 | 9 | 10 | 13 | 11 | 20 | 63 | 32 | 24 | 25 | 40 | 43 | 24 | 53 | 28 | 18 | 62 | 44 | 27 | 71 | 39 | 44 | | 70.7 | |
| 9-Jan-08 | 40 | 54 | 41 | 20 | 29 | 41 | 39 | 41 | 23 | 34 | 15 | 29 | 46 | 45 | 8 | 6 | 20 | 27 | 32 | 50 | 35 | 47 | 71 | 7 | | 71.0 | |
| 10-Jan-08 | 10 | 15 | 13 | 33 | 34 | 23 | 29 | 25 | 38 | 2 | 47 | 23 | 72 | 59 | 19 | 64 | 37 | 34 | 6 | 30 | 15 | 19 | 52 | 42 | | 71.6 | |
| 11-Jan-08 | 86 | 53 | 30 | 23 | 66 | 45 | 25 | 25 | 8 | 8 | 9 | 22 | 29 | 50 | 74 | 75 | 56 | 62 | 20 | 17 | 48 | 68 | 35 | 21 | | 86.4 | |
| 12-Jan-08 | 21 | 30 | 13 | 13 | 16 | 30 | 48 | 31 | 18 | 53 | 30 | 28 | 52 | 38 | 47 | 18 | 17 | 30 | 51 | 44 | 49 | 37 | 74 | 41 | | 74.0 | |
| 13-Jan-08 | 31 | 7 | 5 | 7 | 5 | 7 | 5 | 6 | 9 | 8 | 7 | 10 | 10 | 13 | 11 | 6 | 7 | 11 | 33 | 16 | 34 | 31 | 13 | 17 | | 34.2 | |
| 14-Jan-08 | 16 | 46 | 75 | 4 | 2 | 4 | 2 | 26 | 69 | 2 | 2 | 2 | 6 | 10 | 11 | 8 | 10 | 8 | 6 | 9 | 9 | 17 | 10 | 10 | | 75.1 | |
| 15-Jan-08 | 9 | 9 | 6 | 12 | 20 | 9 | 4 | 8 | 6 | 6 | 17 | 12 | 20 | 20 | 9 | 8 | 2 | 5 | 2 | 8 | 7 | 5 | 4 | 15 | | 19.9 | |
| 16-Jan-08 | 7 | 7 | 5 | 6 | 5 | 33 | 27 | 27 | 46 | 28 | 33 | 9 | 6 | 9 | 7 | 8 | 4 | 5 | 4 | 4 | 5 | 4 | 3 | 4 | | 46.2 | |
| 17-Jan-08 | 40 | 6 | 38 | 11 | 16 | 13 | 11 | 14 | 12 | 11 | 64 | 7 | 6 | 11 | 9 | 15 | 38 | 19 | 14 | 7 | 21 | 63 | 47 | 28 | | 63.6 | |
| 18-Jan-08 | 16 | 15 | 38 | 22 | 8 | 14 | 15 | 17 | 38 | 35 | 66 | 68 | 63 | 46 | 25 | 27 | 15 | 16 | 20 | 57 | 6 | 11 | 11 | 19 | | 68.2 | |
| 19-Jan-08 | 6 | 9 | 25 | 15 | 13 | 7 | 5 | 8 | 12 | 15 | 8 | 33 | 32 | 66 | 76 | 36 | 14 | 5 | 7 | 10 | 10 | 42 | 42 | 54 | | 76.2 | |
| 20-Jan-08 | 11 | 44 | 53 | 40 | 21 | 5 | 41 | 24 | 6 | 38 | 21 | 29 | 62 | 20 | 27 | 17 | 15 | 52 | 30 | 20 | 38 | 25 | 27 | 91 | | 90.8 | |
| 21-Jan-08 | 50 | 35 | 67 | 57 | 9 | 12 | 10 | 8 | 9 | 9 | 10 | 8 | 8 | 7 | 6 | 7 | 6 | 7 | 13 | 23 | 65 | 14 | 24 | 8 | | 67.0 | |
| 22-Jan-08 | 8 | 7 | 10 | 10 | 9 | 7 | 7 | 9 | 10 | 14 | 15 | 46 | 19 | 19 | 10 | 12 | 18 | 13 | 15 | 10 | 23 | 66 | 10 | 10 | | 65.7 | |
| 23-Jan-08 | 18 | 54 | 38 | 38 | 48 | 32 | 43 | 61 | 30 | 22 | 23 | 18 | 17 | 7 | 8 | 5 | 8 | 5 | 11 | 7 | 29 | 5 | 73 | 27 | | 72.5 | |
| 24-Jan-08 | 64 | 9 | 47 | 54 | 51 | 55 | 16 | 46 | 10 | 14 | 5 | 5 | 7 | 4 | 7 | 6 | 4 | 9 | 6 | 4 | 22 | 11 | 5 | 80 | | 80.5 | |
| 25-Jan-08 | 35 | 24 | 30 | 13 | 14 | 23 | 15 | 8 | 5 | 11 | 11 | 22 | 27 | 16 | 23 | 85 | 10 | 6 | 6 | 9 | 6 | 5 | 20 | 16 | | 85.1 | |
| 26-Jan-08 | 37 | 13 | 24 | 6 | 4 | 6 | 5 | 6 | 12 | 87 | 58 | 59 | 8 | 37 | 12 | 9 | 3 | 4 | 6 | 7 | 4 | N | N | 5 | | 87.3 | |
| 27-Jan-08 | N | 6 | N | N | 6 | 3 | 8 | 9 | 6 | 5 | 8 | 4 | 5 | 4 | 6 | 6 | 12 | 7 | 6 | 7 | 9 | 7 | 12 | 22 | | 22.4 | |
| 28-Jan-08 | 6 | 6 | 12 | 9 | 11 | 8 | 5 | 3 | 6 | 6 | 5 | 7 | 76 | 8 | 6 | 23 | 23 | 7 | 14 | 22 | 25 | 17 | 84 | 68 | | 83.7 | |
| 29-Jan-08 | 9 | 15 | 21 | 15 | 7 | 12 | 17 | 8 | 11 | 17 | N | 47 | 42 | 47 | 35 | 9 | 11 | 25 | 24 | 21 | 18 | 22 | 18 | 21 | | 47.3 | |
| 30-Jan-08 | 12 | 19 | 10 | 7 | 12 | 11 | 14 | 16 | 28 | 39 | 43 | 11 | 19 | 8 | 8 | 16 | 5 | 14 | 15 | 14 | 11 | 8 | 13 | 39 | | 42.7 | |
| 31-Jan-08 | 7 | 44 | 9 | 12 | 12 | 18 | 16 | 23 | 17 | 15 | 26 | 13 | 25 | 79 | 50 | 44 | 56 | 15 | 26 | 14 | 15 | 20 | 46 | 64 | | 79.0 | |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Hourly Max | 86 | 60 | 75 | 57 | 66 | 74 | 87 | 61 | 78 | 90 | 66 | 75 | 76 | 79 | 78 | 85 | 56 | 62 | 65 | 57 | 65 | 71 | 84 | 91 |
|------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|

1-hr Average Wind Rose (in km/hr) Located at the Portable-Spirit River Site for January 2008



Calms: 0%

| Frequency Distribution of Wind in km/hr | | | |
|---|----|----|-----------------|
| Range | | | Frequency (hrs) |
| 0.8 | < | 5 | 480 |
| 5 | to | 10 | 142 |
| 10 | to | 20 | 81 |
| 20 | to | 30 | 20 |
| 30 | to | 40 | 8 |
| | > | 40 | 6 |
| Total Non-Zero Values | | | 737 |

PASZA
Valleyview Station
Monthly Summary Tables, Graphs and
Roses

PASZA - Valleyview Sulphur Dioxide Monthly Summary

Station: Valleyview
 Station Owner: PASZA

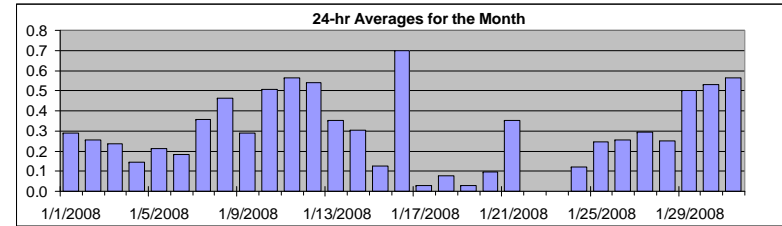
HOURLY AVERAGE TABLE

Sulphur Dioxide (SO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: Alberta Environment: 1-hr 172 ppb 24-hr 57 ppb

| | | | | |
|------------------------------|---------|--------|-------|-------|
| Number of 1-hr Exceedances: | 0 | | | |
| Number of 24-hr Exceedances: | 0 | | | |
| Maximum 1-hr Average: | 4.8 ppb | 16-Jan | 18:00 | 19:00 |
| Maximum 24-hr Average: | 0.7 ppb | 16-Jan | | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 30 hrs | Operational Time: | 686 hrs | | | | | | |
| Calibration Time: | 8 hrs | AMD Operational Uptime: | 97.3% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 1.7 | 0.8 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.3 ppb | 0.2 ppb |

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | |
|------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|--|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | | | |
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | |
| 1-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.3 | 0.9 | |
| 2-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.8 | |
| 3-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0.2 | 1.1 | |
| 4-Jan-08 | A | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.9 | |
| 5-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.8 | |
| 6-Jan-08 | 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 | 0.4 | |
| 7-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0.4 | 0.8 | |
| 8-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.9 | |
| 9-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0.3 | 0.7 | |
| 10-Jan-08 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0.5 | 0.9 | |
| 11-Jan-08 | A | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0.6 | 2.0 | |
| 12-Jan-08 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.5 | 1.1 | |
| 13-Jan-08 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.6 | |
| 14-Jan-08 | A | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.7 | |
| 15-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.5 | |
| 16-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 3 | 1 | 5 | 2 | 0 | 0 | 0 | 0 | 0.7 | 4.8 | |
| 17-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 | |
| 18-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.5 | |
| 19-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.2 | |
| 20-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.3 | |
| 21-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0.4 | 1.1 | |
| 22-Jan-08 | A | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | C | C | C | C | C | C | C | M | M | M | M | M | M | N | 0.7 | | |
| 23-Jan-08 | M | M | M | M | M | M | M | M | M | M | M | M | M | C | C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | N | 1.4 | |
| 24-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0.1 | 0.7 | |
| 25-Jan-08 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.8 | |
| 26-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.6 | |
| 27-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.5 | |
| 28-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 1.1 | |
| 29-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0.5 | 2.4 | |
| 30-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0.5 | 0.8 | |
| 31-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.6 | 0.9 | |
| Hourly Avg | N | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | | | |
| Hourly Max | 0.0 | 0.9 | 0.7 | 0.9 | 0.7 | 0.6 | 0.8 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 2.0 | 0.6 | 0.6 | 1.8 | 3.0 | 2.6 | 2.4 | 4.8 | 2.0 | 1.1 | 0.8 | 0.9 | 1.4 | | |

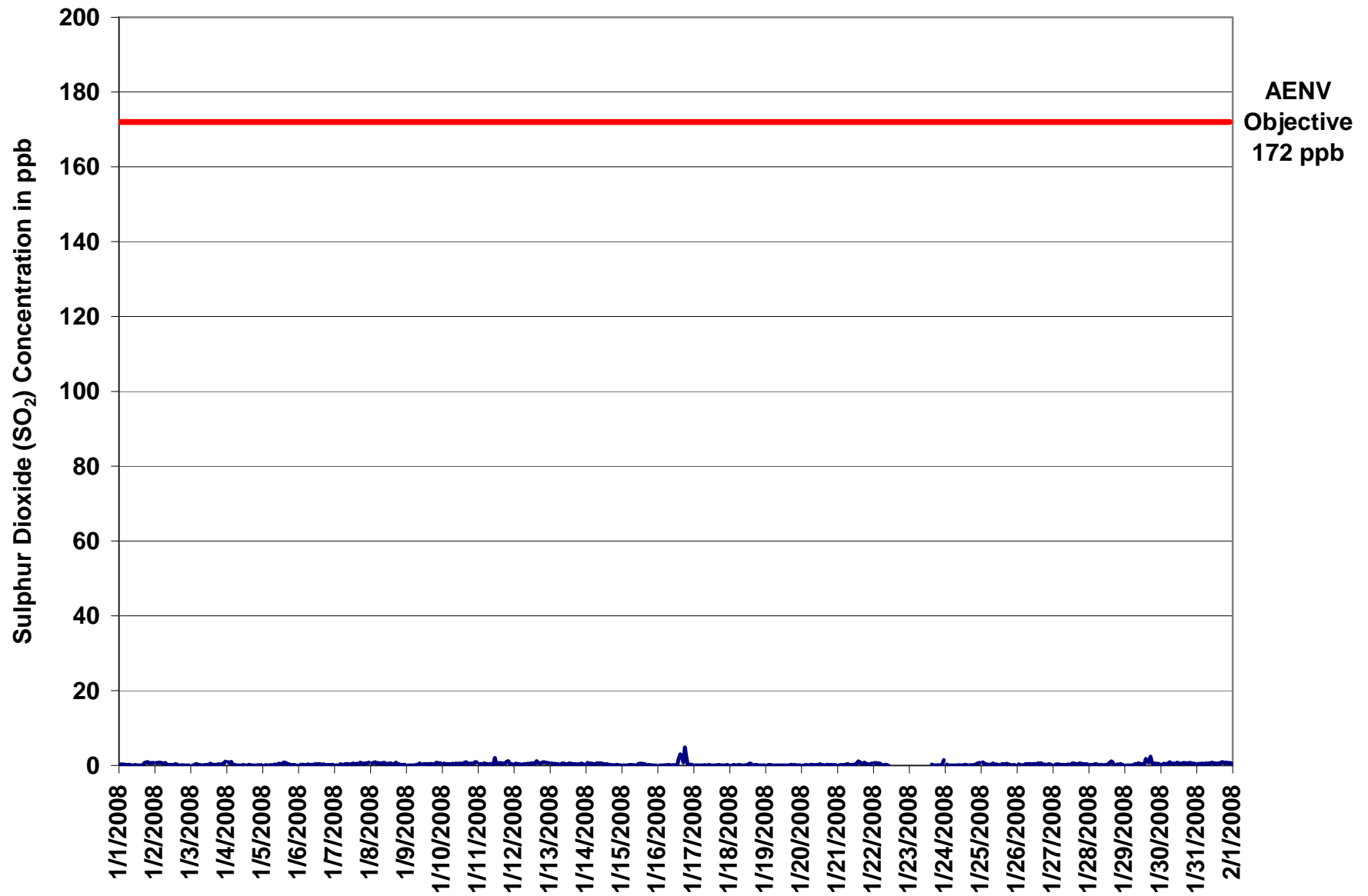


Figure 56. PASZA - Valleyview Sulphur Dioxide 1-hr Average Monthly Trend

Station: Valleyview
 Station Owner: PASZA

INSTANTANEOUS (30 Second) MAXIMUM TABLE

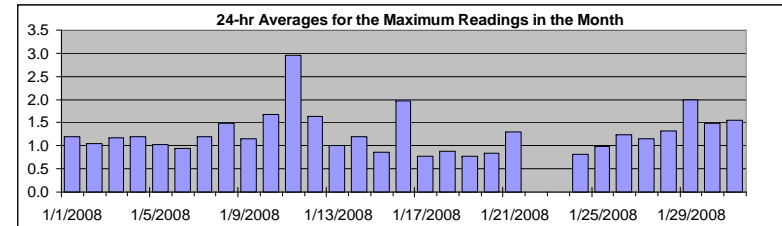
Sulphur Dioxide (SO₂)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|------|-----|--------|-------------|
| Maximum 1-hr Value: | 25.5 | ppb | 11-Jan | 11:00 12:00 |
| Maximum 24-hr Value: | 3.0 | ppb | 11-Jan | |

| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 30 hrs | Operational Time: | 686 hrs | | | | | | |
| Calibration Time: | 8 hrs | AMD Operational Uptime: | 97.3% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 5.7 | 2.2 | 1.5 | 1.1 | 0.8 | 0.5 | 0.4 | 1.3 ppb | 1.1 ppb |



Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1.2 | 2.0 | |
| 2-Jan-08 | A | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1.0 | 2.0 | |
| 3-Jan-08 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1.2 | 2.2 | |
| 4-Jan-08 | A | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1.2 | 4.0 | |
| 5-Jan-08 | A | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1.0 | 1.5 | |
| 6-Jan-08 | A | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.5 | |
| 7-Jan-08 | A | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1.2 | 1.7 | |
| 8-Jan-08 | A | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1.5 | 2.3 | |
| 9-Jan-08 | A | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1.2 | 2.2 | |
| 10-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 3 | 3 | 2 | 1 | 2 | 1 | 2 | 3 | 2 | 1.7 | 3.4 |
| 11-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 11 | 4 | 1 | 1 | 3.0 | 25.5 | |
| 12-Jan-08 | A | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1.6 | 3.6 | |
| 13-Jan-08 | A | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1.0 | 1.7 | |
| 14-Jan-08 | A | 3 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1.2 | 2.7 | |
| 15-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0.9 | 1.6 | |
| 16-Jan-08 | A | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 6 | 5 | 6 | 2 | 10 | 8 | 1 | 1 | 1 | 2.0 | 9.7 | |
| 17-Jan-08 | 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 | |
| 18-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.9 | 1.8 | |
| 19-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.7 | |
| 20-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 0.8 | 1.7 | |
| 21-Jan-08 | A | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1.3 | 3.9 | |
| 22-Jan-08 | A | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | C | C | C | C | C | C | M | M | M | M | M | M | N | 2.9 | |
| 23-Jan-08 | M | M | M | M | M | M | M | M | M | M | M | M | M | C | C | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 5 | 4 | N | 5.3 |
| 24-Jan-08 | A | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 0.8 | 1.6 | |
| 25-Jan-08 | A | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1.0 | 1.9 | |
| 26-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1.2 | 2.8 | |
| 27-Jan-08 | A | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1.1 | 1.9 | |
| 28-Jan-08 | A | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 3 | 1 | 1.3 | 2.8 | |
| 29-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 8 | 2 | 2 | 11 | 4 | 2 | 1 | 1 | 2 | 2.0 | 10.8 | |
| 30-Jan-08 | A | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 3 | 2 | 2 | 1 | 1 | 2 | 1 | 1.5 | 2.8 | |
| 31-Jan-08 | A | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1.5 | 1.8 | |
| Hourly Avg | N | 1.1 | 1.0 | 1.2 | 1.0 | 0.9 | 1.0 | 1.0 | 1.1 | 1.0 | 1.1 | 1.9 | 1.1 | 1.2 | 1.8 | 1.6 | 1.5 | 1.6 | 1.6 | 1.8 | 1.1 | 1.2 | 1.2 | 1.2 | | |
| Hourly Max | 0.0 | 2.9 | 1.8 | 4.0 | 1.9 | 1.5 | 1.9 | 1.7 | 1.7 | 2.2 | 1.9 | 25.5 | 2.3 | 1.8 | 8.2 | 4.5 | 6.4 | 10.8 | 9.7 | 11.3 | 4.4 | 2.8 | 5.3 | 4.2 | | |

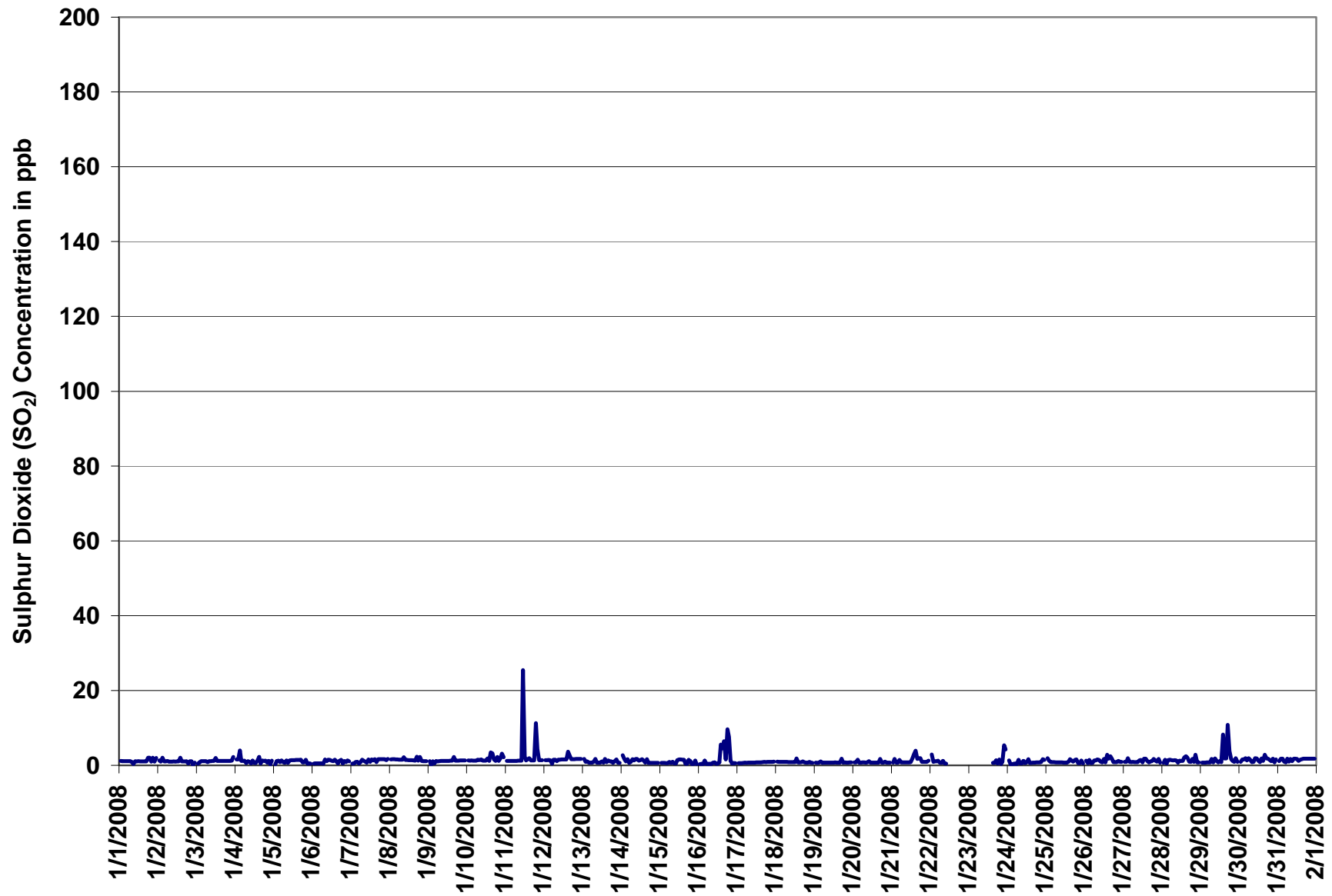
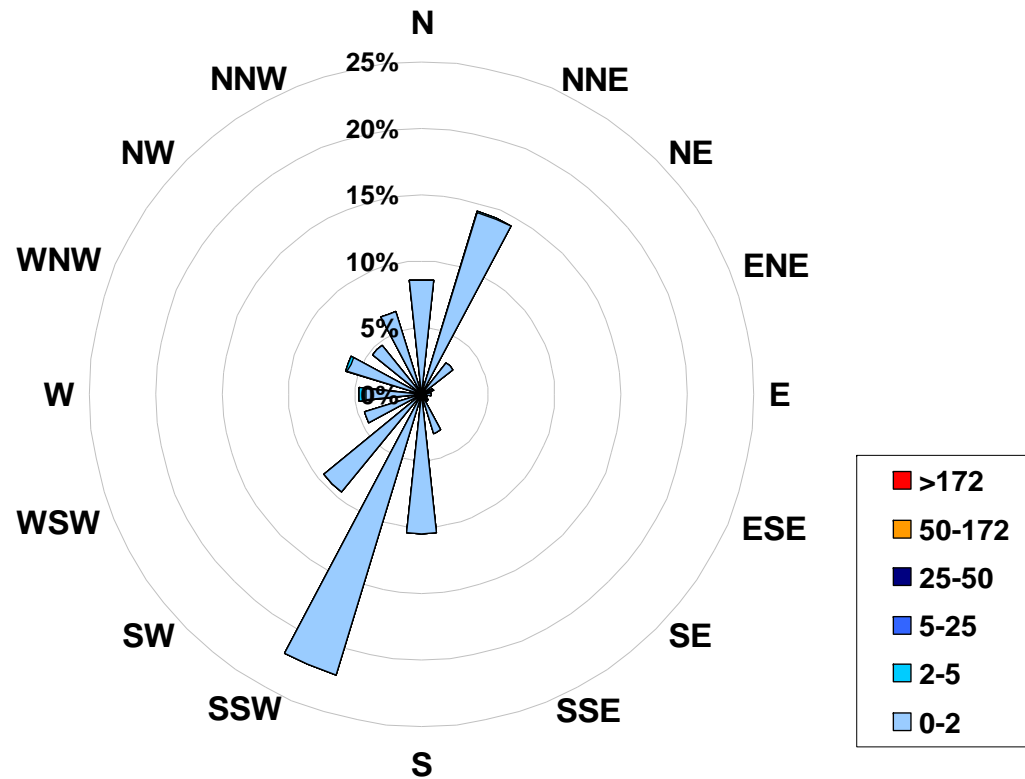


Figure 57. PASZA - Valleyview Sulphur Dioxide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Sulphur Dioxide (in ppb) Located at the Valleyview Site for January 2008



Calms: 0%

| Frequency Distribution of SO ₂ in ppb Range | | | Frequency (hrs) |
|--|----|-----|-----------------|
| 0.0 | < | 2 | 681 |
| 2 | to | 5 | 5 |
| 5 | to | 25 | 0 |
| 25 | to | 50 | 0 |
| 50 | to | 172 | 0 |
| | > | 172 | 0 |
| Total Non-Zero Values | | | 686 |

PASZA - Valleyview Hydrogen Sulphide Monthly Summary

Station: Valleyview
 Station Owner: PASZA

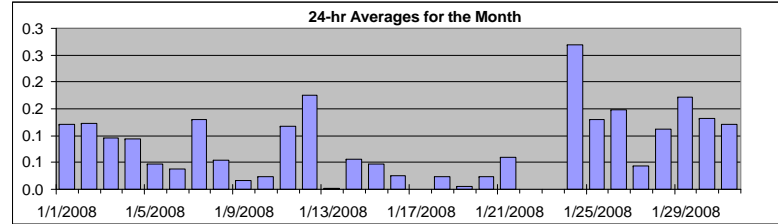
HOURLY AVERAGE TABLE

Hydrogen Sulphide (H₂S)

Monitoring Dates: January 1, 2008 to February 1, 2008

Objective Limit: Alberta Environment: 1-hr 10 ppb 24-hr 3 ppb

| | | | | |
|------------------------------|-----|-----|--------|-------------|
| Number of 1-hr Exceedances: | 0 | | | |
| Number of 24-hr Exceedances: | 0 | | | |
| Maximum 1-hr Average: | 1.2 | ppb | 2-Jan | 18:00 19:00 |
| Maximum 24-hr Value: | 0.3 | ppb | 24-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 30 hrs | Operational Time: | 686 hrs | | | | | | |
| Calibration Time: | 9 hrs | AMD Operational Uptime: | 97.4% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 0.7 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 ppb | 0.0 ppb |

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | | |
|------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|-----|-----|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | | | | |
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | | |
| 1-Jan-08 | 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 | 0.5 | |
| 2-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0.1 | 1.2 | |
| 3-Jan-08 | 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 | 0.3 | |
| 4-Jan-08 | 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 | 0.3 | |
| 5-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.2 | |
| 6-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.2 | |
| 7-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0.1 | 1.1 | |
| 8-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.7 | |
| 9-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 | |
| 10-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 | |
| 11-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0.1 | 0.8 | |
| 12-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.7 | |
| 13-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | |
| 14-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.6 | |
| 15-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.3 | |
| 16-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.2 | |
| 17-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | |
| 18-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 | |
| 19-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 | |
| 20-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 | |
| 21-Jan-08 | 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 | 0.2 | |
| 22-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | C | C | C | C | C | C | C | M | M | M | M | M | M | M | N | 0.1 | 0.1 | |
| 23-Jan-08 | M | M | M | M | M | M | M | M | M | M | C | C | C | C | C | C | C | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | N | 0.7 | 0.7 |
| 24-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.8 | |
| 25-Jan-08 | 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 | 0.2 | |
| 26-Jan-08 | 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 | 0.2 | |
| 27-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.1 | |
| 28-Jan-08 | 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 | 0.3 | |
| 29-Jan-08 | 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 | 0.2 | 0.3 | |
| 30-Jan-08 | 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 | 0.2 | |
| 31-Jan-08 | 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 | 0.3 | |
| Hourly Avg | N | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | | | |
| Hourly Max | 0.0 | 0.3 | 0.3 | 0.4 | 0.3 | 0.5 | 0.5 | 0.6 | 0.8 | 0.7 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.7 | 0.7 | 1.2 | 0.9 | 0.5 | 0.4 | 0.6 | 0.7 | | | |

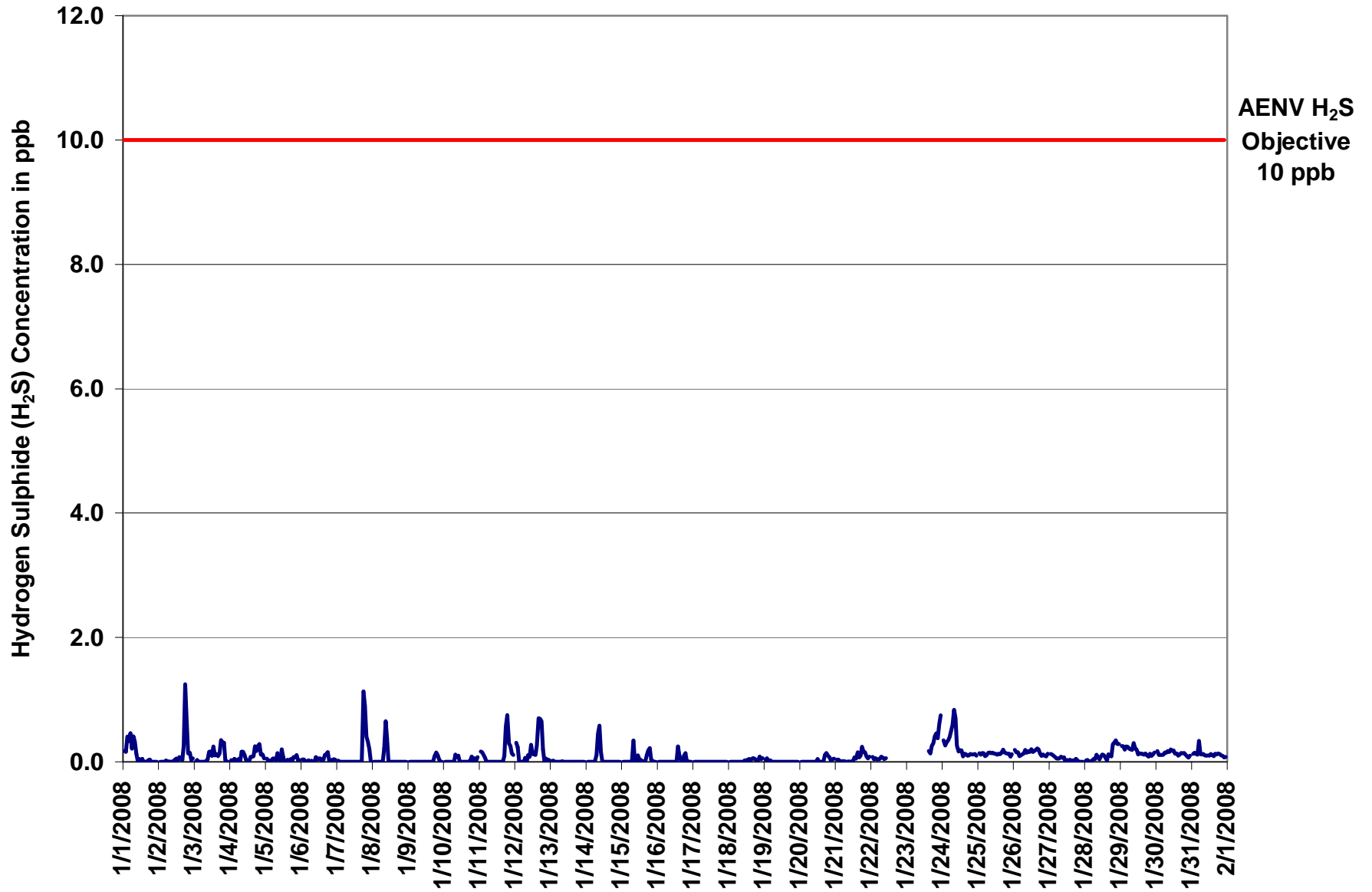


Figure 58. PASZA - Valleyview Hydrogen Sulphide 1-hr Average Monthly Trend

Station: Valleyview
 Station Owner: PASZA

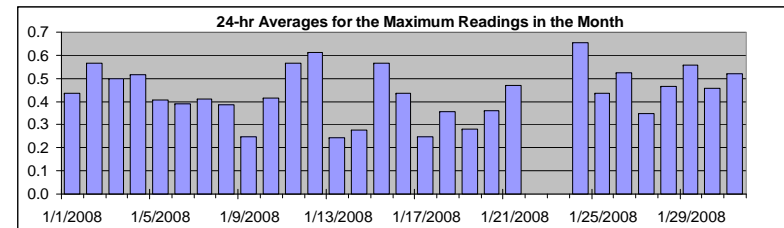
INSTANTANEOUS (30 Second) MAXIMUM TABLE

Hydrogen Sulphide (H₂S)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|----------------------|-----|-----|--------|-----------|
| Maximum 1-hr Value: | 2.8 | ppb | 15-Jan | 8:00 9:00 |
| Maximum 24-hr Value: | 0.7 | ppb | 24-Jan | |



| | | | | | | | | | |
|-------------------|--------|-------------------------|---------|-----|-----|-----|-----|---------|---------|
| AIC Time: | 30 hrs | Operational Time: | 686 hrs | | | | | | |
| Calibration Time: | 9 hrs | AMD Operational Uptime: | 97.4% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 1.6 | 1.0 | 0.5 | 0.4 | 0.3 | 0.1 | 0.0 | 0.4 ppb | 0.4 ppb |

Status Flag Characters

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

Day Mountain Standard Time

| Hour Start Hour End | 0:00 1:00 | 1:00 2:00 | 2:00 3:00 | 3:00 4:00 | 4:00 5:00 | 5:00 6:00 | 6:00 7:00 | 7:00 8:00 | 8:00 9:00 | 9:00 10:00 | 10:00 11:00 | 11:00 12:00 | 12:00 13:00 | 13:00 14:00 | 14:00 15:00 | 15:00 16:00 | 16:00 17:00 | 17:00 18:00 | 18:00 19:00 | 19:00 20:00 | 20:00 21:00 | 21:00 22:00 | 22:00 23:00 | 23:00 0:00 | 24-hour Average | Daily Maximum |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------|------------------|
| 1-Jan-08 | A | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.9 |
| 2-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0.6 | 2.1 |
| 3-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0.5 | 1.0 |
| 4-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0.5 | 1.4 |
| 5-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.9 |
| 6-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.8 |
| 7-Jan-08 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 1 | 1 | 0 | 0.4 | 2.1 |
| 8-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0.4 | 1.2 |
| 9-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0.2 | 0.5 |
| 10-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0.4 | 1.7 |
| 11-Jan-08 | A | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0.6 | 1.5 |
| 12-Jan-08 | A | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0.6 | 1.5 |
| 13-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 1.4 |
| 14-Jan-08 | A | 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 | 1.0 |
| 15-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.6 | 2.8 |
| 16-Jan-08 | A | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0.4 | 1.3 |
| 17-Jan-08 | 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 | 0.4 |
| 18-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0.4 | 1.1 |
| 19-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.4 |
| 20-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0.4 | 1.1 |
| 21-Jan-08 | A | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0.5 | 1.4 |
| 22-Jan-08 | A | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | C | C | C | C | C | C | M | M | M | M | M | M | M | N | 0.5 |
| 23-Jan-08 | M | M | M | M | M | M | M | M | M | M | M | M | C | C | C | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | N | 1.2 |
| 24-Jan-08 | A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 1.3 |
| 25-Jan-08 | A | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.6 |
| 26-Jan-08 | A | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.5 | 1.6 |
| 27-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.6 |
| 28-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0.5 | 1.0 |
| 29-Jan-08 | A | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0.6 | 1.4 |
| 30-Jan-08 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.8 |
| 31-Jan-08 | A | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 2.3 |
| Hourly Avg | N | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | 0.7 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| Hourly Max | 0.0 | 1.3 | 1.0 | 1.2 | 0.8 | 2.3 | 0.9 | 1.4 | 2.8 | 1.2 | 1.4 | 1.4 | 1.2 | 1.2 | 1.1 | 1.4 | 1.5 | 1.7 | 2.1 | 2.1 | 0.9 | 1.1 | 1.0 | 1.2 | | |

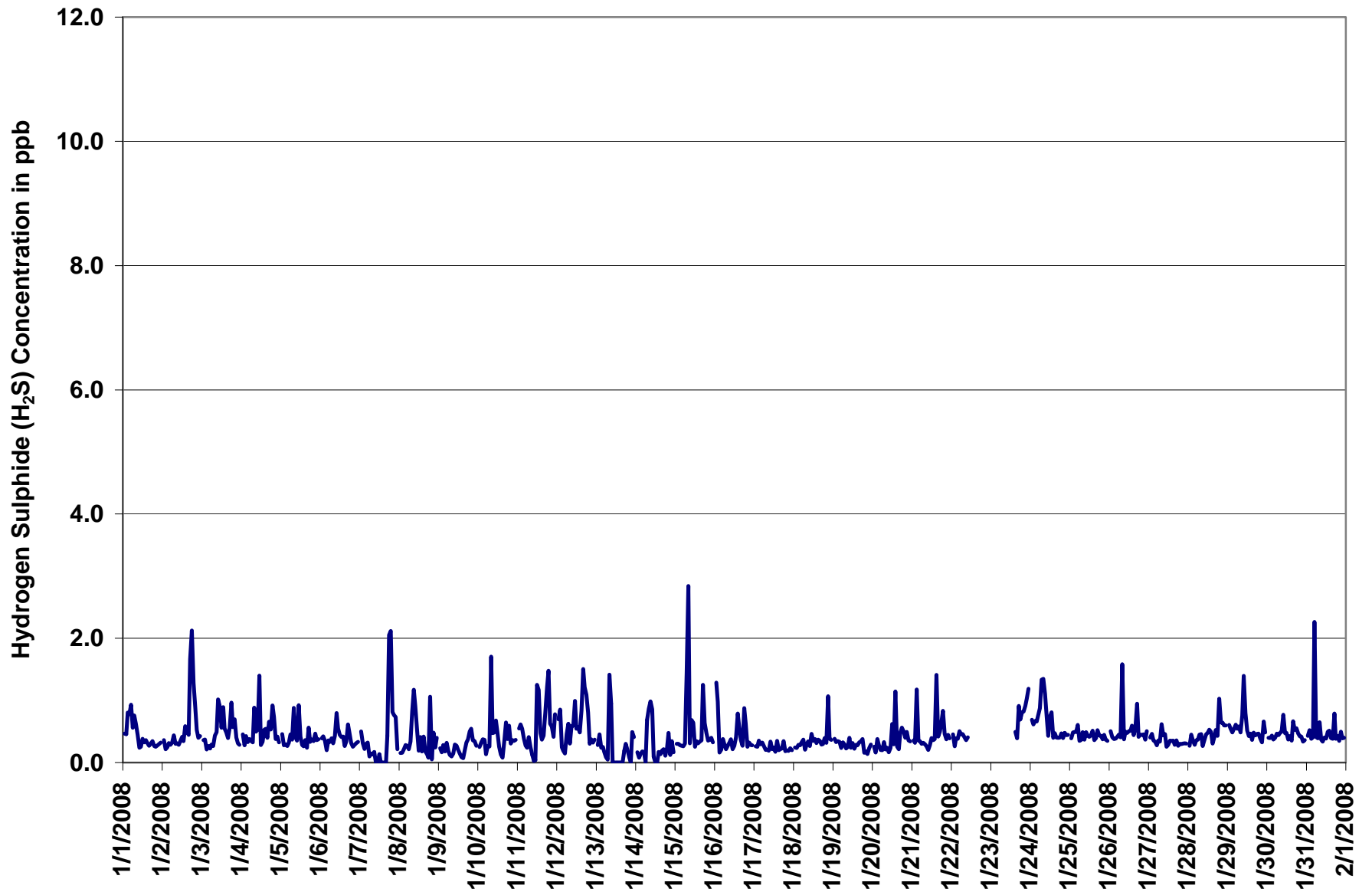
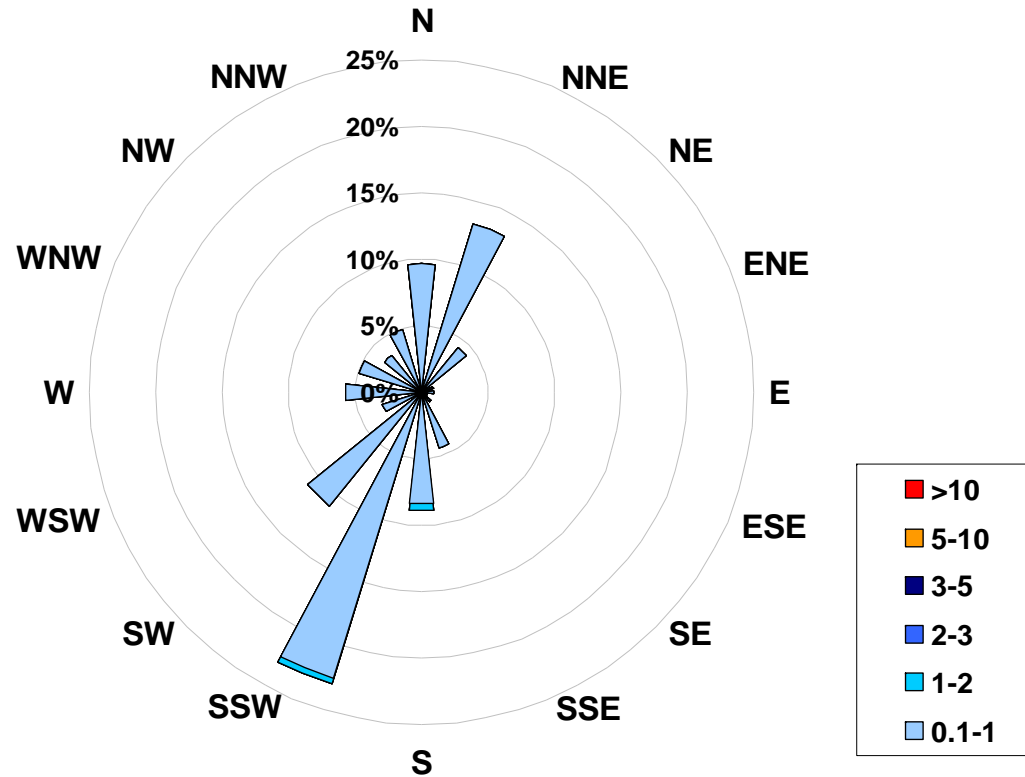


Figure 59. PASZA - Valleyview Hydrogen Sulphide Instantaneous (30 Second) Maximum Value Monthly Trend

1-hr Average Concentration Rose for Hydrogen Sulphide (in ppb) Located at the Valleyview Site for January 2008



Calms: 0%

| Frequency Distribution of H ₂ S in ppb Range | | | Frequency (hrs) |
|---|----|----|-----------------|
| 0.1 | < | 1 | 684 |
| 1 | to | 2 | 2 |
| 2 | to | 3 | 0 |
| 3 | to | 5 | 0 |
| 5 | to | 10 | 0 |
| | > | 10 | 0 |
| Total Non-Zero Values | | | 686 |

PASZA - Valleyview Relative Humidity Monthly Summary

Station: Valleyview
 Station Owner: PASZA

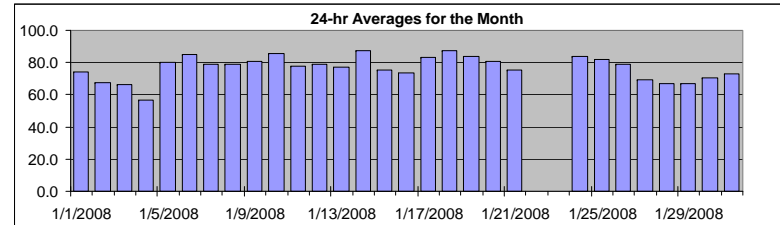
HOURLY AVERAGE TABLE

Relative Humidity (RH)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|---|--------|-------------|
| Maximum 1-hr Average: | 97.4 | % | 14-Jan | 18:00 19:00 |
| Maximum 24-hr Value: | 87.6 | % | 18-Jan | |



| | | | | | | | | | |
|-------------------|-------|-------------------------|---------|------|------|------|------|---------|--------|
| AIC Time: | 0 hrs | Operational Time: | 721 hrs | | | | | | |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 96.9% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 93.6 | 89.9 | 83.5 | 79.0 | 69.2 | 58.7 | 51.1 | 76.6 | 79.0 |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | | |
|------------|------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|------|------|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | | | |
| 1-Jan-08 | 83 | 82 | 81 | 78 | 78 | 78 | 79 | 77 | 78 | 78 | 78 | 78 | 80 | 81 | 74 | 69 | 68 | 64 | 66 | 66 | 67 | 67 | 67 | 66 | 66 | 74.2 | 82.5 |
| 2-Jan-08 | 68 | 68 | 68 | 68 | 68 | 68 | 67 | 67 | 68 | 71 | 69 | 66 | 64 | 63 | 63 | 63 | 64 | 69 | 76 | 71 | 66 | 69 | 67 | 72 | 67 | 67.5 | 75.7 |
| 3-Jan-08 | 68 | 70 | 64 | 62 | 63 | 68 | 71 | 76 | 78 | 75 | 73 | 69 | 66 | 65 | 62 | 63 | 63 | 69 | 73 | 72 | 58 | 55 | 50 | 51 | 66.0 | 78.1 | |
| 4-Jan-08 | 53 | 55 | 56 | 59 | 63 | 61 | 59 | 57 | 63 | 68 | 63 | 52 | 46 | 42 | 42 | 50 | 57 | 64 | 63 | 62 | 57 | 54 | 56 | 56 | 56.7 | 67.7 | |
| 5-Jan-08 | 62 | 65 | 68 | 73 | 80 | 82 | 82 | 87 | 89 | 90 | 83 | 79 | 70 | 72 | 74 | 73 | 76 | 79 | 83 | 88 | 92 | 92 | 93 | 92 | 80.2 | 93.4 | |
| 6-Jan-08 | 91 | 90 | 89 | 89 | 89 | 89 | 89 | 88 | 87 | 87 | 84 | 84 | 82 | 80 | 80 | 81 | 83 | 85 | 85 | 83 | 84 | 81 | 81 | 83 | 85.2 | 91.1 | |
| 7-Jan-08 | 82 | 83 | 83 | 84 | 83 | 82 | 80 | 79 | 79 | 79 | 79 | 74 | 68 | 69 | 68 | 67 | 70 | 77 | 84 | 86 | 85 | 83 | 82 | 83 | 78.8 | 86.0 | |
| 8-Jan-08 | 82 | 83 | 83 | 82 | 79 | 79 | 78 | 77 | 77 | 76 | 75 | 74 | 75 | 72 | 73 | 75 | 78 | 79 | 80 | 82 | 83 | 82 | 82 | 83 | 78.8 | 83.3 | |
| 9-Jan-08 | 83 | 81 | 80 | 80 | 80 | 80 | 80 | 79 | 79 | 79 | 79 | 79 | 79 | 80 | 80 | 81 | 82 | 82 | 81 | 81 | 82 | 83 | 83 | 84 | 80.7 | 83.5 | |
| 10-Jan-08 | 85 | 86 | 87 | 86 | 86 | 85 | 85 | 85 | 84 | 84 | 85 | 85 | 86 | 86 | 85 | 86 | 86 | 86 | 87 | 87 | 87 | 87 | 87 | 86 | 86 | 85.7 | 87.0 |
| 11-Jan-08 | 85 | 82 | 81 | 81 | 79 | 80 | 80 | 82 | 82 | 81 | 78 | 72 | 69 | 65 | 59 | 63 | 67 | 70 | 73 | 79 | 84 | 86 | 89 | 91 | 77.5 | 91.2 | |
| 12-Jan-08 | 91 | 90 | 90 | 91 | 91 | 90 | 90 | 90 | 90 | 88 | 86 | 84 | 82 | 78 | 74 | 75 | 77 | 77 | 65 | 58 | 57 | 58 | 59 | 61 | 78.8 | 91.4 | |
| 13-Jan-08 | 66 | 70 | 71 | 77 | 84 | 85 | 85 | 86 | 87 | 86 | 82 | 78 | 72 | 65 | 65 | 66 | 69 | 73 | 79 | 83 | 84 | 81 | 81 | 82 | 77.4 | 87.3 | |
| 14-Jan-08 | 83 | 84 | 83 | 82 | 86 | 87 | 88 | 89 | 91 | 87 | 83 | 81 | 82 | 86 | 92 | 95 | 96 | 97 | 97 | 93 | 86 | 81 | 81 | 90 | 87.5 | 97.4 | |
| 15-Jan-08 | 86 | 85 | 82 | 79 | 73 | 72 | 76 | 75 | 79 | 83 | 79 | 68 | 63 | 61 | 60 | 58 | 59 | 72 | 86 | 86 | 85 | 80 | 79 | 81 | 75.3 | 86.5 | |
| 16-Jan-08 | 82 | 83 | 83 | 83 | 83 | 83 | 83 | 84 | 83 | 83 | 83 | 83 | 82 | 79 | 67 | 64 | 66 | 65 | 64 | 60 | 56 | 56 | 56 | 55 | 73.5 | 83.7 | |
| 17-Jan-08 | 55 | 63 | 95 | 97 | 96 | 92 | 90 | 86 | 83 | 85 | 79 | 76 | 78 | 80 | 82 | 84 | 85 | 89 | 88 | 86 | 83 | 81 | 81 | 80 | 83.1 | 97.2 | |
| 18-Jan-08 | 84 | 89 | 90 | 88 | 87 | 87 | 86 | 85 | 87 | 90 | 88 | 86 | 84 | 83 | 83 | 81 | 84 | 88 | 91 | 92 | 92 | 93 | 93 | 93 | 87.6 | 93.4 | |
| 19-Jan-08 | 94 | 93 | 92 | 90 | 87 | 86 | 85 | 85 | 83 | 82 | 81 | 80 | 81 | 81 | 81 | 81 | 85 | 84 | 83 | 83 | 82 | 80 | 78 | 78 | 83.9 | 93.6 | |
| 20-Jan-08 | 78 | 79 | 79 | 80 | 81 | 82 | 82 | 82 | 81 | 80 | 80 | 82 | 83 | 80 | 74 | 73 | 76 | 81 | 85 | 85 | 84 | 84 | 83 | 83 | 80.7 | 85.2 | |
| 21-Jan-08 | 82 | 81 | 81 | 81 | 82 | 82 | 83 | 83 | 83 | 84 | 82 | 80 | 73 | 64 | 59 | 55 | 56 | 61 | 69 | 78 | 78 | 82 | 78 | 69 | 75.3 | 84.1 | |
| 22-Jan-08 | 66 | 64 | 65 | 66 | 66 | 67 | 68 | 71 | 75 | 77 | 77 | 78 | 77 | 77 | 79 | 78 | M | M | M | M | M | M | M | M | N | 79.0 | |
| 23-Jan-08 | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 51 | 49 | 58 | 70 | 75 | 81 | 88 | 88 | 88 | N | 88.4 |
| 24-Jan-08 | 87 | 89 | 90 | 89 | 86 | 86 | 85 | 85 | 85 | 85 | 86 | 83 | 80 | 80 | 80 | 79 | 80 | 82 | 84 | 84 | 83 | 82 | 82 | 82 | 83.9 | 90.4 | |
| 25-Jan-08 | 82 | 82 | 83 | 88 | 90 | 89 | 86 | 85 | 85 | 86 | 85 | 83 | 83 | 75 | 73 | 71 | 74 | 77 | 80 | 81 | 82 | 81 | 82 | 85 | 82.0 | 90.0 | |
| 26-Jan-08 | 85 | 86 | 86 | 86 | 85 | 82 | 81 | 80 | 80 | 80 | 81 | 77 | 73 | 70 | 69 | 71 | 72 | 75 | 79 | 86 | 81 | 78 | 77 | 77 | 79.1 | 86.4 | |
| 27-Jan-08 | 76 | 75 | 75 | 73 | 73 | 72 | 70 | 73 | 71 | 71 | 70 | 68 | 66 | 66 | 64 | 64 | 65 | 68 | 67 | 66 | 67 | 69 | 69 | 67 | 69.4 | 75.6 | |
| 28-Jan-08 | 67 | 67 | 67 | 68 | 68 | 70 | 71 | 71 | 71 | 69 | 65 | 64 | 61 | 60 | 58 | 58 | 58 | 65 | 72 | 72 | 72 | 70 | 68 | 68 | 66.7 | 72.4 | |
| 29-Jan-08 | 67 | 67 | 67 | 67 | 66 | 66 | 66 | 67 | 66 | 66 | 67 | 68 | 66 | 62 | 61 | 60 | 62 | 65 | 68 | 70 | 71 | 73 | 73 | 73 | 67.0 | 73.1 | |
| 30-Jan-08 | 73 | 73 | 73 | 74 | 73 | 70 | 69 | 70 | 70 | 70 | 67 | 66 | 65 | 63 | 63 | 64 | 69 | 74 | 75 | 76 | 76 | 75 | 75 | 74 | 70.7 | 75.9 | |
| 31-Jan-08 | 75 | 75 | 76 | 76 | 75 | 75 | 74 | 74 | 75 | 75 | 73 | 70 | 69 | 69 | 71 | 71 | 72 | 72 | 71 | 72 | 72 | 72 | 72 | 72 | 72.9 | 76.1 | |
| Hourly Avg | 77.3 | 78.0 | 79.0 | 79.2 | 79.4 | 79.2 | 78.9 | 79.2 | 79.7 | 79.8 | 78.0 | 75.6 | 73.5 | 71.8 | 70.5 | 70.0 | 71.6 | 75.0 | 77.5 | 78.1 | 77.3 | 76.7 | 76.5 | 76.8 | | | |
| Hourly Max | 93.6 | 93.2 | 94.8 | 97.2 | 95.9 | 91.9 | 89.8 | 89.7 | 90.8 | 90.2 | 88.2 | 86.3 | 85.5 | 85.9 | 92.2 | 94.8 | 96.0 | 97.1 | 97.4 | 93.1 | 92.2 | 92.6 | 93.4 | 93.4 | | | |

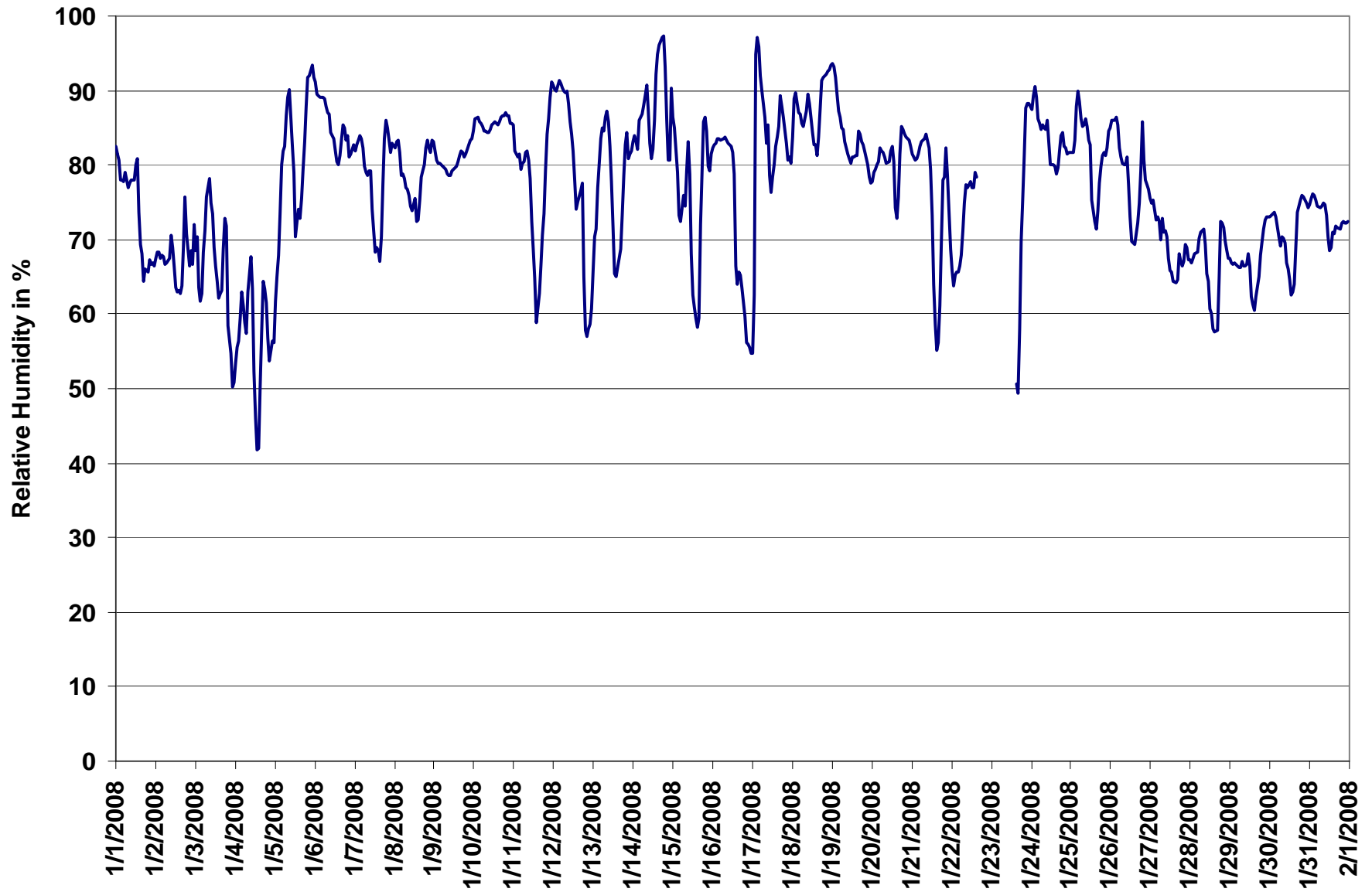


Figure 60. PASZA - Valleyview Relative Humidity 1-hr Average Monthly Trend

PASZA - Valleyview Temperature Monthly Summary

Station: Valleyview
 Station Owner: PASZA

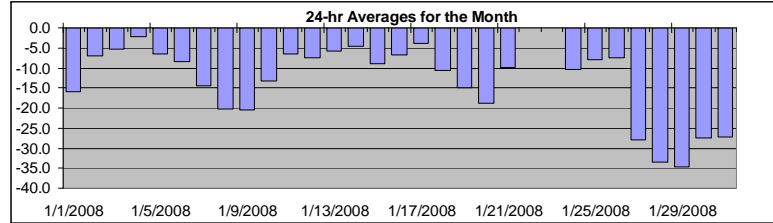
HOURLY AVERAGE TABLE

Ambient Temperature (T)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|----|--------|-------------|
| Maximum 1-hr Average: | 4.4 | °C | 16-Jan | 21:00 22:00 |
| Maximum 24-hr Value: | -2.1 | °C | 4-Jan | |



| | | | | | | | | | |
|-------------------|-------|-------------------------|---------|------|-------|-------|-------|----------|---------|
| AIC Time: | 0 hrs | Operational Time: | 721 hrs | | | | | | |
| Calibration Time: | 0 hrs | AMD Operational Uptime: | 96.9% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average | Median |
| | 2.5 | -0.7 | -6.3 | -9.8 | -19.3 | -30.9 | -40.4 | -13.1 °C | -9.8 °C |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | Daily Maximum | | |
|------------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|---------------|-------|--|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | |
| 1-Jan-08 | -20 | -21 | -22 | -24 | -25 | -25 | -24 | -24 | -24 | -23 | -21 | -19 | -16 | -13 | -9 | -8 | -8 | -8 | -8 | -8 | -9 | -8 | -8 | -8 | -8 | -16.0 | -7.7 | |
| 2-Jan-08 | -8 | -8 | -8 | -8 | -8 | -8 | -8 | -8 | -8 | -8 | -9 | -9 | -8 | -7 | -7 | -6 | -5 | -6 | -7 | -8 | -4 | -3 | -4 | -4 | -6 | -6.9 | -2.8 | |
| 3-Jan-08 | -5 | -6 | -5 | -4 | -5 | -7 | -7 | -9 | -9 | -9 | -9 | -8 | -7 | -5 | -5 | -4 | -4 | -5 | -6 | -6 | -3 | -1 | 1 | 1 | -5.3 | 0.6 | | |
| 4-Jan-08 | 0 | -1 | -1 | -1 | -2 | -2 | -1 | -1 | -3 | -4 | -4 | -1 | 0 | 1 | 1 | -1 | -3 | -5 | -5 | -5 | -4 | -3 | -3 | -2 | -2.1 | 1.4 | | |
| 5-Jan-08 | -3 | -4 | -4 | -5 | -7 | -8 | -8 | -9 | -10 | -11 | -9 | -7 | -5 | -4 | -4 | -3 | -4 | -5 | -5 | -6 | -7 | -8 | -9 | -10 | -6.5 | -3.0 | | |
| 6-Jan-08 | -10 | -10 | -9 | -9 | -9 | -9 | -8 | -8 | -8 | -8 | -8 | -8 | -7 | -6 | -6 | -6 | -7 | -7 | -8 | -8 | -9 | -10 | -11 | -11 | -8.4 | -6.1 | | |
| 7-Jan-08 | -12 | -12 | -12 | -13 | -14 | -14 | -14 | -15 | -15 | -15 | -15 | -14 | -13 | -12 | -12 | -11 | -12 | -14 | -15 | -17 | -17 | -18 | -20 | -19 | -14.4 | -11.3 | | |
| 8-Jan-08 | -20 | -20 | -20 | -21 | -22 | -23 | -24 | -25 | -26 | -26 | -24 | -21 | -19 | -17 | -16 | -16 | -16 | -17 | -18 | -18 | -19 | -20 | -21 | -21 | -20.3 | -15.5 | | |
| 9-Jan-08 | -21 | -21 | -21 | -21 | -21 | -22 | -22 | -22 | -23 | -23 | -23 | -22 | -22 | -22 | -21 | -20 | -19 | -18 | -19 | -19 | -19 | -18 | -18 | -17 | -17 | -20.4 | -16.8 | |
| 10-Jan-08 | -16 | -14 | -14 | -15 | -15 | -15 | -16 | -16 | -16 | -16 | -15 | -14 | -13 | -12 | -11 | -11 | -11 | -11 | -12 | -12 | -12 | -12 | -12 | -12 | -13.3 | -11.0 | | |
| 11-Jan-08 | -12 | -11 | -10 | -10 | -9 | -9 | -8 | -8 | -7 | -7 | -6 | -4 | -3 | -2 | -1 | -2 | -3 | -3 | -4 | -6 | -7 | -7 | -8 | -10 | -6.6 | -0.5 | | |
| 12-Jan-08 | -9 | -11 | -11 | -12 | -11 | -11 | -12 | -13 | -12 | -13 | -13 | -11 | -8 | -7 | -5 | -5 | -5 | -6 | -3 | 0 | 0 | 0 | -1 | -1 | -7.5 | 0.0 | | |
| 13-Jan-08 | -3 | -4 | -4 | -6 | -8 | -8 | -8 | -8 | -8 | -8 | -8 | -8 | -6 | -5 | -3 | -3 | -3 | -4 | -6 | -7 | -8 | -6 | -7 | -7 | -5.8 | -2.6 | | |
| 14-Jan-08 | -7 | -7 | -7 | -6 | -7 | -8 | -8 | -9 | -9 | -8 | -7 | -4 | -3 | -1 | 0 | 0 | 0 | 0 | -2 | -3 | -3 | -3 | -4 | -5 | -4.7 | 0.2 | | |
| 15-Jan-08 | -5 | -6 | -6 | -7 | -8 | -7 | -7 | -8 | -8 | -9 | -9 | -9 | -8 | -8 | -7 | -7 | -7 | -10 | -12 | -13 | -14 | -13 | -13 | -14 | -9.0 | -5.4 | | |
| 16-Jan-08 | -14 | -14 | -15 | -16 | -16 | -16 | -16 | -16 | -17 | -16 | -13 | -11 | -8 | -5 | 0 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 | 4 | -6.8 | 4.4 | | |
| 17-Jan-08 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -3 | -4 | -4 | -5 | -5 | -6 | -6 | -7 | -7 | -8 | -9 | -9 | -10 | -10 | -10 | -3.9 | 4.1 | | |
| 18-Jan-08 | -10 | -12 | -13 | -13 | -13 | -13 | -14 | -14 | -14 | -14 | -13 | -12 | -11 | -10 | -9 | -8 | -8 | -8 | -8 | -7 | -7 | -7 | -7 | -6 | -10.5 | -6.4 | | |
| 19-Jan-08 | -6 | -6 | -8 | -9 | -11 | -11 | -12 | -12 | -13 | -13 | -14 | -15 | -15 | -16 | -16 | -16 | -17 | -18 | -19 | -20 | -21 | -23 | -25 | -25 | -15.1 | -5.8 | | |
| 20-Jan-08 | -25 | -25 | -24 | -23 | -23 | -21 | -20 | -20 | -20 | -21 | -20 | -18 | -16 | -15 | -13 | -13 | -13 | -14 | -16 | -17 | -17 | -17 | -19 | -19 | -18.7 | -12.7 | | |
| 21-Jan-08 | -20 | -20 | -19 | -18 | -18 | -16 | -15 | -14 | -13 | -13 | -12 | -10 | -7 | -3 | -2 | -1 | -1 | -3 | -4 | -6 | -6 | -7 | -5 | -3 | -9.9 | -1.1 | | |
| 22-Jan-08 | -3 | -3 | -4 | -4 | -4 | -5 | -5 | -6 | -6 | -6 | -6 | -5 | -5 | -5 | -5 | -5 | M | M | M | M | M | M | M | M | N | -3.4 | | |
| 23-Jan-08 | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | -1 | -1 | -3 | -5 | -8 | -9 | -12 | -12 | -12 | N | -0.6 | |
| 24-Jan-08 | -14 | -13 | -14 | -15 | -15 | -16 | -16 | -15 | -15 | -14 | -13 | -11 | -9 | -6 | -5 | -5 | -6 | -6 | -6 | -6 | -7 | -7 | -7 | -7 | -10.4 | -5.4 | | |
| 25-Jan-08 | -7 | -8 | -8 | -9 | -10 | -10 | -10 | -9 | -9 | -9 | -8 | -8 | -8 | -7 | -7 | -6 | -6 | -7 | -7 | -7 | -7 | -7 | -7 | -7 | -7.9 | -6.3 | | |
| 26-Jan-08 | -7 | -8 | -8 | -8 | -7 | -7 | -7 | -6 | -7 | -7 | -7 | -5 | -4 | -3 | -3 | -3 | -3 | -4 | -3 | -7 | -14 | -17 | -18 | -19 | -7.5 | -2.5 | | |
| 27-Jan-08 | -20 | -21 | -23 | -24 | -24 | -25 | -26 | -27 | -28 | -28 | -29 | -29 | -29 | -29 | -30 | -30 | -30 | -30 | -30 | -31 | -31 | -31 | -31 | -32 | -27.9 | -20.0 | | |
| 28-Jan-08 | -32 | -33 | -33 | -32 | -32 | -32 | -33 | -34 | -35 | -35 | -34 | -32 | -31 | -30 | -30 | -30 | -30 | -29 | -31 | -33 | -35 | -37 | -39 | -40 | -33.5 | -29.2 | | |
| 29-Jan-08 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -40 | -38 | -34 | -31 | -29 | -28 | -28 | -28 | -28 | -28 | -29 | -29 | -29 | -30 | -34.8 | -28.2 | | |
| 30-Jan-08 | -30 | -29 | -29 | -29 | -29 | -30 | -30 | -30 | -29 | -29 | -29 | -28 | -27 | -26 | -25 | -25 | -25 | -25 | -25 | -26 | -26 | -25 | -26 | -26 | -27.4 | -24.6 | | |
| 31-Jan-08 | -27 | -28 | -29 | -30 | -30 | -30 | -30 | -30 | -30 | -29 | -29 | -28 | -27 | -26 | -26 | -25 | -25 | -25 | -25 | -25 | -25 | -25 | -26 | -25 | -27.3 | -24.9 | | |
| Hourly Avg | -13.4 | -13.7 | -14.1 | -14.5 | -14.8 | -14.9 | -15.0 | -15.2 | -15.4 | -15.6 | -14.9 | -13.7 | -12.3 | -11.1 | -10.2 | -9.8 | -10.2 | -11.0 | -11.6 | -12.1 | -12.5 | -12.8 | -13.1 | -13.4 | | | | |
| Hourly Max | 4.1 | 3.2 | 0.0 | -0.2 | 0.0 | 0.2 | 0.1 | 0.3 | -0.2 | -2.9 | -3.7 | -1.4 | 0.2 | 1.4 | 1.2 | 1.6 | 1.7 | 2.0 | 2.6 | 3.6 | 4.3 | 4.4 | 4.4 | 4.2 | | | | |

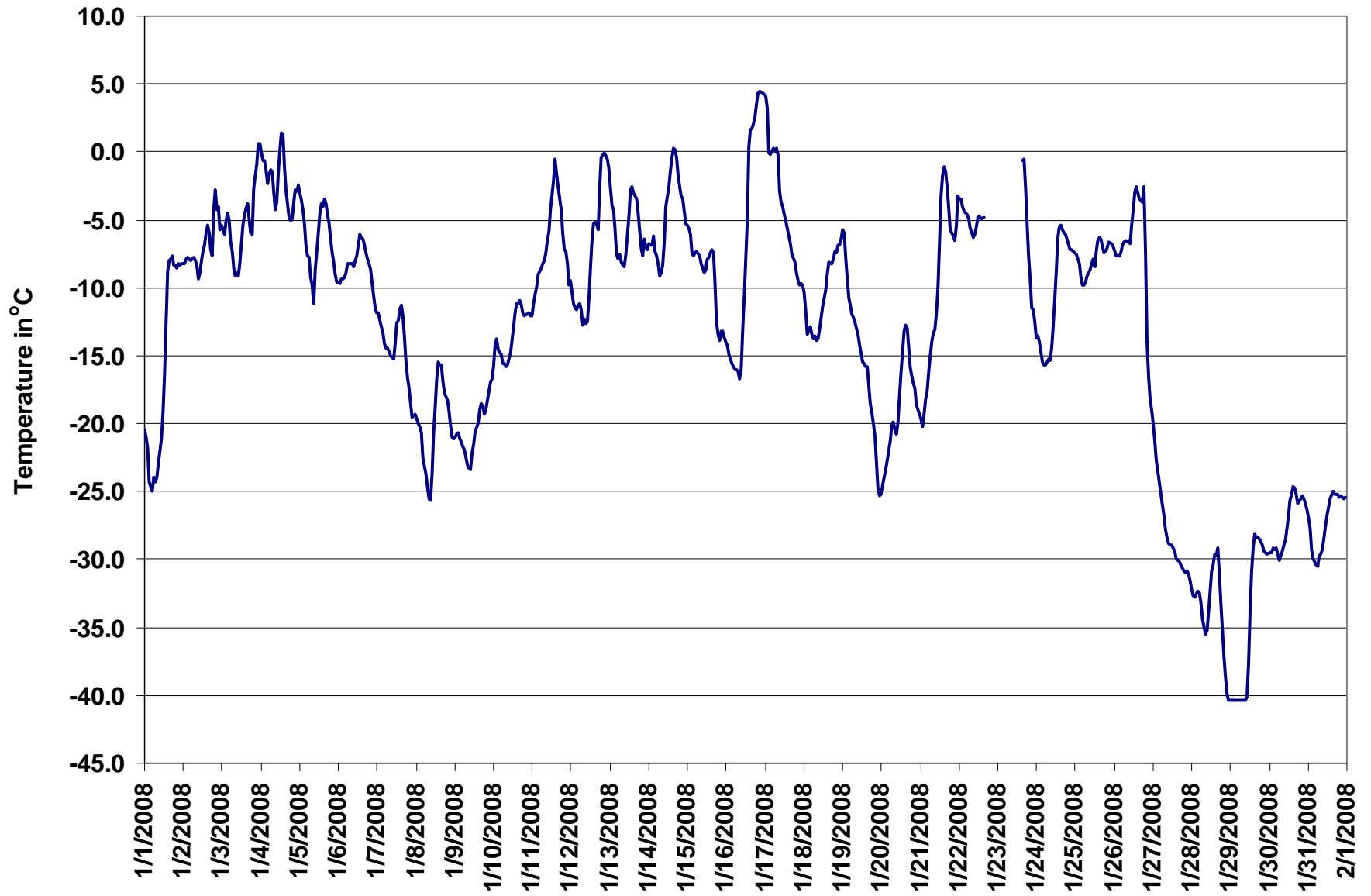


Figure 61. PASZA - Valleyview Temperature 1-hr Average Monthly Trend

PASZA - Valleyview Scalar Wind Speed Monthly Summary

Station: Valleyview
 Station Owner: PASZA

HOURLY AVERAGE TABLE

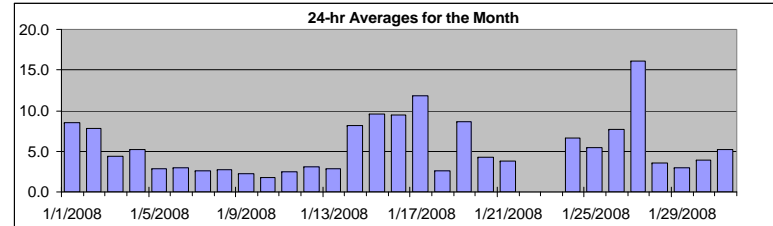
Wind Speed (WSs)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|-------|--------|------------|
| Maximum 1-hr Average: | 26.2 | km/hr | 26-Jan | 23:00 0:00 |
| Maximum 24-hr Value: | 16.1 | km/hr | 27-Jan | |

| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|-----------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 721 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 96.9% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | AverageS |
| | 22.6 | 17.5 | 6.5 | 3.7 | 2.2 | 1.3 | 0.9 | 5.5 km/hr |



Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hr Scalar Average | Daily Max | |
|--------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------------|--------------|--|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | |
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | |
| 1-Jan-08 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 2 | 4 | 9 | 11 | 11 | 19 | 25 | 19 | 23 | 22 | 19 | 19 | 8.6 | 25.3 | |
| 2-Jan-08 | 20 | 20 | 16 | 14 | 11 | 13 | 10 | 10 | 7 | 7 | 6 | 5 | 3 | 4 | 2 | 2 | 3 | 4 | 6 | 8 | 5 | 5 | 7 | 7.8 | 20.0 | | |
| 3-Jan-08 | 7 | 5 | 9 | 10 | 4 | 4 | 4 | 2 | 1 | 3 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 7 | 10 | 14 | 4.4 | 13.9 | |
| 4-Jan-08 | 11 | 7 | 5 | 4 | 4 | 4 | 8 | 7 | 4 | 3 | 5 | 7 | 8 | 6 | 3 | 2 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 6 | 5.2 | 10.6 | |
| 5-Jan-08 | 5 | 2 | 4 | 3 | 2 | 2 | 2 | 3 | 3 | 5 | 3 | 3 | 3 | 5 | 4 | 2 | 3 | 3 | 1 | 1 | 1 | 3 | 2 | 2 | 2.8 | 5.5 | |
| 6-Jan-08 | 1 | 2 | 2 | 2 | 2 | 4 | 2 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 4 | 3 | 6 | 6 | 5 | 5 | 3 | 3.0 | 6.3 | |
| 7-Jan-08 | 3 | 3 | 3 | 5 | 4 | 3 | 4 | 5 | 5 | 2 | 2 | 3 | 2 | 4 | 3 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2.6 | 5.2 | |
| 8-Jan-08 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 5 | 7 | 6 | 5 | 3 | 5 | 4 | 2 | 2.8 | 7.2 | |
| 9-Jan-08 | 3 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 4 | 2 | 1 | 3 | 2 | 1 | 1 | 1 | 2 | 1 | 2.2 | 3.5 | |
| 10-Jan-08 | 1 | 2 | 2 | 2 | 4 | 3 | 2 | 2 | 2 | 1 | 2 | 1 | 3 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1.7 | 4.1 | |
| 11-Jan-08 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 3 | 4 | 4 | 4 | 3 | 2 | 1 | 2 | 2 | 4 | 1 | 2 | 1 | 3 | 3 | 2 | 2 | 2.5 | 4.4 | |
| 12-Jan-08 | 2 | 1 | 1 | 5 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 3 | 5 | 8 | 5 | 7 | 6 | 3 | 3.1 | 7.5 | |
| 13-Jan-08 | 2 | 3 | 3 | 2 | 2 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 2 | 2 | 4 | 1 | 2 | 3 | 3 | 2 | 2 | 1 | 2.8 | 4.3 | |
| 14-Jan-08 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 4 | 5 | 5 | 4 | 5 | 2 | 6 | 23 | 26 | 19 | 20 | 18 | 21 | 17 | 8.2 | 26.1 | |
| 15-Jan-08 | 12 | 15 | 14 | 11 | 9 | 9 | 8 | 10 | 5 | 8 | 11 | 15 | 20 | 16 | 14 | 11 | 7 | 3 | 4 | 5 | 6 | 7 | 6 | 6 | 9.6 | 19.7 | |
| 16-Jan-08 | 4 | 6 | 6 | 5 | 6 | 6 | 4 | 4 | 3 | 5 | 7 | 6 | 4 | 5 | 14 | 14 | 12 | 11 | 10 | 14 | 19 | 21 | 21 | 22 | 9.5 | 22.2 | |
| 17-Jan-08 | 22 | 25 | 19 | 22 | 14 | 17 | 17 | 15 | 17 | 9 | 9 | 8 | 8 | 9 | 8 | 6 | 6 | 7 | 10 | 11 | 8 | 6 | 6 | 5 | 11.8 | 25.4 | |
| 18-Jan-08 | 2 | 1 | 2 | 4 | 3 | 2 | 4 | 3 | 2 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 4 | 3 | 4 | 4 | 2.7 | 4.1 | |
| 19-Jan-08 | 6 | 7 | 9 | 12 | 11 | 12 | 14 | 12 | 12 | 11 | 10 | 11 | 11 | 9 | 9 | 9 | 10 | 10 | 6 | 4 | 2 | 3 | 4 | 3 | 8.6 | 14.0 | |
| 20-Jan-08 | 2 | 4 | 3 | 2 | 4 | 6 | 6 | 5 | 4 | 4 | 5 | 3 | 2 | 5 | 5 | 6 | 5 | 3 | 5 | 5 | 5 | 5 | 3 | 4 | 4.2 | 6.1 | |
| 21-Jan-08 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 3 | 2 | 3 | 3 | 3 | 5 | 5 | 4 | 3.8 | 5.4 | |
| 22-Jan-08 | 7 | 12 | 12 | 13 | 13 | 9 | 14 | 7 | 7 | 9 | 11 | 9 | 8 | 6 | 6 | 6 | M | M | M | M | M | M | M | M | N | 13.5 | |
| 23-Jan-08 | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 2 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | N | 3.3 | |
| 24-Jan-08 | 5 | 3 | 2 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 6 | 12 | 12 | 13 | 9 | 11 | 12 | 15 | 13 | 12 | 11 | 6.6 | 14.9 | |
| 25-Jan-08 | 10 | 10 | 8 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 6 | 7 | 10 | 8 | 7 | 6 | 7 | 4 | 4 | 3 | 5 | 5 | 3 | 1 | 5.5 | 10.5 | |
| 26-Jan-08 | 2 | 3 | 3 | 4 | 7 | 7 | 6 | 8 | 5 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 4 | 5 | 6 | 19 | 25 | 21 | 17 | 26 | 7.7 | 26.2 | |
| 27-Jan-08 | 23 | 22 | 18 | 19 | 18 | 18 | 19 | 18 | 18 | 15 | 17 | 15 | 15 | 14 | 16 | 12 | 13 | 11 | 13 | 13 | 14 | 15 | 14 | 16 | 16.1 | 23.3 | |
| 28-Jan-08 | 12 | 8 | 5 | 6 | 6 | 5 | 5 | 6 | 3 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 3.5 | 12.4 | |
| 29-Jan-08 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 2 | 5 | 5 | 5 | 6 | 6 | 5 | 4 | 5 | 4 | 2 | 3 | 3.0 | 5.7 | |
| 30-Jan-08 | 3 | 3 | 2 | 3 | 3 | 5 | 6 | 3 | 1 | 2 | 3 | 2 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 5 | 6 | 7 | 7 | 7 | 3.9 | 7.1 | |
| 31-Jan-08 | 5 | 6 | 7 | 5 | 3 | 2 | 2 | 1 | 6 | 6 | 4 | 4 | 4 | 5 | 6 | 9 | 10 | 8 | 7 | 5 | 5 | 5 | 5 | 5 | 5.2 | 10.1 | |
| 1-hr Average | 6.1 | 6.2 | 5.6 | 5.7 | 5.2 | 5.3 | 5.4 | 5.1 | 4.6 | 4.4 | 4.7 | 4.6 | 4.7 | 5.0 | 5.4 | 4.8 | 5.1 | 5.4 | 6.1 | 6.3 | 7.0 | 6.9 | 6.5 | 6.7 | | | |
| Hourly Max | 23.3 | 25.4 | 19.3 | 22.5 | 17.5 | 18.3 | 18.8 | 18.3 | 17.6 | 15.2 | 16.8 | 15.3 | 19.7 | 16.1 | 15.7 | 14.0 | 13.2 | 22.9 | 26.1 | 19.4 | 25.4 | 21.8 | 21.0 | 26.2 | | | |

PASZA - Valleyview Vector Wind Speed Monthly Summary

Station: Valleyview
 Station Owner: PASZA

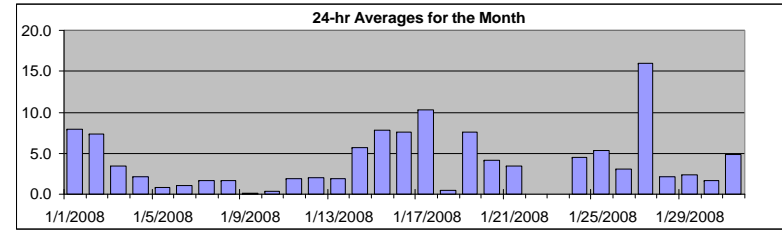
HOURLY AVERAGE TABLE

Wind Speed (WSv)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | | | | |
|-----------------------|------|-------|--------|------------|
| Maximum 1-hr Average: | 26.2 | km/hr | 26-Jan | 23:00 0:00 |
| Maximum 24-hr Value: | 16.0 | km/hr | 27-Jan | |



| | | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|-----------|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 721 hrs | | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 96.9% | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | AverageV |
| | 22.4 | 17.3 | 6.3 | 3.5 | 1.7 | 0.6 | 0.3 | 1.9 km/hr |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hr Vector Average | Daily Max | |
|-------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-----------|-----|
| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | |
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | | |
| 1-Jan-08 | 3 | 3 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 0 | 1 | 1 | 3 | 9 | 10 | 11 | 19 | 25 | 19 | 22 | 22 | 19 | 19 | 7.9 | 25.2 | |
| 2-Jan-08 | 20 | 19 | 16 | 14 | 11 | 13 | 10 | 10 | 7 | 7 | 6 | 5 | 2 | 4 | 1 | 1 | 1 | 2 | 4 | 6 | 8 | 5 | 5 | 6 | 7.4 | 19.8 | |
| 3-Jan-08 | 7 | 5 | 9 | 10 | 4 | 3 | 4 | 2 | 0 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 3 | 1 | 2 | 7 | 10 | 14 | 3.5 | 13.8 | | |
| 4-Jan-08 | 11 | 7 | 5 | 2 | 4 | 4 | 8 | 7 | 4 | 3 | 5 | 7 | 8 | 6 | 3 | 1 | 4 | 5 | 5 | 3 | 2 | 3 | 4 | 5 | 2.1 | 10.6 | |
| 5-Jan-08 | 5 | 1 | 3 | 0 | 2 | 1 | 2 | 2 | 2 | 4 | 3 | 2 | 2 | 5 | 3 | 2 | 3 | 3 | 0 | 1 | 0 | 2 | 1 | 2 | 0.8 | 5.2 | |
| 6-Jan-08 | 1 | 1 | 0 | 2 | 1 | 1 | 1 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 3 | 3 | 6 | 6 | 5 | 5 | 3 | 1.0 | 6.3 | |
| 7-Jan-08 | 2 | 3 | 3 | 5 | 4 | 3 | 3 | 5 | 5 | 2 | 2 | 3 | 0 | 3 | 3 | 2 | 1 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 1.7 | 5.1 | |
| 8-Jan-08 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 3 | 2 | 2 | 2 | 5 | 7 | 6 | 5 | 3 | 4 | 4 | 2 | 1.7 | 7.1 | |
| 9-Jan-08 | 3 | 2 | 0 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.2 | 3.5 | |
| 10-Jan-08 | 1 | 2 | 1 | 2 | 4 | 3 | 2 | 2 | 1 | 1 | 0 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0.4 | 4.1 | |
| 11-Jan-08 | 2 | 2 | 0 | 2 | 2 | 3 | 2 | 3 | 4 | 4 | 4 | 3 | 2 | 1 | 0 | 2 | 4 | 1 | 2 | 1 | 2 | 3 | 2 | 2 | 1.8 | 4.3 | |
| 12-Jan-08 | 1 | 0 | 1 | 5 | 4 | 3 | 1 | 1 | 2 | 1 | 0 | 0 | 2 | 2 | 3 | 3 | 1 | 1 | 5 | 7 | 5 | 7 | 6 | 3 | 2.0 | 7.5 | |
| 13-Jan-08 | 2 | 2 | 3 | 1 | 1 | 4 | 4 | 4 | 1 | 3 | 3 | 4 | 3 | 4 | 2 | 2 | 4 | 0 | 2 | 2 | 3 | 2 | 1 | 1 | 1.9 | 4.1 | |
| 14-Jan-08 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 1 | 1 | 1 | 2 | 4 | 5 | 4 | 5 | 2 | 4 | 23 | 25 | 19 | 20 | 17 | 21 | 17 | 5.7 | 25.0 | |
| 15-Jan-08 | 12 | 15 | 14 | 11 | 9 | 9 | 8 | 10 | 5 | 8 | 11 | 15 | 20 | 16 | 14 | 11 | 7 | 3 | 4 | 5 | 6 | 7 | 6 | 5 | 7.8 | 19.6 | |
| 16-Jan-08 | 4 | 6 | 6 | 5 | 6 | 6 | 4 | 3 | 3 | 5 | 7 | 6 | 3 | 5 | 13 | 14 | 12 | 11 | 10 | 14 | 19 | 21 | 21 | 22 | 7.5 | 22.1 | |
| 17-Jan-08 | 22 | 24 | 19 | 22 | 14 | 17 | 17 | 15 | 15 | 9 | 9 | 8 | 8 | 8 | 7 | 6 | 6 | 7 | 10 | 11 | 7 | 5 | 4 | 5 | 10.3 | 24.0 | |
| 18-Jan-08 | 1 | 1 | 1 | 4 | 3 | 1 | 4 | 3 | 2 | 1 | 1 | 1 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 4 | 3 | 4 | 4 | 0.5 | 4.1 | |
| 19-Jan-08 | 6 | 7 | 9 | 12 | 11 | 12 | 14 | 12 | 12 | 11 | 10 | 11 | 11 | 9 | 9 | 9 | 10 | 9 | 6 | 4 | 2 | 2 | 4 | 3 | 7.6 | 13.9 | |
| 20-Jan-08 | 2 | 3 | 3 | 2 | 4 | 6 | 6 | 5 | 4 | 4 | 5 | 3 | 2 | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 5 | 2 | 4 | 4.1 | 6.1 | |
| 21-Jan-08 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 5 | 5 | 5 | 3 | 3 | 4 | 4 | 3 | 1 | 3 | 2 | 1 | 5 | 4 | 1 | 3.4 | 5.3 | |
| 22-Jan-08 | 6 | 12 | 11 | 13 | 13 | 9 | 13 | 6 | 7 | 9 | 11 | 9 | 8 | 6 | 5 | 5 | M | M | M | M | M | M | M | M | N | 13.3 | |
| 23-Jan-08 | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 2 | 0 | 2 | 2 | 3 | 1 | 2 | 1 | 0 | N | 3.2 |
| 24-Jan-08 | 5 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 3 | 2 | 2 | 4 | 12 | 12 | 12 | 9 | 11 | 12 | 15 | 13 | 11 | 11 | 4.5 | 14.6 | |
| 25-Jan-08 | 10 | 10 | 7 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 7 | 9 | 8 | 6 | 6 | 7 | 3 | 4 | 3 | 5 | 5 | 3 | 1 | 5.3 | 10.4 | |
| 26-Jan-08 | 2 | 1 | 1 | 4 | 7 | 6 | 6 | 8 | 5 | 4 | 2 | 2 | 1 | 2 | 1 | 1 | 4 | 5 | 6 | 18 | 25 | 21 | 17 | 26 | 3.0 | 26.2 | |
| 27-Jan-08 | 23 | 22 | 18 | 19 | 17 | 18 | 19 | 18 | 17 | 15 | 17 | 15 | 15 | 14 | 16 | 12 | 13 | 11 | 13 | 13 | 14 | 15 | 13 | 16 | 16.0 | 23.2 | |
| 28-Jan-08 | 12 | 8 | 5 | 6 | 6 | 5 | 5 | 5 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2.1 | 12.4 | |
| 29-Jan-08 | 1 | 2 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 3 | 3 | 2 | 4 | 5 | 5 | 6 | 6 | 5 | 4 | 5 | 4 | 2 | 3 | 2.4 | 5.6 | |
| 30-Jan-08 | 3 | 2 | 2 | 3 | 2 | 5 | 5 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 3 | 2 | 4 | 4 | 5 | 6 | 7 | 7 | 7 | 1.7 | 7.0 | |
| 31-Jan-08 | 5 | 6 | 7 | 5 | 2 | 1 | 2 | 1 | 6 | 6 | 4 | 4 | 4 | 5 | 6 | 9 | 10 | 8 | 7 | 5 | 5 | 5 | 5 | 5 | 4.8 | 10.0 | |
| 1-hr Vector | 1.6 | 1.9 | 1.3 | 1.9 | 1.8 | 2.0 | 1.7 | 1.4 | 1.2 | 1.0 | 1.1 | 0.8 | 1.3 | 1.3 | 1.3 | 1.1 | 1.3 | 2.0 | 1.1 | 1.2 | 1.3 | 1.0 | 1.4 | 1.3 | | | |
| Hourly Max | 23.2 | 24.0 | 19.1 | 21.5 | 17.4 | 18.2 | 18.6 | 18.2 | 17.5 | 15.1 | 16.6 | 15.2 | 19.6 | 16.0 | 15.5 | 13.9 | 13.1 | 22.7 | 25.2 | 19.1 | 25.2 | 21.6 | 20.9 | 26.2 | | | |

PASZA - Valleyview Wind Direction Monthly Summary

Station: Valleyview
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| | |
|--|--|
| | |
| | |

| | | | | | | | | |
|-------------------------|----------|-------------------------------|-------|-------|-------|------|-----|---------|
| Calm Time: 0 hrs | 0% calms | Operational Time: 721 hrs | | | | | | |
| Calibration Time: 0 hrs | | AMD Operational Uptime: 96.9% | | | | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 | Average |
| | 357.9 | 344.0 | 262.0 | 204.7 | 147.5 | 10.7 | 1.9 | 295 deg |

Status Flag Characters

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

| Day | Mountain Standard Time | | | | | | | | | | | | | | | | | | | | | | | | 24-hour Average | WD Sector | | |
|------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-----------|-------|-------|
| | Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | | | 23:00 | 23:00 |
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | 0:00 | | | |
| 1-Jan-08 | 209 | 215 | 220 | 23 | 266 | 197 | 214 | 358 | 187 | 215 | 271 | 323 | 350 | 160 | 173 | 170 | 174 | 185 | 185 | 180 | 188 | 186 | 182 | 184 | 184 | 185 | 185 | S |
| 2-Jan-08 | 182 | 188 | 191 | 192 | 192 | 190 | 192 | 192 | 195 | 205 | 212 | 213 | 211 | 198 | 204 | 266 | 9 | 66 | 165 | 204 | 202 | 209 | 204 | 204 | 181 | 194 | 194 | SSW |
| 3-Jan-08 | 192 | 192 | 198 | 194 | 210 | 229 | 219 | 224 | 252 | 232 | 292 | 272 | 257 | 276 | 272 | 260 | 242 | 321 | 334 | 314 | 183 | 192 | 187 | 188 | 212 | 212 | SSW | |
| 4-Jan-08 | 192 | 195 | 186 | 247 | 220 | 216 | 181 | 191 | 211 | 223 | 214 | 194 | 189 | 190 | 201 | 347 | 26 | 353 | 344 | 325 | 345 | 28 | 27 | 20 | 210 | 210 | SSW | |
| 5-Jan-08 | 36 | 2 | 29 | 359 | 201 | 209 | 341 | 137 | 210 | 190 | 209 | 168 | 254 | 307 | 287 | 281 | 292 | 324 | 77 | 358 | 324 | 209 | 196 | 205 | 271 | 271 | W | |
| 6-Jan-08 | 217 | 196 | 45 | 12 | 154 | 193 | 300 | 194 | 195 | 207 | 229 | 346 | 351 | 302 | 236 | 223 | 239 | 277 | 274 | 299 | 341 | 29 | 27 | 1 | 290 | 290 | WNW | |
| 7-Jan-08 | 323 | 290 | 271 | 275 | 263 | 265 | 263 | 262 | 281 | 274 | 198 | 204 | 51 | 354 | 343 | 335 | 13 | 205 | 180 | 215 | 183 | 166 | 200 | 206 | 275 | 275 | W | |
| 8-Jan-08 | 248 | 240 | 279 | 262 | 178 | 185 | 197 | 195 | 124 | 360 | 10 | 23 | 13 | 348 | 346 | 309 | 13 | 18 | 13 | 49 | 32 | 48 | 34 | 43 | 18 | 18 | NNE | |
| 9-Jan-08 | 15 | 341 | 120 | 164 | 179 | 175 | 193 | 152 | 176 | 204 | 123 | 286 | 1 | 358 | 357 | 1 | 150 | 246 | 334 | 351 | 172 | 170 | 343 | 183 | 192 | 192 | SSW | |
| 10-Jan-08 | 245 | 230 | 195 | 245 | 197 | 205 | 214 | 227 | 72 | 304 | 138 | 73 | 283 | 332 | 20 | 18 | 83 | 74 | 351 | 341 | 241 | 332 | 318 | 179 | 242 | 242 | WSW | |
| 11-Jan-08 | 218 | 223 | 219 | 216 | 231 | 213 | 219 | 218 | 207 | 211 | 205 | 208 | 212 | 222 | 100 | 21 | 18 | 248 | 232 | 213 | 204 | 208 | 218 | 206 | 214 | 214 | SW | |
| 12-Jan-08 | 219 | 234 | 227 | 213 | 219 | 213 | 184 | 259 | 251 | 287 | 345 | 97 | 339 | 2 | 354 | 341 | 233 | 326 | 199 | 196 | 200 | 194 | 198 | 209 | 222 | 222 | SW | |
| 13-Jan-08 | 231 | 263 | 202 | 246 | 317 | 223 | 218 | 207 | 254 | 211 | 225 | 208 | 205 | 203 | 277 | 29 | 1 | 99 | 251 | 203 | 214 | 228 | 199 | 166 | 225 | 225 | SW | |
| 14-Jan-08 | 216 | 229 | 225 | 244 | 218 | 241 | 219 | 19 | 189 | 290 | 232 | 189 | 193 | 202 | 196 | 202 | 338 | 340 | 335 | 298 | 293 | 317 | 321 | 316 | 303 | 303 | WNW | |
| 15-Jan-08 | 308 | 320 | 333 | 329 | 319 | 312 | 327 | 335 | 305 | 303 | 294 | 292 | 293 | 294 | 296 | 296 | 282 | 220 | 215 | 212 | 205 | 210 | 202 | 212 | 296 | 296 | WNW | |
| 16-Jan-08 | 205 | 213 | 216 | 218 | 219 | 218 | 220 | 220 | 226 | 217 | 206 | 191 | 190 | 197 | 282 | 277 | 268 | 268 | 275 | 289 | 302 | 305 | 299 | 298 | 268 | 268 | W | |
| 17-Jan-08 | 300 | 340 | 355 | 342 | 301 | 310 | 320 | 317 | 337 | 32 | 24 | 20 | 19 | 15 | 19 | 3 | 5 | 3 | 20 | 25 | 27 | 348 | 331 | 41 | 347 | 347 | NNW | |
| 18-Jan-08 | 137 | 244 | 172 | 150 | 160 | 158 | 147 | 180 | 188 | 206 | 170 | 321 | 327 | 331 | 316 | 31 | 357 | 38 | 6 | 14 | 350 | 19 | 31 | 42 | 48 | 48 | NE | |
| 19-Jan-08 | 39 | 32 | 19 | 20 | 23 | 26 | 26 | 24 | 31 | 33 | 31 | 20 | 19 | 13 | 8 | 8 | 3 | 7 | 20 | 12 | 232 | 209 | 184 | 202 | 21 | 21 | NNE | |
| 20-Jan-08 | 225 | 214 | 194 | 193 | 209 | 184 | 188 | 194 | 207 | 208 | 191 | 193 | 204 | 184 | 183 | 184 | 193 | 209 | 208 | 211 | 209 | 204 | 237 | 223 | 200 | 200 | SSW | |
| 21-Jan-08 | 220 | 221 | 219 | 214 | 209 | 197 | 191 | 191 | 219 | 208 | 192 | 181 | 192 | 257 | 255 | 260 | 245 | 239 | 195 | 207 | 268 | 215 | 238 | 196 | 216 | 216 | SW | |
| 22-Jan-08 | 320 | 306 | 300 | 300 | 314 | 303 | 307 | 310 | 298 | 304 | 302 | 309 | 284 | 280 | 229 | 201 | M | M | M | M | M | M | M | M | N | N | - | |
| 23-Jan-08 | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 85 | 120 | 261 | 200 | 214 | 161 | 240 | 198 | 135 | N | N | - |
| 24-Jan-08 | 7 | 327 | 358 | 204 | 201 | 330 | 189 | 285 | 37 | 51 | 10 | 45 | 10 | 164 | 148 | 162 | 165 | 170 | 175 | 175 | 167 | 157 | 162 | 177 | 162 | 162 | SSE | |
| 25-Jan-08 | 177 | 184 | 192 | 210 | 208 | 212 | 205 | 216 | 218 | 215 | 192 | 188 | 184 | 190 | 176 | 184 | 196 | 220 | 208 | 206 | 201 | 202 | 215 | 219 | 196 | 196 | SSW | |
| 26-Jan-08 | 286 | 233 | 75 | 214 | 206 | 193 | 201 | 192 | 190 | 201 | 221 | 201 | 191 | 209 | 284 | 7 | 19 | 22 | 50 | 29 | 21 | 14 | 6 | 358 | 10 | 10 | N | |
| 27-Jan-08 | 4 | 16 | 15 | 12 | 16 | 12 | 12 | 16 | 20 | 20 | 15 | 18 | 17 | 23 | 23 | 24 | 23 | 18 | 15 | 10 | 8 | 1 | 5 | 359 | 14 | 14 | NNE | |
| 28-Jan-08 | 358 | 345 | 338 | 347 | 1 | 340 | 313 | 304 | 293 | 204 | 198 | 206 | 244 | 305 | 341 | 303 | 207 | 339 | 181 | 190 | 203 | 200 | 182 | 302 | 321 | 321 | NW | |
| 29-Jan-08 | 228 | 208 | 257 | 243 | 316 | 334 | 345 | 323 | 212 | 23 | 357 | 14 | 30 | 15 | 12 | 22 | 21 | 16 | 25 | 21 | 16 | 39 | 41 | 51 | 15 | 15 | NNE | |
| 30-Jan-08 | 11 | 44 | 12 | 24 | 326 | 302 | 275 | 273 | 227 | 214 | 272 | 41 | 193 | 169 | 180 | 186 | 53 | 21 | 13 | 8 | 25 | 20 | 13 | 12 | 356 | 356 | N | |
| 31-Jan-08 | 9 | 16 | 11 | 2 | 9 | 249 | 196 | 47 | 4 | 22 | 11 | 5 | 351 | 357 | 353 | 355 | 358 | 1 | 19 | 30 | 32 | 20 | 7 | 2 | 7 | 7 | N | |
| Hourly Avg | 294 | 296 | 309 | 304 | 272 | 261 | 271 | 271 | 284 | 275 | 276 | 289 | 301 | 296 | 308 | 312 | 344 | 336 | 318 | 304 | 291 | 290 | 294 | 300 | | | | |

PASZA - Valleyview Standard Deviation of Wind Direction Monthly Summary

Station: Valleyview
 Station Owner: PASZA

HOURLY AVERAGE TABLE

Wind Direction (WD)

Monitoring Dates: January 1, 2008 to February 1, 2008

Summary

| |
|--|
| |
|--|

Determined by the Yamartino 15-min interval calculation

| | | | | | | | |
|-------------------|-------|----------|-------------------------|---------|-----|-----|-----|
| Calm Time: | 0 hrs | 0% calms | Operational Time: | 721 hrs | | | |
| Calibration Time: | 0 hrs | | AMD Operational Uptime: | 96.9% | | | |
| Percentile | 99 | 95 | 75 | 50 | 25 | 5 | 1 |
| | 89.4 | 81.7 | 40.5 | 16.5 | 9.1 | 6.0 | 4.3 |

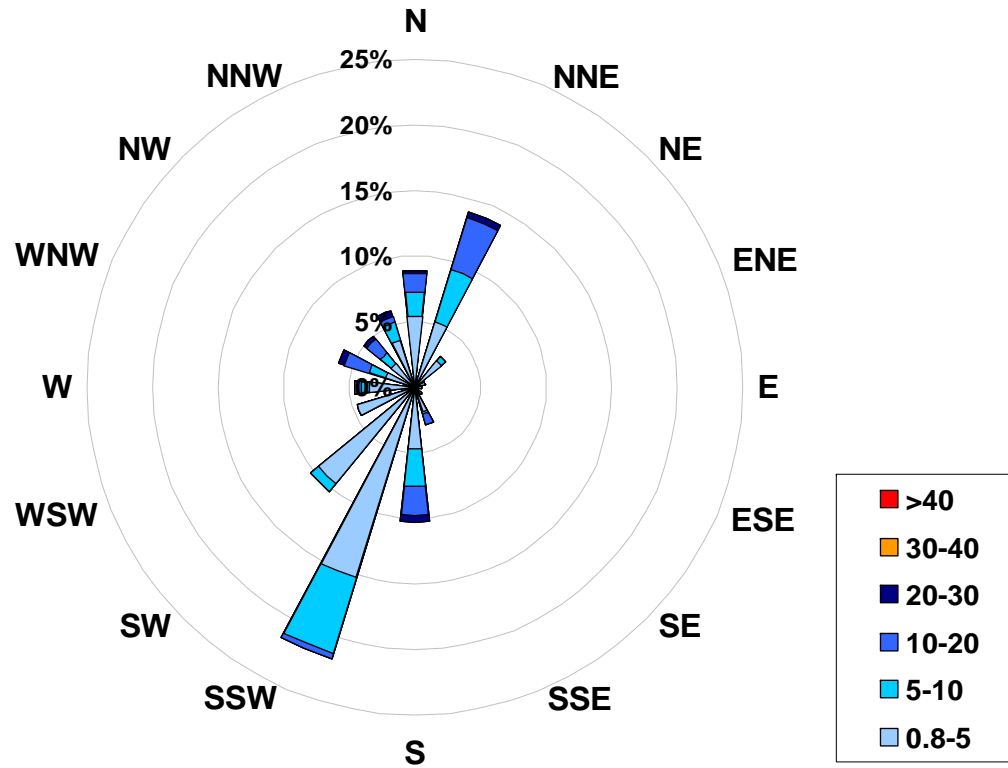
Status Flag Characters

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

Day Mountain Standard Time

| Hour Start | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | Daily Maximum |
|------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|---------------|
| Hour End | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | 0:00 | | |
| 1-Jan-08 | 15 | 18 | 92 | 35 | 75 | 25 | 62 | 72 | 19 | 64 | 82 | 84 | 69 | 55 | 11 | 12 | 11 | 8 | 6 | 12 | 8 | 6 | 7 | 8 | 92.2 | |
| 2-Jan-08 | 8 | 6 | 7 | 7 | 8 | 6 | 9 | 6 | 8 | 4 | 8 | 22 | 21 | 21 | 47 | 85 | 69 | 60 | 11 | 8 | 4 | 8 | 20 | 33 | 84.8 | |
| 3-Jan-08 | 9 | 8 | 8 | 5 | 12 | 13 | 6 | 18 | 88 | 43 | 39 | 52 | 27 | 24 | 51 | 58 | 57 | 55 | 18 | 65 | 53 | 11 | 9 | 6 | 87.8 | |
| 4-Jan-08 | 7 | 8 | 13 | 62 | 9 | 10 | 8 | 6 | 10 | 7 | 7 | 6 | 7 | 7 | 15 | 68 | 14 | 13 | 21 | 40 | 61 | 48 | 35 | 16 | 68.5 | |
| 5-Jan-08 | 13 | 82 | 17 | 86 | 38 | 52 | 60 | 58 | 40 | 14 | 43 | 38 | 50 | 25 | 52 | 29 | 19 | 64 | 64 | 69 | 87 | 35 | 62 | 14 | 87.2 | |
| 6-Jan-08 | 31 | 69 | 86 | 42 | 81 | 77 | 88 | 13 | 15 | 14 | 24 | 47 | 24 | 57 | 25 | 23 | 25 | 18 | 22 | 9 | 22 | 14 | 10 | 18 | 87.9 | |
| 7-Jan-08 | 41 | 19 | 27 | 11 | 27 | 15 | 19 | 18 | 12 | 36 | 13 | 13 | 88 | 10 | 14 | 9 | 54 | 60 | 44 | 27 | 57 | 70 | 48 | 33 | 87.6 | |
| 8-Jan-08 | 70 | 44 | 27 | 46 | 72 | 62 | 56 | 33 | 66 | 14 | 49 | 78 | 20 | 29 | 26 | 66 | 12 | 10 | 14 | 10 | 23 | 12 | 12 | 26 | 78.2 | |
| 9-Jan-08 | 16 | 35 | 71 | 24 | 10 | 13 | 19 | 25 | 19 | 16 | 43 | 58 | 36 | 32 | 12 | 30 | 70 | 73 | 91 | 96 | 44 | 80 | 82 | 39 | 95.7 | |
| 10-Jan-08 | 27 | 20 | 48 | 17 | 9 | 16 | 11 | 16 | 62 | 59 | 38 | 75 | 69 | 69 | 19 | 21 | 34 | 37 | 58 | 32 | 71 | 93 | 82 | 58 | 93.5 | |
| 11-Jan-08 | 22 | 40 | 85 | 17 | 19 | 11 | 33 | 23 | 25 | 16 | 15 | 13 | 37 | 40 | 85 | 14 | 12 | 74 | 42 | 59 | 28 | 17 | 21 | 33 | 85.2 | |
| 12-Jan-08 | 67 | 86 | 68 | 7 | 6 | 18 | 70 | 64 | 21 | 58 | 75 | 95 | 82 | 24 | 17 | 24 | 62 | 82 | 19 | 7 | 8 | 7 | 6 | 25 | 95.0 | |
| 13-Jan-08 | 11 | 45 | 22 | 51 | 90 | 26 | 15 | 15 | 87 | 54 | 36 | 17 | 23 | 9 | 41 | 63 | 25 | 83 | 22 | 62 | 11 | 25 | 83 | 87 | 89.5 | |
| 14-Jan-08 | 73 | 41 | 38 | 37 | 29 | 35 | 11 | 81 | 82 | 72 | 65 | 47 | 10 | 9 | 11 | 49 | 59 | 7 | 18 | 8 | 6 | 14 | 7 | 13 | 81.7 | |
| 15-Jan-08 | 7 | 9 | 7 | 10 | 5 | 10 | 13 | 8 | 13 | 8 | 7 | 6 | 5 | 7 | 5 | 5 | 12 | 18 | 6 | 7 | 7 | 6 | 9 | 6 | 17.8 | |
| 16-Jan-08 | 17 | 5 | 3 | 4 | 3 | 6 | 7 | 9 | 11 | 17 | 5 | 9 | 33 | 16 | 19 | 6 | 7 | 6 | 8 | 9 | 7 | 7 | 6 | 5 | 33.4 | |
| 17-Jan-08 | 6 | 21 | 10 | 17 | 8 | 9 | 7 | 6 | 31 | 15 | 12 | 13 | 17 | 10 | 11 | 7 | 14 | 10 | 8 | 11 | 10 | 29 | 54 | 10 | 54.0 | |
| 18-Jan-08 | 71 | 72 | 58 | 10 | 59 | 51 | 26 | 22 | 16 | 19 | 32 | 67 | 12 | 14 | 23 | 19 | 11 | 19 | 14 | 15 | 6 | 16 | 5 | 8 | 71.9 | |
| 19-Jan-08 | 8 | 11 | 6 | 6 | 7 | 7 | 7 | 7 | 10 | 10 | 8 | 8 | 7 | 5 | 4 | 3 | 5 | 9 | 9 | 9 | 44 | 27 | 8 | 15 | 43.7 | |
| 20-Jan-08 | 17 | 23 | 11 | 18 | 10 | 6 | 5 | 6 | 4 | 8 | 7 | 15 | 52 | 10 | 9 | 8 | 7 | 13 | 4 | 7 | 6 | 11 | 24 | 13 | 52.4 | |
| 21-Jan-08 | 13 | 7 | 8 | 8 | 11 | 14 | 18 | 13 | 13 | 9 | 12 | 9 | 15 | 42 | 21 | 17 | 16 | 89 | 25 | 28 | 65 | 9 | 24 | 74 | 88.9 | |
| 22-Jan-08 | 55 | 12 | 13 | 9 | 9 | 12 | 9 | 21 | 9 | 9 | 7 | 14 | 17 | 27 | 21 | 14 | M | M | M | M | M | M | M | M | 54.7 | |
| 23-Jan-08 | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 31 | 85 | 52 | 33 | 11 | 53 | 65 | 82 | 85 | 84.7 | |
| 24-Jan-08 | 15 | 35 | 39 | 77 | 75 | 83 | 79 | 79 | 75 | 74 | 17 | 28 | 31 | 76 | 13 | 12 | 12 | 13 | 13 | 13 | 12 | 10 | 11 | 9 | 82.8 | |
| 25-Jan-08 | 8 | 8 | 8 | 16 | 11 | 7 | 9 | 6 | 8 | 10 | 12 | 12 | 9 | 8 | 10 | 14 | 15 | 28 | 11 | 17 | 25 | 8 | 12 | 85 | 84.7 | |
| 26-Jan-08 | 34 | 60 | 67 | 14 | 7 | 36 | 9 | 11 | 22 | 15 | 30 | 59 | 69 | 11 | 57 | 32 | 12 | 30 | 26 | 17 | 7 | 10 | 11 | 5 | 69.3 | |
| 27-Jan-08 | 6 | 7 | 7 | 8 | 8 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 9 | 8 | 9 | 10 | 8 | 8 | 8 | 7 | 7 | 5 | 6 | 3 | 10.3 | |
| 28-Jan-08 | 3 | 5 | 6 | 7 | 6 | 7 | 10 | 7 | 51 | 54 | 28 | 38 | 76 | 50 | 67 | 80 | 48 | 57 | 89 | 24 | 22 | 30 | 25 | 76 | 89.5 | |
| 29-Jan-08 | 57 | 26 | 62 | 33 | 69 | 83 | 69 | 55 | 98 | 35 | 20 | 15 | 10 | 20 | 14 | 14 | 13 | 11 | 14 | 20 | 8 | 19 | 49 | 39 | 98.5 | |
| 30-Jan-08 | 19 | 16 | 72 | 23 | 39 | 14 | 12 | 21 | 40 | 34 | 24 | 78 | 57 | 44 | 35 | 30 | 44 | 16 | 15 | 9 | 9 | 10 | 9 | 7 | 78.2 | |
| 31-Jan-08 | 8 | 7 | 8 | 15 | 34 | 62 | 17 | 46 | 11 | 10 | 15 | 21 | 16 | 12 | 7 | 6 | 5 | 7 | 14 | 17 | 12 | 21 | 15 | 14 | 62.0 | |
| Hourly Max | 73 | 86 | 92 | 86 | 90 | 83 | 88 | 81 | 98 | 74 | 82 | 95 | 88 | 76 | 85 | 85 | 85 | 89 | 91 | 96 | 87 | 93 | 83 | 87 | | |

1-hr Average Wind Rose (in km/hr) Located at the Valleyview Site for January 2008



Calms: 0%

| Frequency Distribution of Wind in km/hr | | | Frequency (hrs) |
|---|-------|--|-----------------|
| Range | | | |
| 0.8 | < 5 | | 460 |
| 5 | to 10 | | 146 |
| 10 | to 20 | | 96 |
| 20 | to 30 | | 19 |
| 30 | to 40 | | 0 |
| | > 40 | | 0 |
| Total Non-Zero Values | | | 721 |

PASZA

Monthly Passive Data Summary

Table 1. PASZA Passive Stations for January 2008

| Station Number | Station Name | SO2 ppb | O3 ppb | NO2 ppb | Site Legal |
|-------------------|-------------------|------------|-----------|------------|------------------|
| Duplicates | | | | | |
| 20a | Shaftsbury | 0.4 | 33.1 | 2.1 | |
| 20b | Shaftsbury | 0.4 | 31.8 | 2.4 | |
| 21a | Eaglesham | 0.4 | 32.1 | 2.4 | |
| 21b | Eaglesham | 0.5 | 34.0 | 2.4 | |
| 26a | Flyingshot | 0.4 | 27.8 | 7.7 | |
| 26b | Flyingshot | 0.4 | 32.4 | 7.9 | |
| 27a | Grande Prairie I | 0.5 | 37.3 | 18.8 | |
| 27b | Grande Prairie I | 0.7 | 23.8 | 17.7 | |
| 28a | Clairmont Lake | 1.0 | 20.4 | 4.2 | |
| 28b | Clairmont Lake | 1.0 | 38.6 | 4.2 | |
| 60a | Gerry Lake | 0.3 | 38.5 | 1.4 | |
| 60b | Gerry Lake | 0.2 | 37.1 | 1.9 | |
| 49a | Grande Prairie HP | 0.5 | 22.7 | 17.0 | |
| 49b | Grande Prairie HP | 0.7 | 43.1 | 18.0 | |
| 1 | Silver Valley | 0.9 | 38.1 | 3.2 | 08-27-081-11 W6M |
| 2 | Bay Tree | 0.4 | 35.4 | 2.6 | 13-16-078-13 W6M |
| 3 | Forth Creek | 0.8 | 39.3 | 2.1 | 04-13-082-07 W6M |
| 4 | Gordondale | 0.8 | 40.2 | 2.8 | 04-34-078-10 W6M |
| 5 | Boone Creek | 0.6 | 36.3 | 3.4 | 01-23-076-11 W6M |
| 7 | Steepprock Creek | 0.7 | 40.8 | 2.8 | 09-35-072-13 W6M |
| 9 | Spirit River | 0.6 | 33.6 | 3.5 | 08-12-079-07 W6M |
| 10 | Woking | 0.8 | 38.4 | 2.1 | 01-13-076-07 W6M |
| 11 | Webber Creek | 0.7 | 36.9 | 3.9 | 09-36-074-09 W6M |
| 12 | Hythe | 0.7 | 32.7 | 4.7 | 14-36-072-11 W6M |
| 14 | Sylvester | 0.3 | 30.1 | 4.0 | 08-06-069-12 W6M |
| 16 | Beaverlodge | 0.7 | 34.4 | 6.0 | 15-36-071-10 W6M |
| 17 | Poplar | 0.7 | 35.5 | 4.3 | 13-06-073-08 W6M |
| 18 | Saddle Hills | 0.7 | 40.5 | 2.2 | 04-25-074-07 W6M |
| 19 | Wanham | 0.8 | 37.9 | 2.5 | 16-22-077-03 W6M |
| 20 | Shaftsbury | 0.4 | 32.5 | 2.3 | 04-03-082-23 W5M |
| 21 | Eaglesham | 0.5 | 33.1 | 2.4 | 16-21-079-25 W5M |
| 23 | Bear Lake | 0.9 | 45.5 | 5.3 | 15-31-072-06 W6M |

Table 1. PASZA Passive Stations for January 2008 (Continued)

| Station Number | Station Name | SO2 ppb | O3 ppb | NO2 ppb | Site Legal |
|----------------|----------------------|------------|-----------|------------|------------------|
| 24 | Wembley | 0.6 | 35.1 | 6.2 | 12-31-070-08 W6M |
| 25 | Pinto Creek | 0.4 | 42.5 | 4.4 | 04-24-069-11 W6M |
| 26 | Flyingshot | 0.4 | 30.1 | 7.8 | 15-36-070-07 W6M |
| 27 | Grande Prairie I | 0.6 | 30.6 | 18.3 | 08-15-071-06 W6M |
| 28 | Clairmont Lake | 1.0 | 29.5 | 4.2 | 09-06-073-04 W6M |
| 29 | Smoky Heights | 0.7 | 35.1 | 4.4 | 04-06-075-02 W6M |
| 30 | Fitzsimmons | 0.4 | 42.7 | 4.4 | 15-36-072-03 W6M |
| 32 | Gold Creek | 0.7 | 18.7 | 6.9 | 06-33-067-05 W6M |
| 33 | Wapiti | 0.5 | 33.0 | 5.2 | 02-25-071-03 W6M |
| 34 | Puskwaskau | 0.2 | 40.0 | N/A | 15-35-074-25 W5M |
| 35 | Jean Cote | 0.5 | 40.7 | 2.2 | 12-35-079-21 W5M |
| 36 | Guy | 0.5 | 36.9 | 2.8 | 03-04-076-22 W5M |
| 37 | Crooked Creek | 0.6 | 37.4 | 4.8 | 16-01-071-26 W5M |
| 38 | Karr Creek | N/A | N/A | N/A | 10-16-065-02 W6M |
| 39 | Clouston Creek | 0.7 | 34.0 | 3.3 | 12-01-073-22 W5M |
| 40 | McLennan | 0.5 | 39.2 | 2.7 | 03-29-077-19 W5M |
| 41 | Valleyview | 1.1 | 39.6 | 3.8 | 09-30-069-22 W5M |
| 42 | Sunset House | 0.7 | 39.8 | 1.8 | 05-32-070-19 W5M |
| 43 | High Prairie | 0.4 | 33.4 | 4.3 | 16-13-074-17 W5M |
| 44 | Peavine | 0.2 | 35.6 | 1.7 | 03-05-079-15 W5M |
| 45 | Gift Lake | 0.3 | 31.5 | 2.3 | 10-07-079-12 W5M |
| 46 | Little Smoky | 0.6 | 25.6 | 8.1 | 12-01-065-21 W5M |
| 47 | Kinuso | 0.2 | 28.2 | 3.3 | 12-10-073-10 W5M |
| 48 | Deer Mountain | 0.5 | 35.9 | 2.2 | 15-22-068-09 W5M |
| 49 | Grande Prairie HP | 0.6 | 32.9 | 17.5 | 17-26-071-06 W6M |
| 50 | Clear River | 0.9 | 39.7 | 1.9 | SE-03-084-12 W6M |
| 51 | Bear Canyon | 1.1 | 36.9 | 2.9 | SE-28-085-12 W6M |
| 52 | Worsley | 0.5 | 31.8 | 3.8 | NE-34-085-07 W6M |
| 53 | Hines Creek | 0.4 | 39.3 | 1.8 | SW-09-084-04 W6M |
| 54 | Ronan | 0.5 | 35.2 | 4.1 | SE-03-082-04 W6M |
| 55 | Cadotte Lake School | 0.4 | 26.3 | 3.9 | NE-23-086-16 W5M |
| 56 | Simon Lake Store | 1.5 | 34.3 | 2.4 | SE-32-086-17 W5M |
| 57 | Dixonville | 0.3 | 35.6 | 2.2 | SE-14-087-24 W5M |
| 58 | Queen Elizabeth Park | 0.5 | 40.2 | 2.4 | NW-19-083-23 W5M |
| 59 | Blue Sky | 0.6 | 39.2 | 3.9 | SW-35-081-02 W6M |
| 60 | Gerry Lake | 0.2 | 37.8 | 1.6 | SW-22-084-02 W6M |
| 61 | Musreau Lake | 0.2 | 39.6 | 2.4 | NE-22-064-05 W6M |

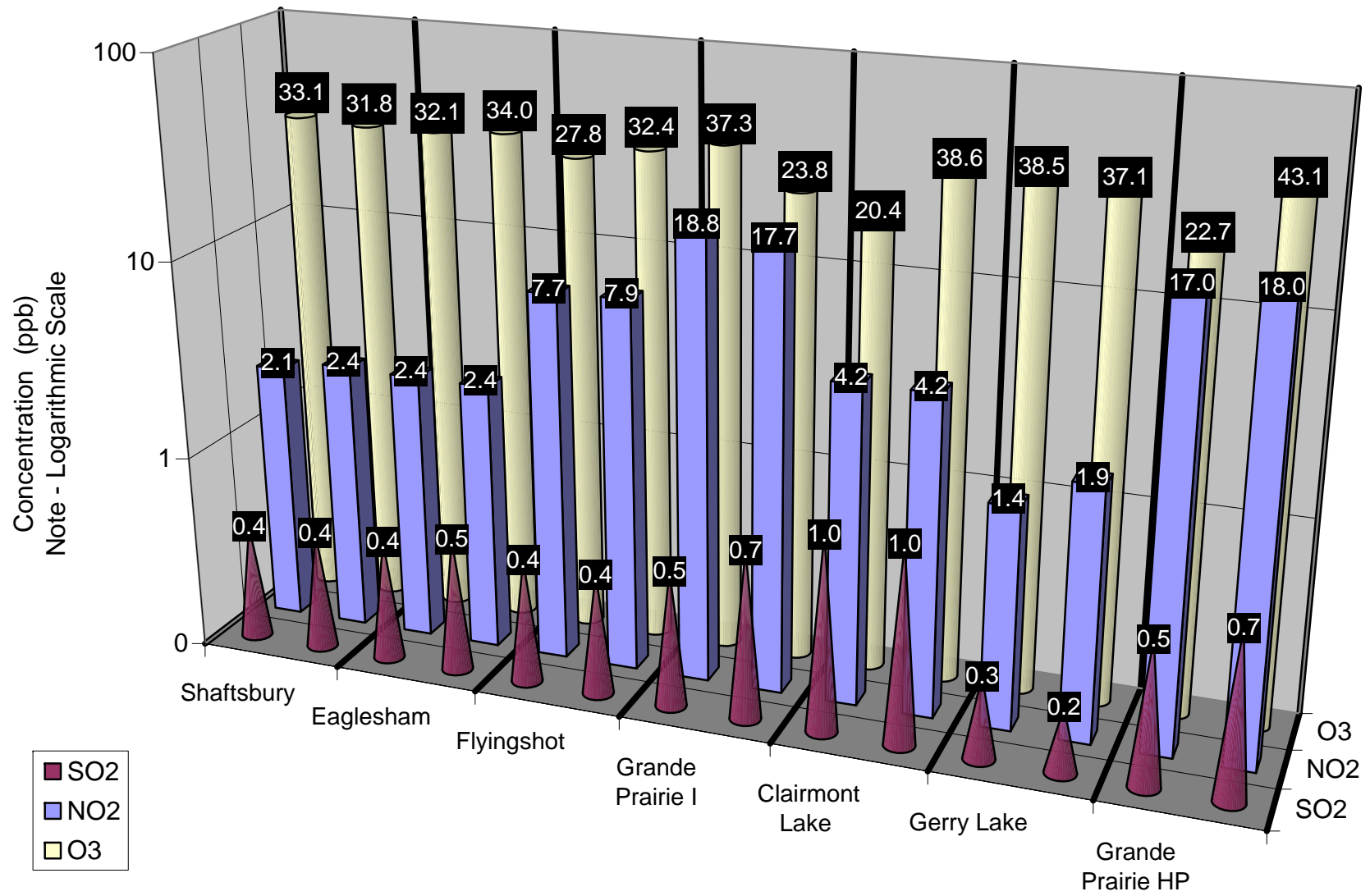


Figure 61. Duplicate Summary Chart

Table 2. Passive Summary Results for January 2008

| Stats | Sulphur Dioxide SO ₂ | Ozone O ₃ | Nitrogen Dioxide NO ₂ |
|---|------------------------------------|-------------------------|-------------------------------------|
| | ppb | ppb | ppb |
| Passive Summary for January 2008 (PASZA Zone) | | | |
| Mean | 0.6 | 35.7 | 4.1 |
| Standard Deviation | 0.3 | 4.8 | 3.1 |
| Minimum | 0.2 | 18.7 | 1.6 |
| Minimum At | Musreau Lake (#61) | Gold Creek (#32) | Gerry Lake (#60) |
| Maximum | 1.5 | 45.5 | 6.0 |
| Maximum At | Simon Lake Store (#56) | Bear Lake (#23) | Grande Prairie I (#27) |
| Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge) | | | |
| | SO ₂ | O ₃ | NO ₂ |
| AENV Beaverlodge station | 0.9 | 24.5 | 9.1 |
| PASZA Beaverlodge passive | 0.7 | 34.4 | 6.0 |
| Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP) | | | |
| | SO ₂ | O ₃ | NO ₂ |
| PASZA Henry Pirker station | 0.4 | 11.7 | 21.0 |
| PASZA Grande Prairie passive | 0.6 | 32.9 | 17.5 |
| Comparison between Continuous and Passive monitoring at Spirit River (passive #9 Spirit River) | | | |
| | SO ₂ | O ₃ | NO ₂ |
| PASZA Portable Spirit River station | 0.8 | 23.5 | 6.6 |
| PASZA Spirit River passive | 0.6 | 33.6 | 3.5 |

Alberta Ambient Air Quality Objective - Annual SO₂ Objective is 11 ppb

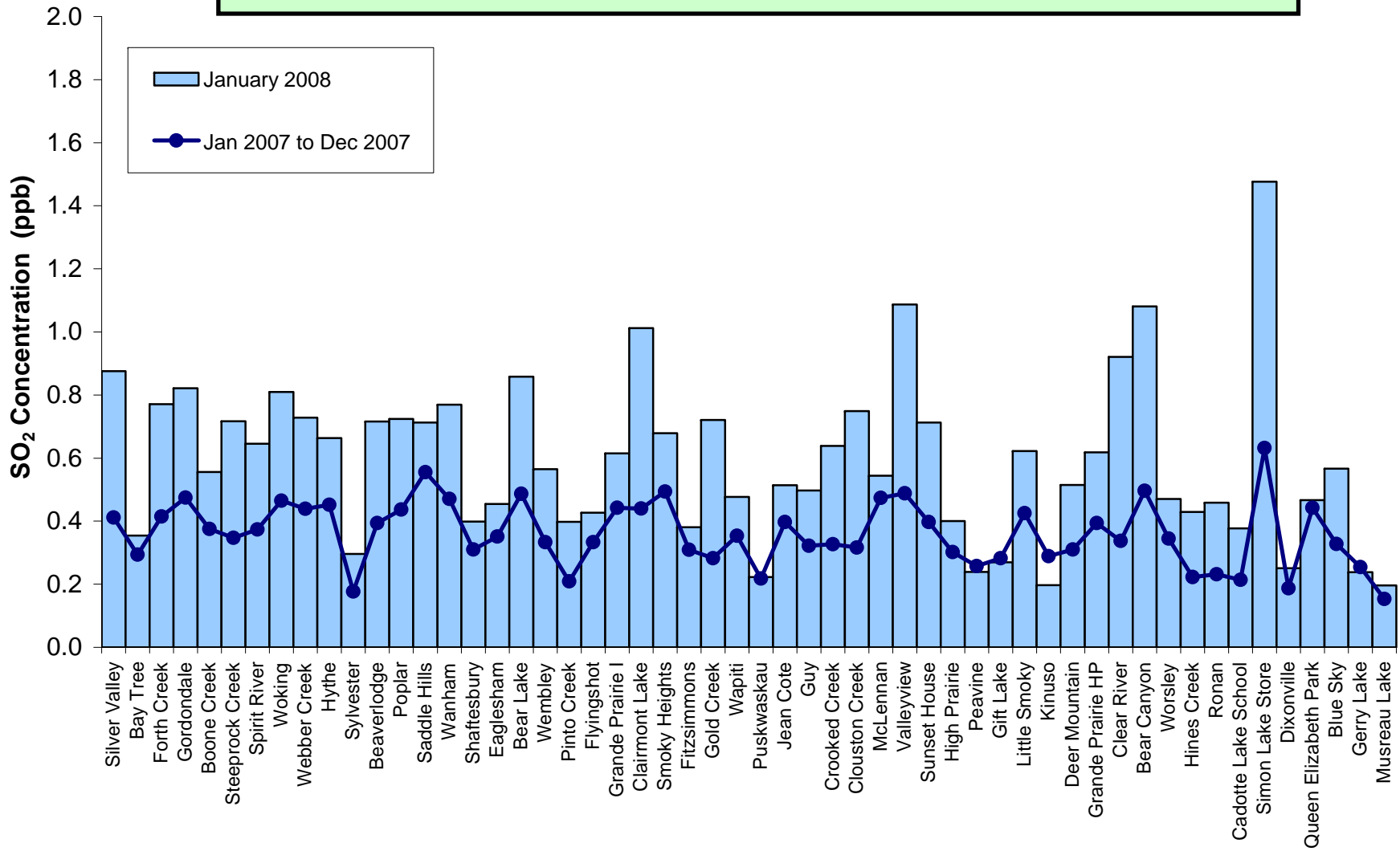


Figure 63. SO₂ Summary Chart

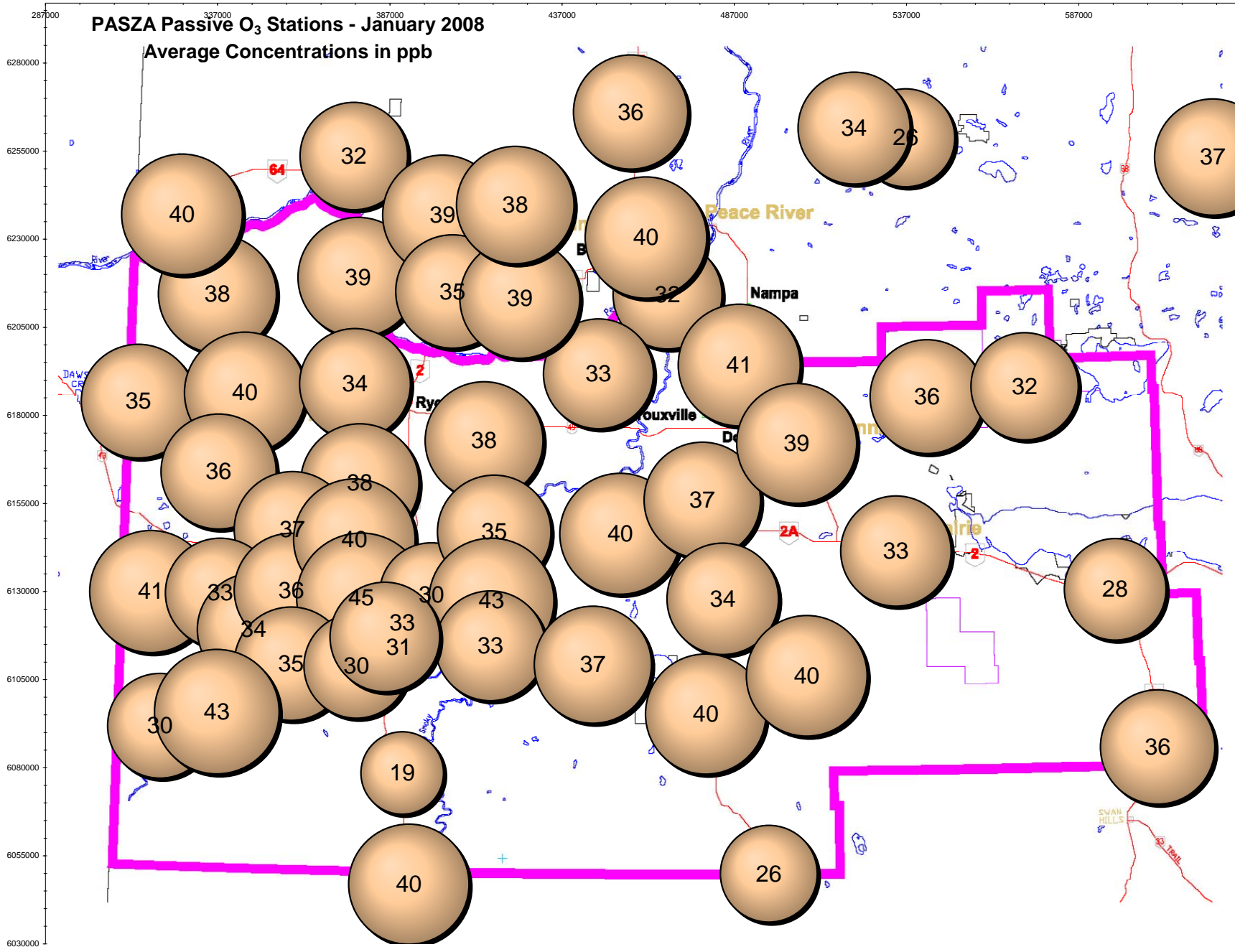


Figure 64. O₃ Bubble Chart

Alberta Ambient Air Quality Objective - No Annual O₃ Objective

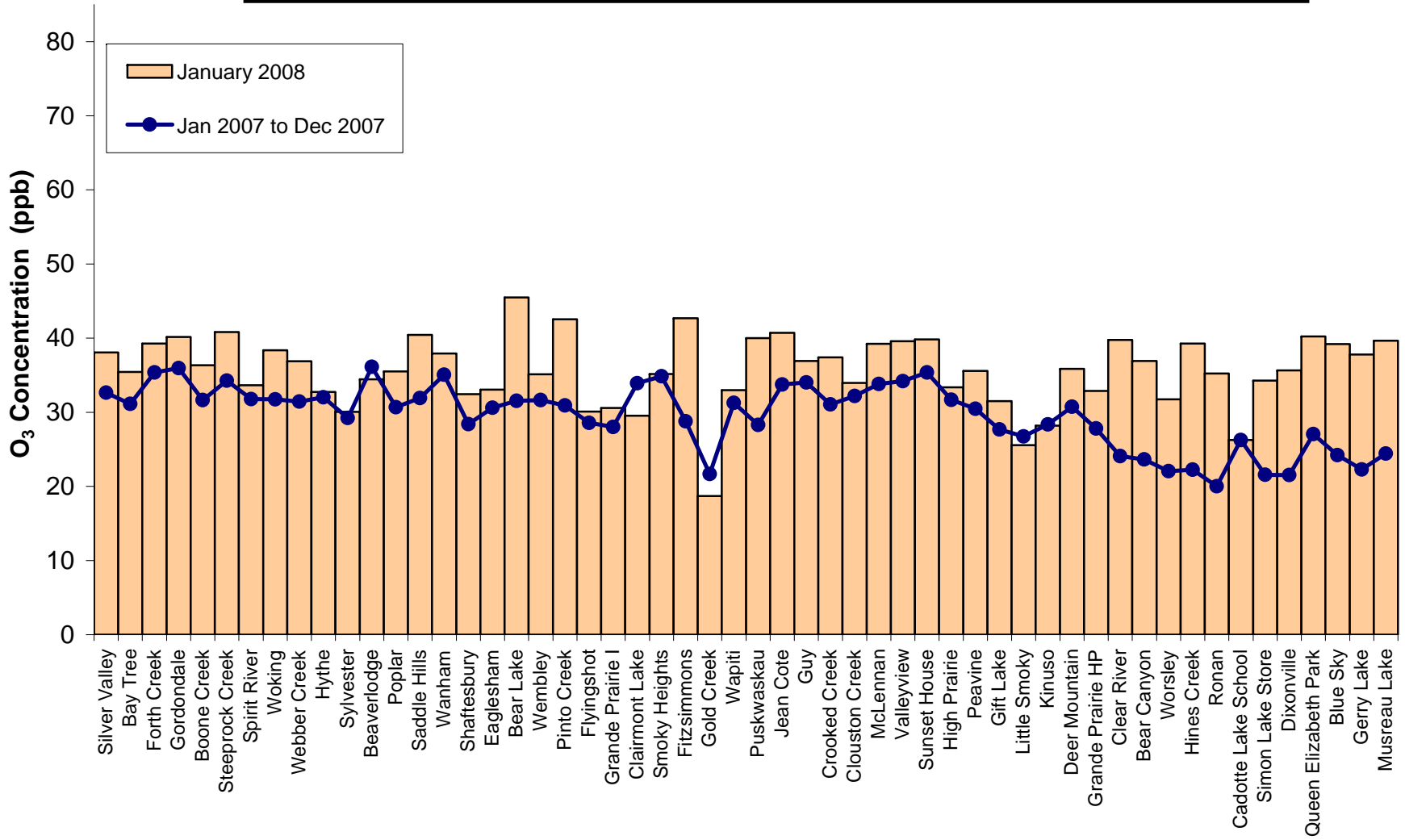


Figure 65. O₃ Summary Chart

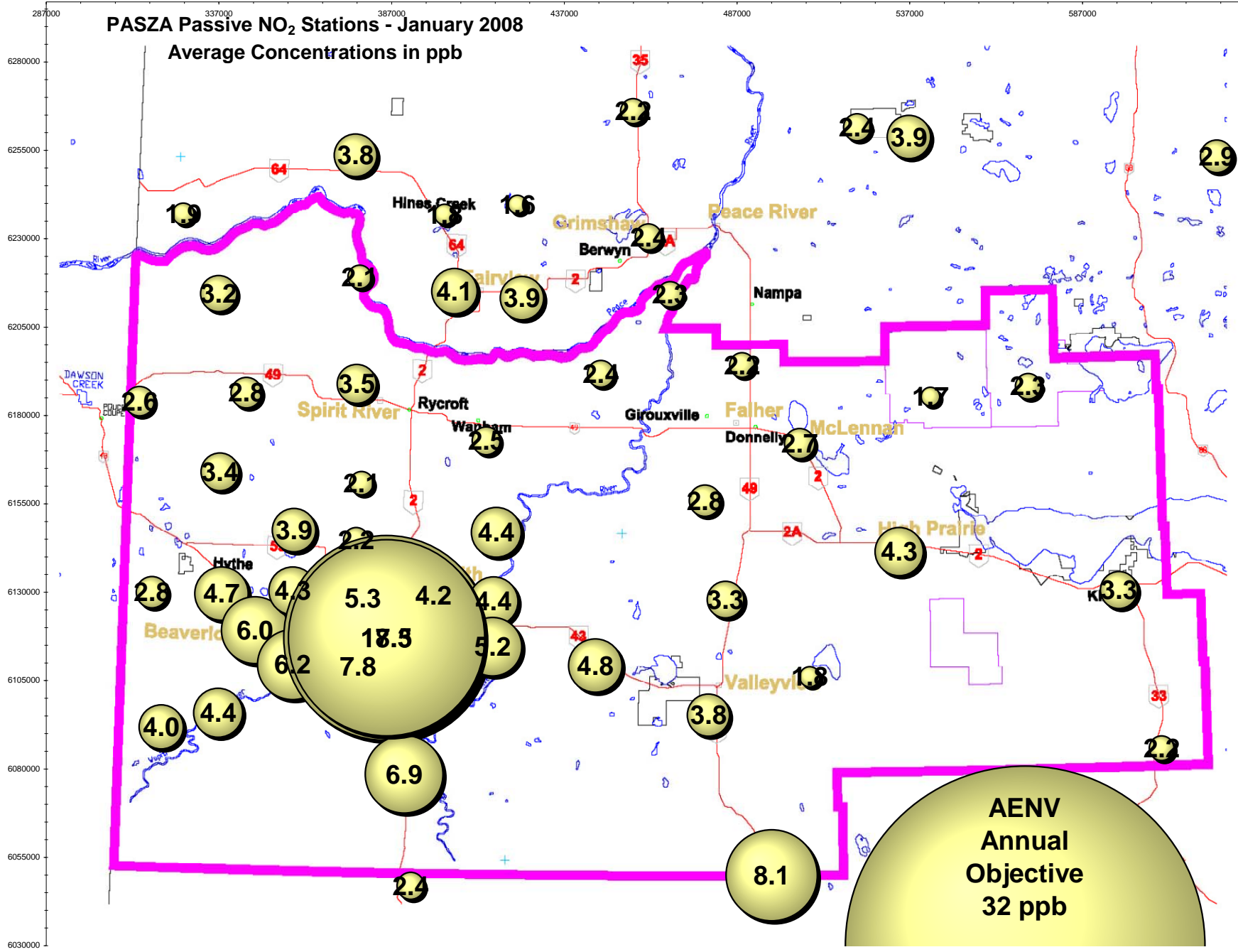


Figure 66. NO₂ Bubble Chart

Alberta Ambient Air Quality Objective - Annual NO₂ Objective is 32 ppb

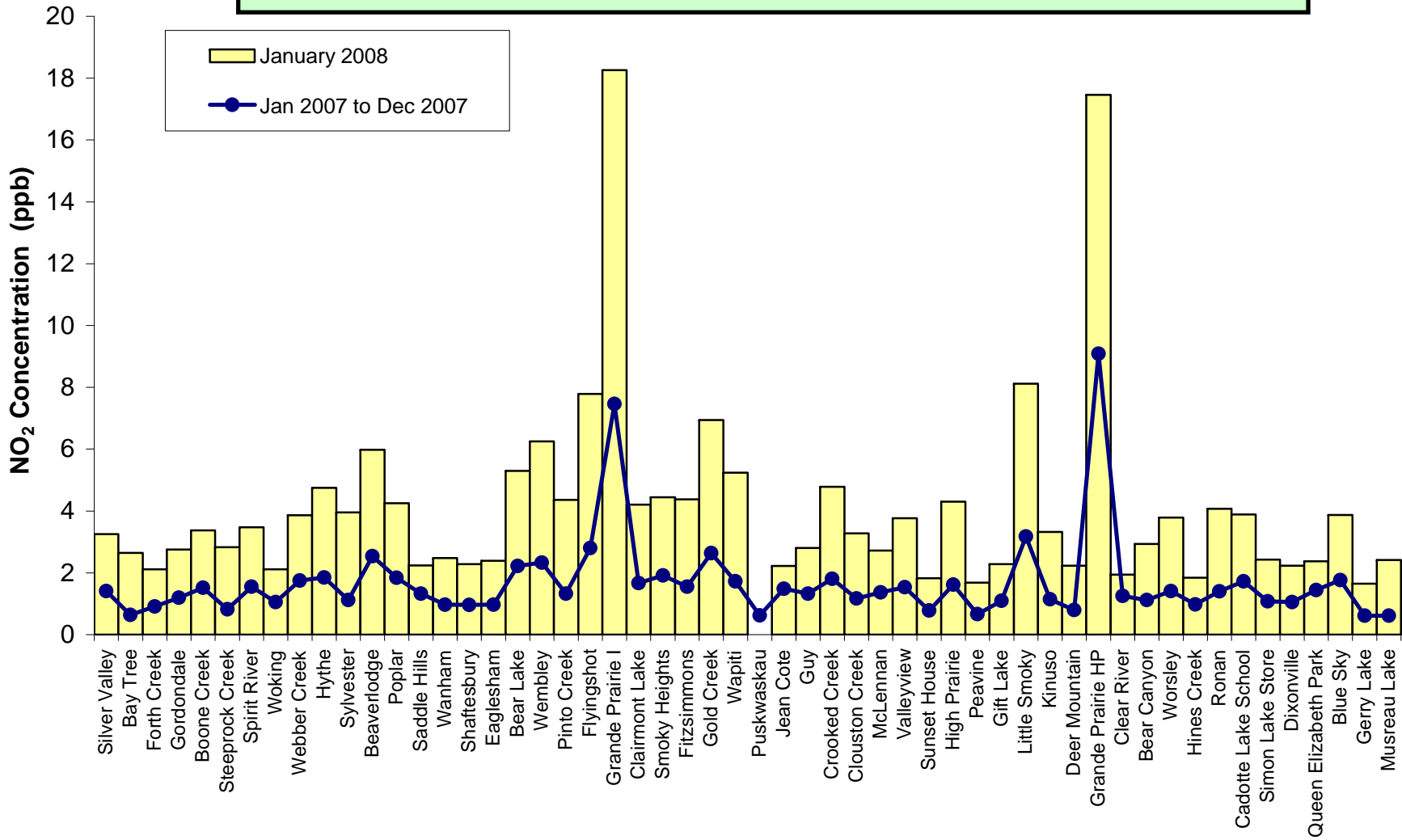


Figure 67. NO₂ Summary Chart

January 2008 Calibration Reports

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

**PASZA – Evergreen Park Station with the following calibrations:
SO₂ and TRS**

**PASZA – Smoky Heights Station with the following calibrations:
SO₂, TRS and TEOM**

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

**PASZA – Spirit River (Portable) Station with the following calibrations:
SO₂, TRS, NO, NO₂, NO_x, O₃,**

**PASZA – Valleyview Station with the following calibrations:
SO₂, H₂S**

Calibration Report

Parameter **SO2**Air Monitoring Network **PASZA**

Station Information

| | | | |
|----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 11, 2008 | Previous Calibration | December 12, 2007 |
| Station Number | 1 | Station Location | Henry Pirker |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | Other: <input type="checkbox"/> |
| Start Time (MST) | 9:45 | End Time (MST) | 12:35 |
| Barometric Pressure | 0.914 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | Envionics 6100 | Serial Number | 3474 |
| Cal Gas Conc | 50.3 ppb | Cal Gas Expiry Date | 1/2/2009 |
| | | Cal Gas Cylinder # | LL16161 |
| DACS make | Focus AP1000 | DACS serial No. | 1 |
| DACS voltage range | 0 - 1 volt | DACS channel # | 10 |
| | Before | | After |
| Calculated slope | 0.997135 | Calculated slope | 0.995235 |
| Calculated intercept | -0.323819 | Calculated intercept | -1.092679 |
| Analyzer make | TEI 43C | Analyzer serial # | 610816292 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 500 | ppb | 0 - 500 | ppb |
| Background | 7.6 | | 7.6 | |
| Coefficient | .807 | | .807 | |
| Pressure | 640.6 | mm Hg | 638.7 | mm Hg |
| Flow | 0.470 | lpm | 0.478 | lpm |
| Lamp Voltage | 44056 | Hz | 43287 | 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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4990 | 0.00 | 0.0 | 0.2 | N/A |
| 4990 | 39.83 | 398.3 | 400.7 | 0.9940 |
| 4990 | 19.90 | 199.8 | 202.6 | 0.9859 |
| 4990 | 9.95 | 100.1 | 102.4 | 0.9777 |
| | | | | |
| | | | | |
| 4990 | 0.00 | 0.0 | 0.2 | As Found Zero |
| 4990 | 39.82 | 398.2 | 400.7 | As Found Span |
| Average Correction Factor | | | | 0.9859 |

Calculated value of As Found Response: 399.1 ppb Percent Change of As Found: -0.2%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.3 | ppb | 1.1 | ppb |
| Auto span | 340.6 | ppb | 343.3 | ppb |

Notes:

Calibration Performed By: Conor Whiteley

Calibration ReportParameter **SO2**Air Monitoring Network **PASZA****Station Information**

| | | | |
|----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | December 12, 2007 | Previous Calibration | November 19, 2007 |
| Station Number | 1 | Station Location | Henry Pirker |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | Other: <input type="checkbox"/> |
| Start Time (MST) | 10:20 | End Time (MST) | 13:20 |
| Barometric Pressure | 0.921 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | Envionics 6100 | Serial Number | 3474 |
| Cal Gas Conc | 50.3 ppb | Cal Gas Expiry Date | 1/2/2009 |
| | | Cal Gas Cylinder # | LL16161 |
| DACS make | Focus AP1000 | DACS serial No. | 1 |
| DACS voltage range | 0 - 1 volt | DACS channel # | 10 |
| | <u>Before</u> | | <u>After</u> |
| Calculated slope | 1.018804 | Calculated slope | 0.997135 |
| Calculated intercept | -0.803087 | Calculated intercept | -0.323819 |
| Analyzer make | TEI 43C | Analyzer serial # | 610816292 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 500 | ppb | 0 - 500 | ppb |
| Background | 7.4 | | 7.6 | |
| Coefficient | 0.785 | | .807 | |
| Pressure | 644.3 | mm Hg | 640.6 | mm Hg |
| Flow | 0.463 | lpm | 0.470 | lpm |
| Lamp Voltage | 44088 | Hz | 44056 | 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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4988 | 0.00 | 0.0 | 0.2 | N/A |
| 4988 | 39.83 | 398.5 | 399.8 | 0.9966 |
| 4988 | 19.95 | 200.4 | 201.4 | 0.9949 |
| 4988 | 9.95 | 100.1 | 100.9 | 0.9926 |
| | | | | |
| | | | | |
| 4988 | 0.00 | 0.0 | 0.2 | As Found Zero |
| 4988 | 39.82 | 398.4 | 385.9 | As Found Span |
| Average Correction Factor | | | | 0.9947 |

Calculated value of As Found Response: 392.2 ppb Percent Change of As Found: 1.6%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.5 | ppb | 0.3 | ppb |
| Auto span | 345.8 | ppb | 340.6 | ppb |

Notes: Calibrator was accidentally powered off during zero... small spike
Span adjustedCalibration Performed By: Conor Whiteley

Calibration Summary

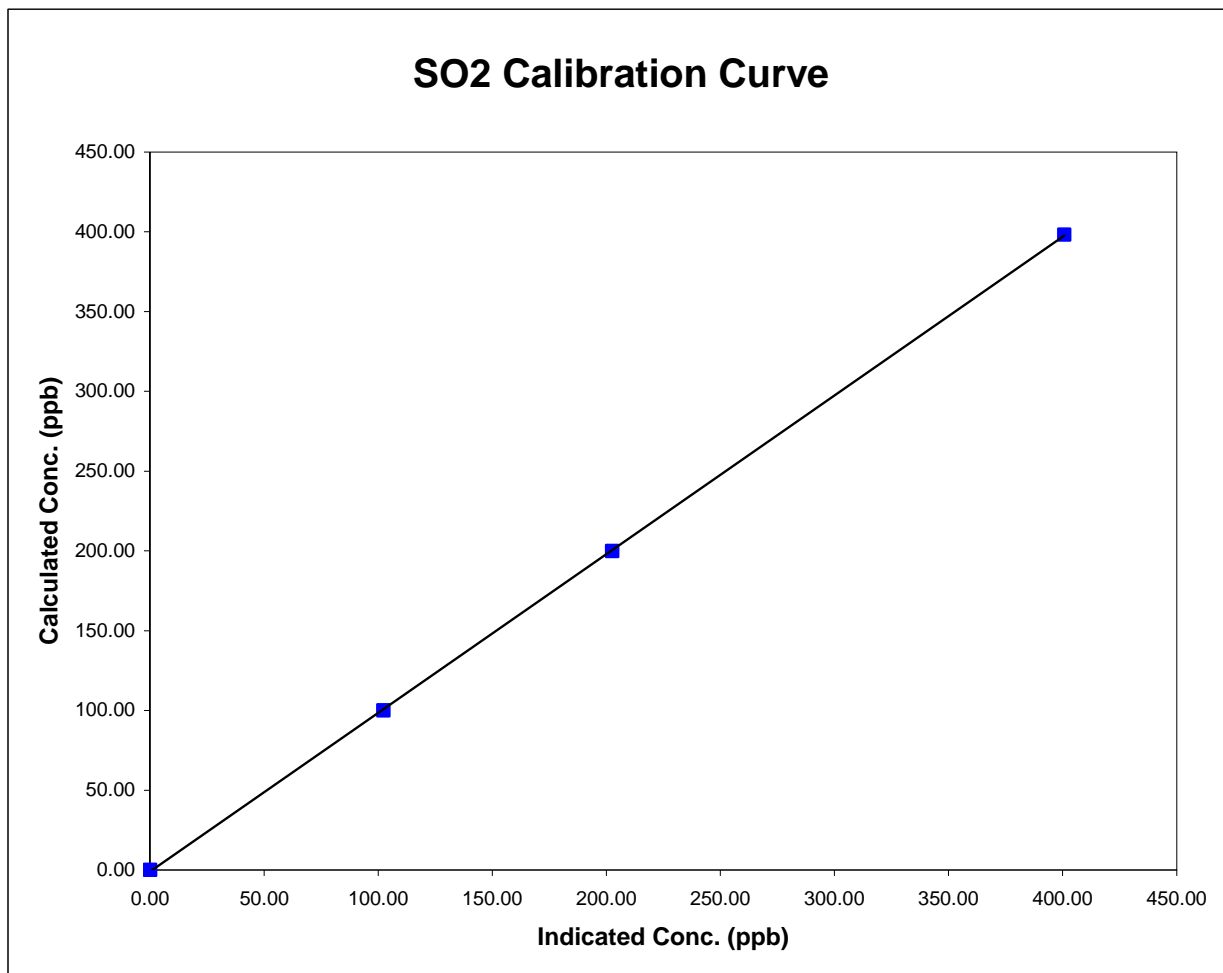
Parameter **SO2**Air Monitoring Network **PASZA**

Station Information

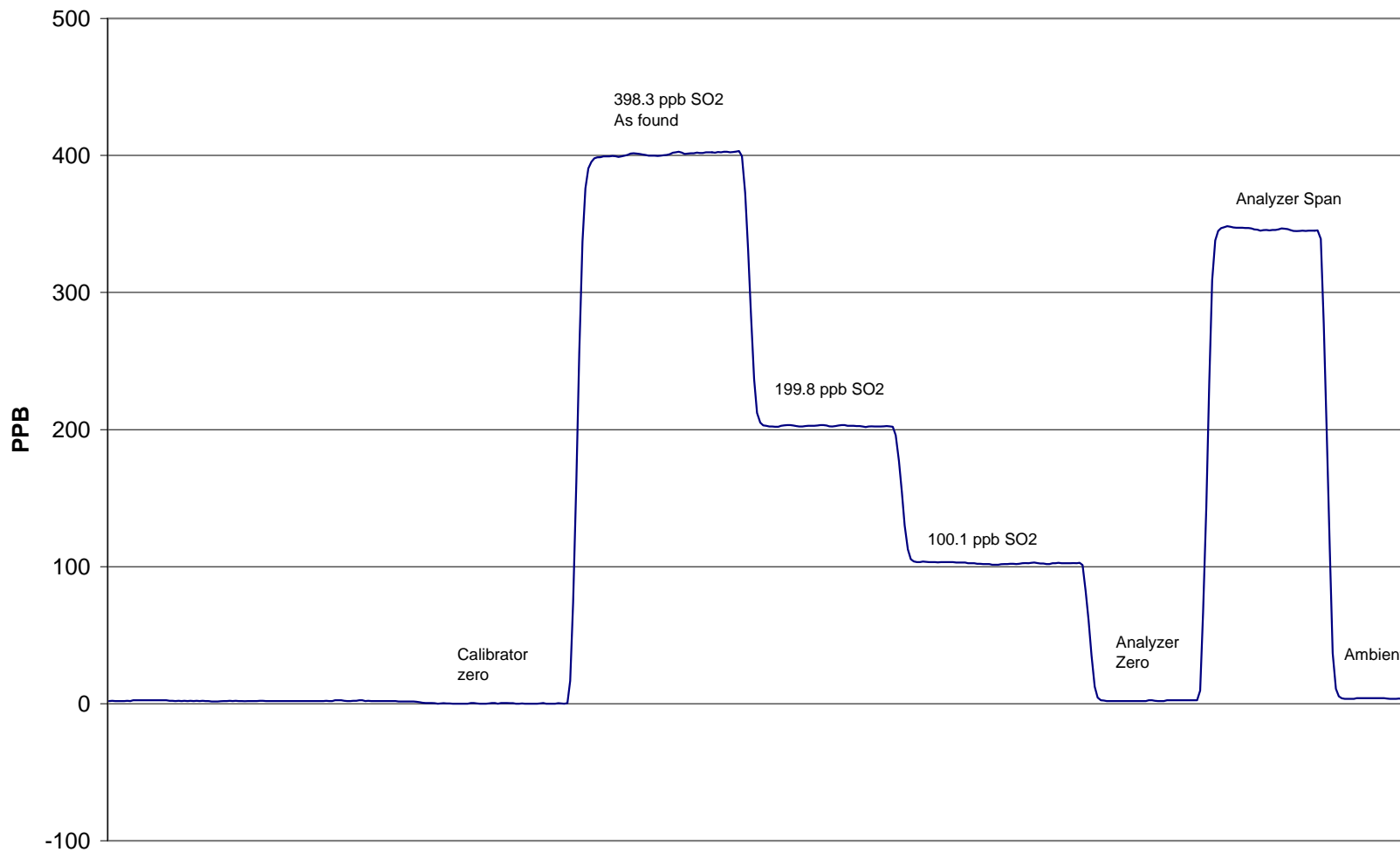
| | | | |
|---------------------|------------------|----------------------|-------------------|
| Calibration Date | January 11, 2008 | Previous Calibration | December 12, 2007 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 9:45 | End Time (MST) | 12:35 |
| Analyzer make/model | TEI 43C | Analyzer serial # | 610816292 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.2 | N/A | | |
| 398.3 | 400.7 | 0.9940 | Correlation Coefficient | 0.999973 |
| 199.8 | 202.6 | 0.9859 | | |
| 100.1 | 102.4 | 0.9777 | | |
| | | | Slope | 0.995235 |
| | | | Intercept | -1.092679 |



Henry Pirker SO2 Calibration



January 11, 2008

Calibration Report

Parameter

NOx-NO-NO₂

Air Monitoring Network

PASZA**Station Information**

| | | | |
|---------------------|-------------------------|----------------------|---------------------|
| Calibration Date | January 11, 2008 | Previous Calibration | December 12, 2007 |
| Station Number | 1 | Station Location | Henry Pirker |
| Reason: | Routine | Installation | Removal |
| Start Time (MST) | 9:45 | End Time (MST) | 14:45 |
| Barometric Pressure | 0.914 Atm | Station Temperature | 21.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| NO Cal Gas Conc | 48.9 ppm | Cal Gas Expiry Date | 1/2/2009 |
| NOx Cal Gas Conc | 48.9 ppm | Cal Gas Serial # | LL16161 |

DACS Information

| | | | |
|-----------|---------------------|-----------------|--------------|
| DACS make | FOCUS AP1000 | DACS serial No. | 45269 |
|-----------|---------------------|-----------------|--------------|

| Parameter | | NO2 | NOx | NO |
|---------------|-------------|------------------|------------------|------------------|
| Before | Data Slope | 1.000459 | 1.002219 | 1.004226 |
| | Data Offset | -0.347925 | -1.063077 | -0.751909 |
| After | Data Slope | 1.002082 | 1.003030 | 1.001967 |
| | Data Offset | -0.377952 | -0.921159 | -0.348088 |
| Channel # | | 8 | 6 | 7 |
| Voltage Range | | 0 - 10 VDC | 0 - 10 VDC | 0 - 10 VDC |

Analyzer Information

| | | | |
|---------------------|-----------------|-------------------|------------------|
| Analyzer make/model | Teco 42C | Analyzer serial # | 508011073 |
|---------------------|-----------------|-------------------|------------------|

| Test Point | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 500 | ppb | 0 - 500 | ppb |
| NO background | 7.7 | ppb | 7.7 | mV |
| NOx background | 8.1 | ppb | 8.1 | mV |
| NO coefficient | 0.678 | | 0.678 | |
| NOx coefficient | 1.000 | | 1.000 | |
| Chamber Temp | 50.0 | Deg C | 50.0 | Deg C |
| Cooler Temp | -2.4 | Deg C | -2.4 | Deg C |
| Converter Temp | 319.0 | Deg C | 319.0 | Deg C |
| Vacuum | 164.9 | mm Hg | 164.9 | mm Hg |

Notes:

Calibration Report



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

Station Information

Calibration Date: **January 11, 2008** Station Location: **Henry Pirker**

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 | 4990 | 0.00 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.5 | N/A | N/A |
| 1 | 4990 | 39.83 | 387.2 | 387.2 | 0.0 | 386.9 | 386.7 | 0.1 | 1.0008 | 1.0012 |
| 2 | 4990 | 19.90 | 194.2 | 194.2 | 0.0 | 194.4 | 194.0 | 0.4 | 0.9989 | 1.0011 |
| 3 | 4990 | 9.95 | 97.3 | 97.3 | 0.0 | 98.5 | 98.1 | 0.3 | 0.9881 | 0.9920 |
| AFZ | 4990 | 0.00 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.5 | 0.0000 | 0.0000 |
| AFS | 4990 | 39.88 | 387.7 | 387.7 | 0.0 | 386.9 | 386.7 | 0.1 | 1.0021 | 1.0025 |
| Average Correction Factor | | | | | | | | | 0.9960 | 0.9981 |

As Found Concentrations: NO_x= 385.3 NO= 386.0 As Found Percent Change NO_x= -0.6% NO= -0.4%

GPT Calibration Data

Dilution Flow 4990 ccm Source Gas Flow 39.88 ccm

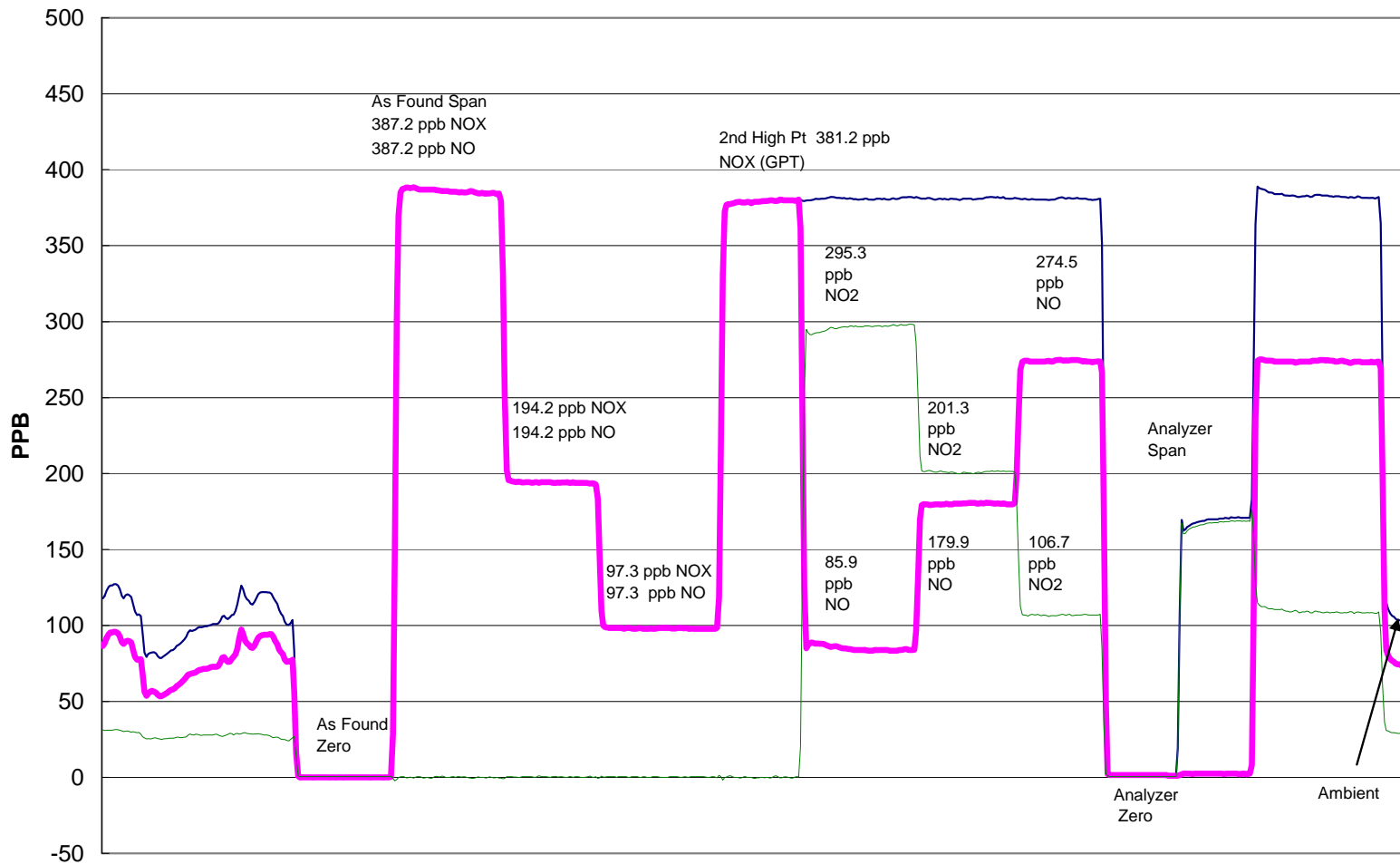
| O3 Setpoint (ppb) | Calculated NOx conc (ppb) | Calculated NO conc (ppb) | Calculated NO2 conc (ppb) | Indicated NOx conc (ppb) | Indicated NO conc (ppb) | Indicated NO2 conc (ppb) | NOx Correction factor | NO Correction factor | NO2 Correction factor | Converter Efficiency |
|---------------------------|---------------------------|--------------------------|---------------------------|--------------------------|-------------------------|--------------------------|-----------------------|----------------------|-----------------------|----------------------|
| 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | N/A | N/A | N/A |
| NO point | 381.2 | 379.3 | 1.9 | 378.8 | 378.9 | -0.1 | 1.0064 | 1.0010 | N/A | N/A |
| 300 | 381.2 | 85.9 | 295.3 | 381.2 | 86.1 | 295.3 | 0.9999 | 0.9979 | 0.9999 | 100.0% |
| 200 | 381.2 | 179.9 | 201.3 | 380.8 | 179.9 | 200.9 | 1.0012 | 1.0000 | 1.0018 | 99.8% |
| 100 | 381.2 | 274.5 | 106.7 | 380.9 | 274.3 | 106.7 | 1.0007 | 1.0007 | 0.9993 | 100.1% |
| Average Correction Factor | | | | | | | 1.0006 | 0.9996 | 1.0004 | 100.0% |

AIC Data

| | Previous calibration | | | | Current calibration | | | |
|-----------|----------------------|-------|-----|-----|---------------------|-------|-----|-----|
| Parameter | NOx | NO2 | NO | | NOx | NO2 | NO | |
| Auto zero | 0.9 | 1.0 | 1.0 | ppb | -0.9 | 0.8 | 0.0 | ppb |
| Auto span | 169.0 | 166.3 | 2.2 | ppb | 168.5 | 166.5 | 2.1 | ppb |

Calibration Performed By: Conor Whiteley

Henry Pirker NOx Calibration



January 11, 2008

Calibration Summary

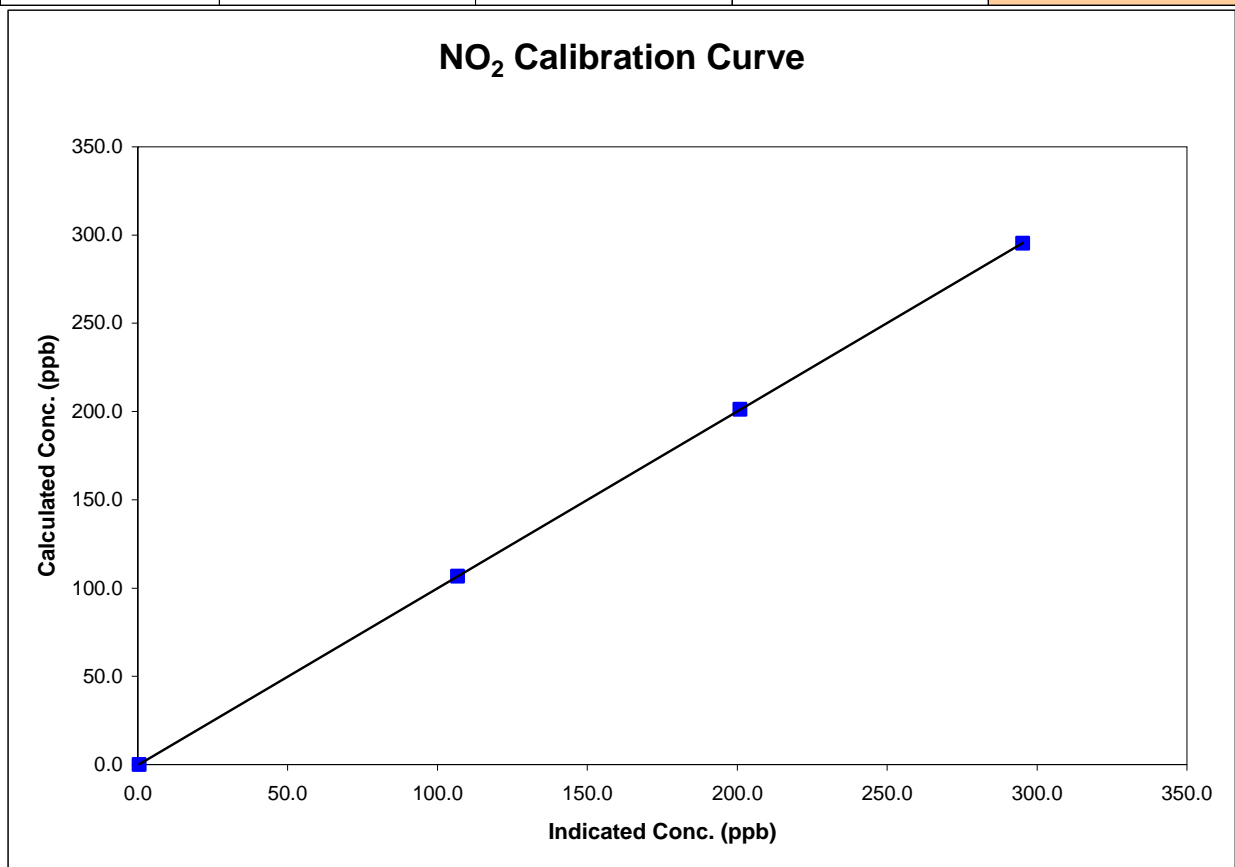
Parameter **NO₂**Air Monitoring Network **PASZA**

Station Information

| | | | |
|------------------|------------------|----------------------|-------------------|
| Calibration Date | January 11, 2008 | Previous Calibration | December 12, 2007 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 9:45 | End Time (MST) | 14:45 |
| Analyzer make | Teco 42C | Analyzer serial # | 508011073 |

Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.5 | 0.0000 | Correlation Coefficient | 0.999996 |
| 295.3 | 295.3 | 0.9999 | | |
| 201.3 | 200.9 | 1.0018 | Slope | 1.002082 |
| 106.7 | 106.7 | 0.9993 | | |
| | | | | |
| | | | Intercept | -0.377952 |



Calibration Summary

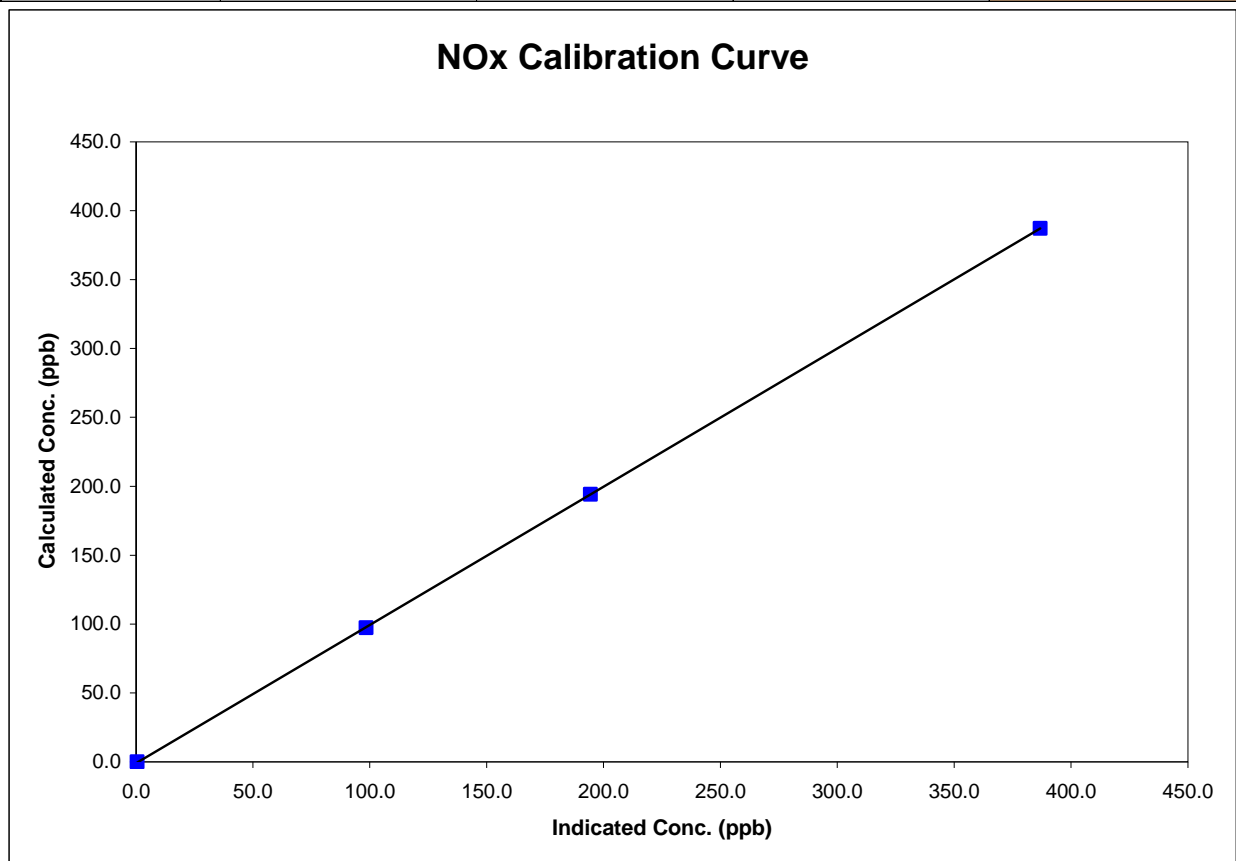
Parameter **NO_x**Air Monitoring Network **PASZA**

Station Information

| | | | |
|------------------|------------------|----------------------|-------------------|
| Calibration Date | January 11, 2008 | Previous Calibration | December 12, 2007 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 9:45 | End Time (MST) | 14:45 |
| Analyzer make | Teco 42C | Analyzer serial # | 508011073 |

Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.6 | 0.0000 | Correlation Coefficient | 0.999995 |
| 387.2 | 386.9 | 1.0008 | | |
| 194.2 | 194.4 | 0.9989 | Slope | 1.003030 |
| 97.3 | 98.5 | 0.9881 | | |
| | | | | |
| | | | Intercept | -0.921159 |



Calibration Summary

Parameter **NO**
 Air Monitoring Network **PASZA**

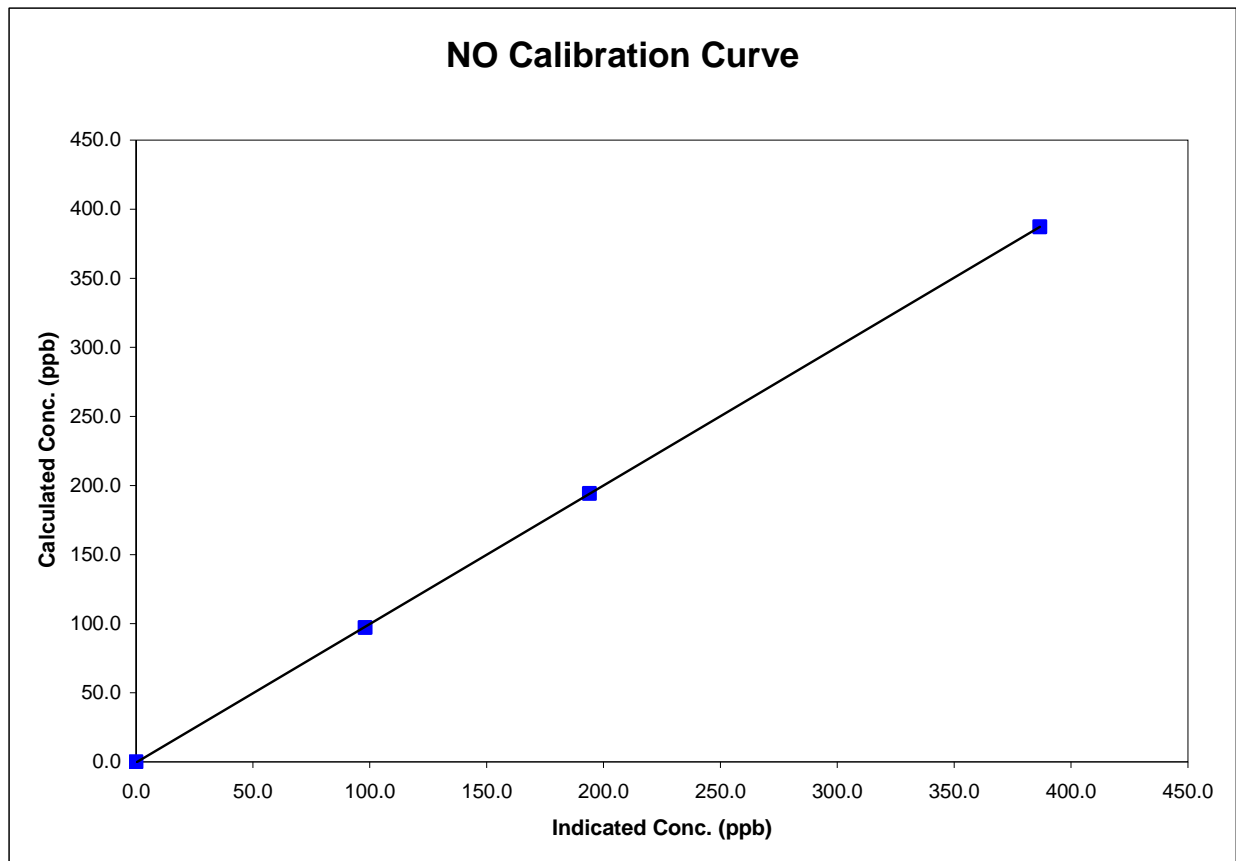


Station Information

| | | | |
|------------------|------------------|----------------------|-------------------|
| Calibration Date | January 11, 2008 | Previous Calibration | December 12, 2007 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 9:45 | End Time (MST) | 14:45 |
| Analyzer make | Teco 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 | | |
| 387.2 | 386.7 | 1.0012 | Correlation Coefficient | 0.999993 |
| 194.2 | 194.0 | 1.0011 | | |
| 97.3 | 98.1 | 0.9920 | Slope | 1.001967 |
| | | | Intercept | -0.348088 |



Calibration Report

Parameter **O3**Air Monitoring Network **PASZA**

Station Information

| | | | |
|------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 11, 2008 | Previous Calibration | December 12, 2007 |
| Station Number | 1 | Station Location | Henry Pirker |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | Other: <input type="checkbox"/> |

| | | | |
|-----------------------|-----------------|---------------------|------------|
| Start Time (MST) | 14:45 | End Time (MST) | 17:55 |
| Barometric Pressure | 0.914 atm | Station Temperature | 20.0 Deg C |
| Calibrator | EnviroNics 6103 | Serial Number | 2844 |
| Cal Gas Concentration | NA | Cal Gas Expiry Date | NA |

| | | | |
|--------------------|---------------|-----------------|--------------|
| DACS make | Focus AP1000 | DACS serial No. | 45269 |
| DACS voltage range | 0 - 1 volt | DACS channel # | 5 |
| | <u>Before</u> | | <u>After</u> |

| | | | |
|----------------------|----------|----------------------|----------|
| Calculated slope | 1.006449 | Calculated slope | 1.007818 |
| Calculated intercept | 2.541506 | Calculated intercept | 0.494040 |

| | | | |
|---------------|----------|-------------------|-----------|
| Analyzer make | TECO 49C | Analyzer serial # | 607415761 |
|---------------|----------|-------------------|-----------|

| | before | | after | |
|---------------------|-------------|-----------|-------------|-----------|
| Concentration range | 500 | ppb | 500 | ppb |
| offset | -0.6 | ppb | -0.6 | ppb |
| slope | 1.006 | | 1.006 | |
| O3 Lamp temp | 71 | mV | 71 | mV |
| Intensities | 93243/73081 | mV | 93243/73081 | mV |
| Pressure | 698.5 | inches Hg | 698.5 | inches Hg |
| Flow A | 673 | ccm | 673 | ccm |
| Flow B | 685 | Deg C | 685 | Deg C |

Calibration Data

| Referenced concentration (ppb) | Dilution air flow rate (cc/min) | Calculated concentration (ppm) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) |
|--------------------------------|---------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 0 | 4992 | 0.0 | 0.0 | N/A |
| 300 | 4992 | 295.3 | 293.2 | 1.0069 |
| 200 | 4992 | 201.3 | 198.3 | 1.0151 |
| 100 | 4992 | 106.7 | 105.0 | 1.0156 |
| 0 | 4992 | 0.0 | 0.0 | As found zero |
| 300 | 4992 | 295.3 | 293.2 | As found span |
| Average Correction Factor | | | | 1.0126 |

Calculated value of As Found Response: 297.6 ppm Percent Change of As Found: 0.8%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 4.4 | ppb | 1.9 | ppb |
| Auto span | 426.7 | ppb | 463.5 | ppb |

Notes: Adjusted SpanCalibration Performed By: Conor Whiteley

Calibration Summary

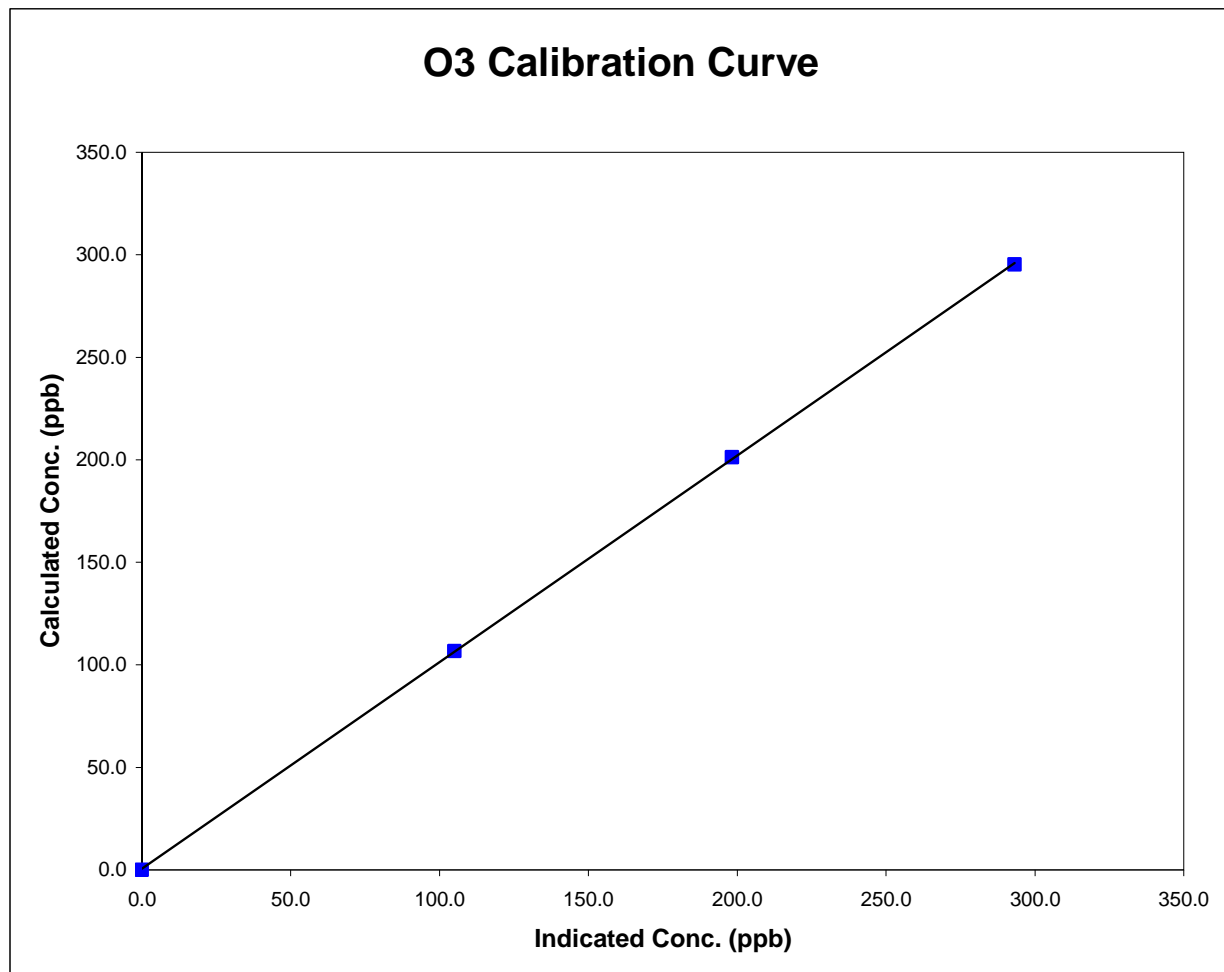
Parameter **O3**Air Monitoring Network **PASZA**

Station Information

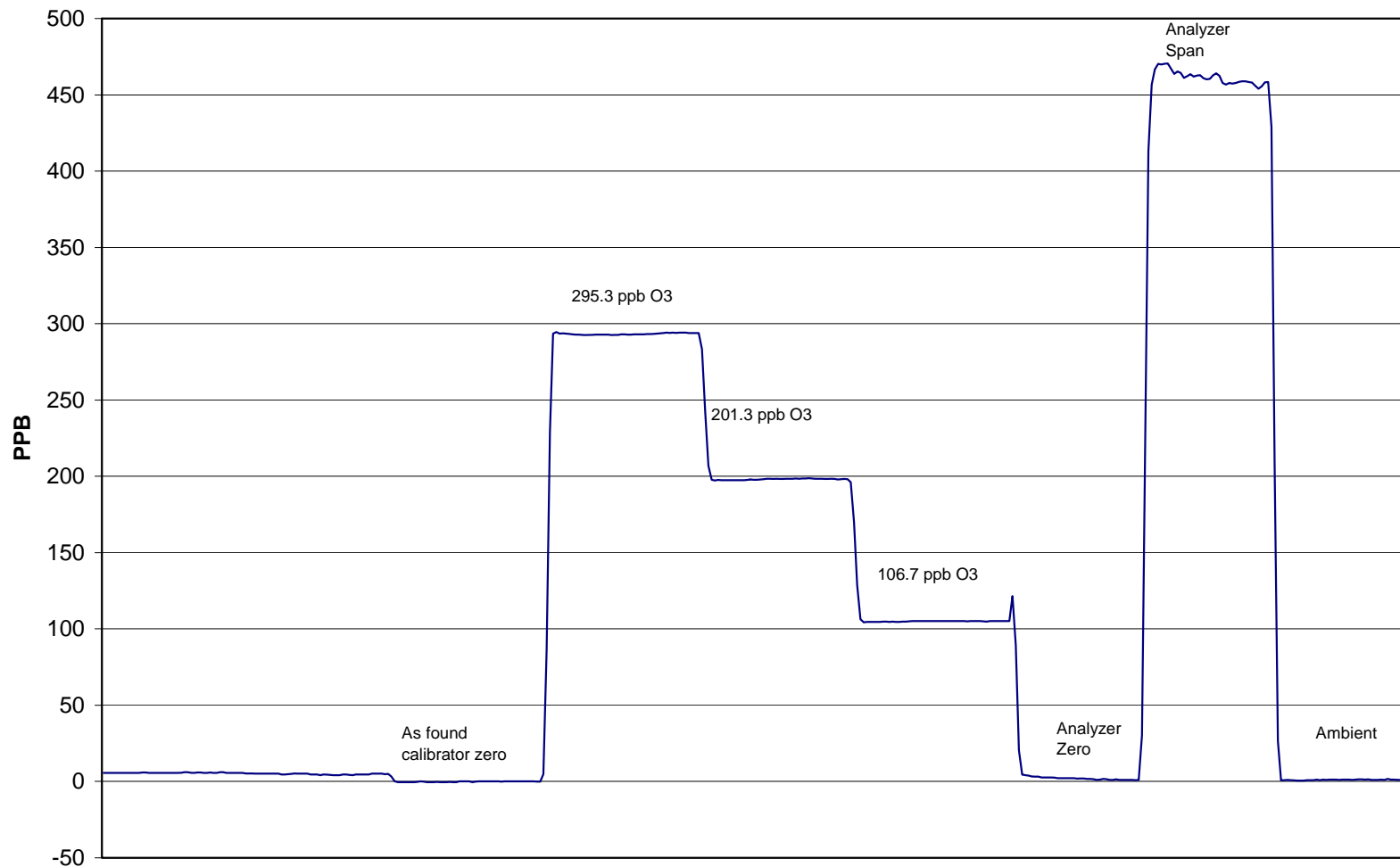
| | | | |
|---------------------|------------------|----------------------|-------------------|
| Calibration Date | January 11, 2008 | Previous Calibration | December 12, 2007 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 14:45 | End Time (MST) | 17:55 |
| Analyzer 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 | 0.0 | NA | | |
| 295.3 | 293.2 | 1.0069 | Correlation Coefficient | 0.999962 |
| 201.3 | 198.3 | 1.0151 | | |
| 106.7 | 105.0 | 1.0156 | Slope | 1.007818 |
| | | | Intercept | 0.494040 |



Henry Pirker O3 Calibration



January 11, 2008

Calibration Report



Parameter **CO**
Air Monitoring Network **PASZA**

Station Information

| | | | |
|----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 14, 2008 | Previous Calibration | December 13, 2007 |
| 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) | 11:30 | End Time (MST) | 14:20 |
| Barometric Pressure | 0.918 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | Envionics 6100 | Serial Number | 3474 |
| Cal Gas Conc | 3000 ppm | Cal Gas Expiry Date | AUG 28/05 |
| | | Cal Gas Cylinder # | AAL20565 |
| DACS make | Focus AP1000 | DACS serial No. | 1 |
| DACS voltage range | 0 - 1 volt | DACS channel # | 9 |
| | Before | | After |
| Calculated slope | 1.021589 | Calculated slope | 0.999851 |
| Calculated intercept | -0.476919 | Calculated intercept | -0.883368 |
| Analyzer make | TEI Model 48C | Analyzer serial # | 508011062 |

| | before | | after | |
|---------------------|--------|-------|--------|-------|
| Concentration range | 0 - 50 | ppm | 0 - 50 | ppm |
| CO span setting | 1.049 | | 1.049 | |
| CO zero setting | -0.002 | | -0.002 | |
| Sample pressure | 686.9 | mm Hg | 671.2 | mm Hg |
| Sample Flow | 1.118 | LPM | 1.107 | 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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4987 | 0.00 | 0.00 | 0.85 | N/A |
| 4987 | 39.90 | 23.81 | 24.67 | 0.9651 |
| 4987 | 19.85 | 11.89 | 12.83 | 0.9274 |
| 4987 | 9.92 | 5.96 | 6.86 | 0.8688 |
| | | | | |
| 4987 | 0.00 | 0.00 | 0.85 | As Found Zero |
| 4987 | 39.90 | 23.81 | 24.67 | As Found Span |
| Average Correction Factor | | | | 0.9204 |

Calculated value of As Found Response: 23.860 ppm Percent Change of As Found: -0.2%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | -0.01 | ppm | 0.01 | ppm |
| Auto span | NA | ppm | 20.38 | ppm |

Notes: Still waiting on CO span bottle from Praxair

Calibration Performed By: Conor Whiteley

Calibration Summary

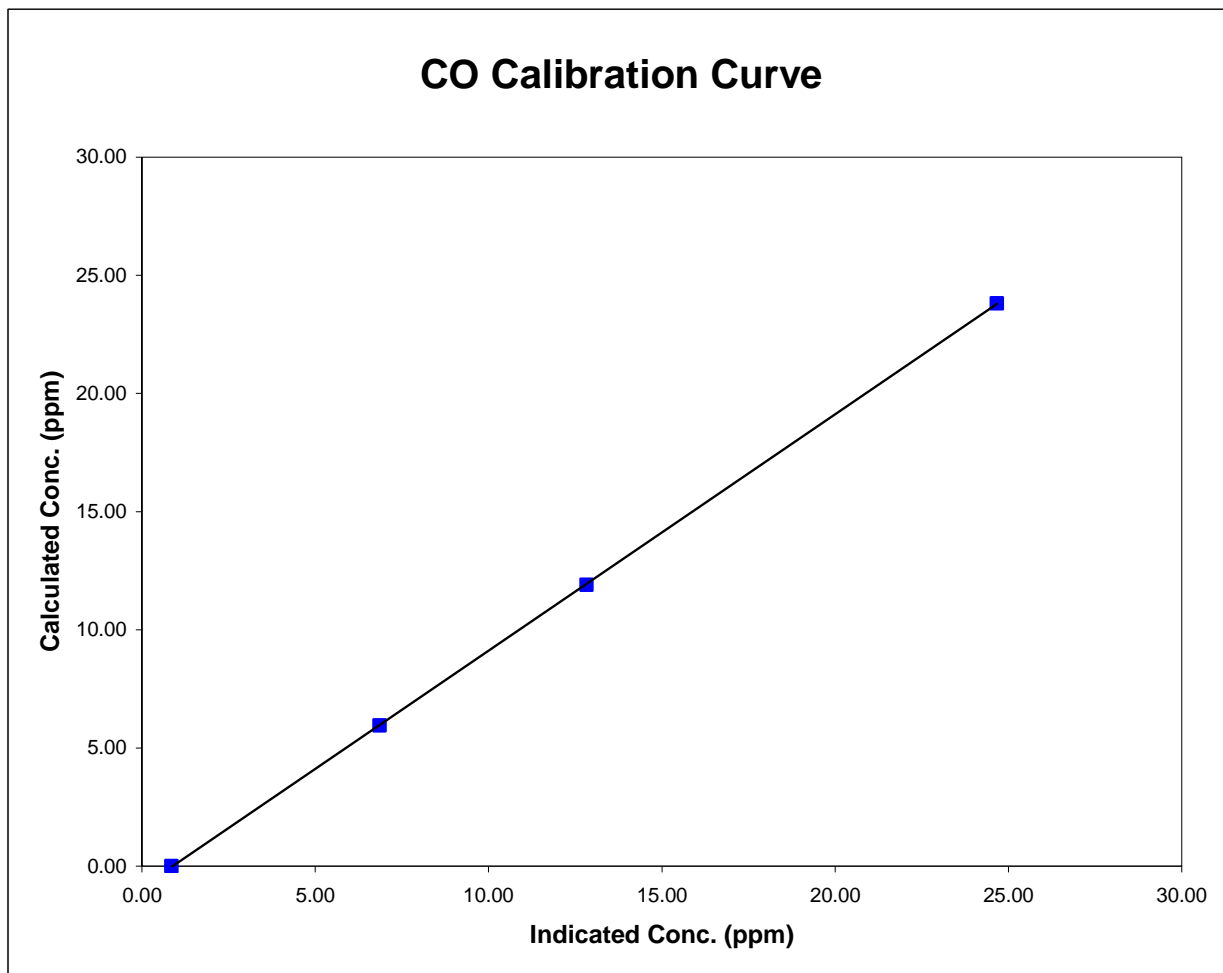
Parameter **CO**Air Monitoring Network **PASZA**

Station Information

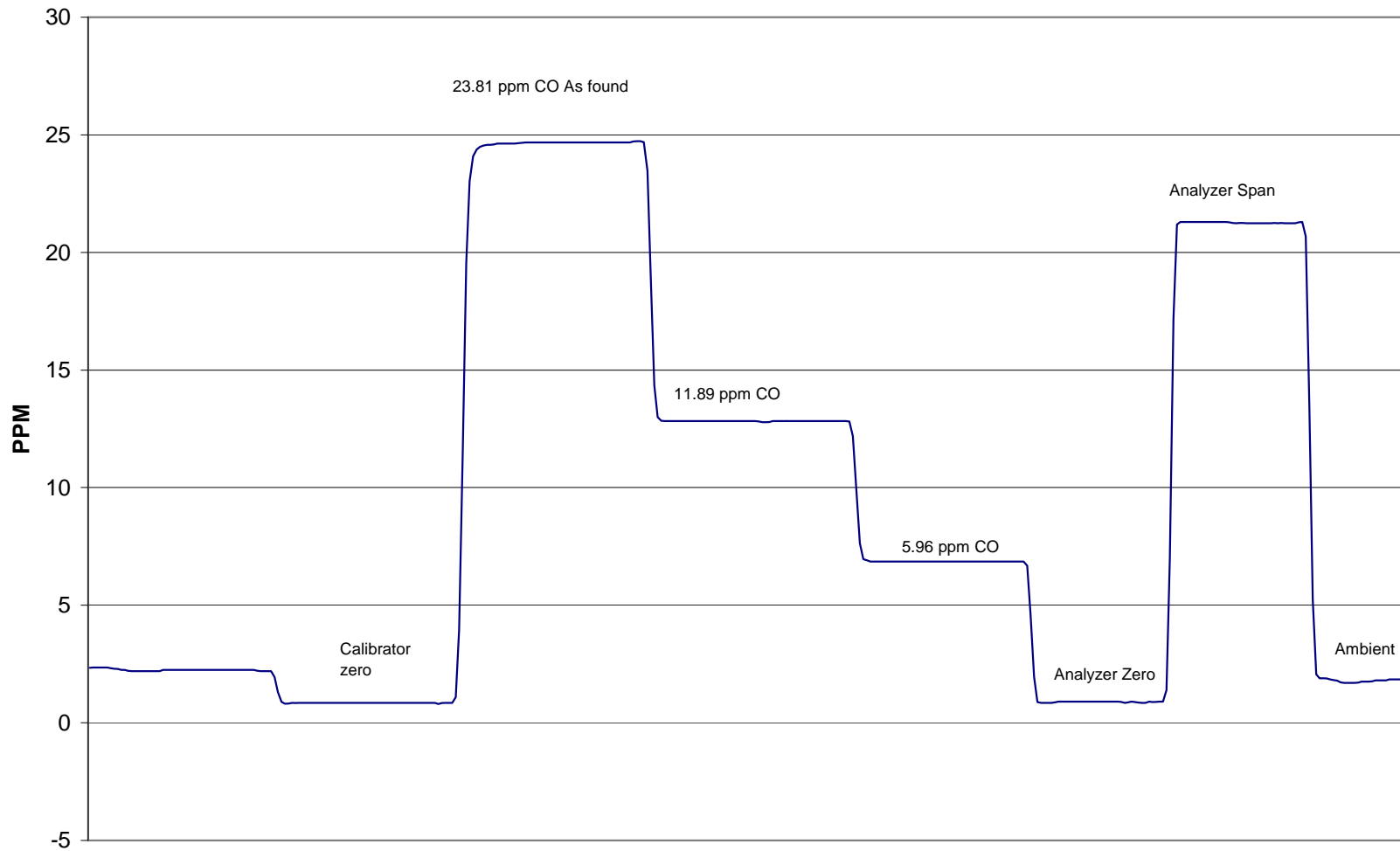
| | | | |
|---------------------|------------------|----------------------|-------------------|
| Calibration Date | January 14, 2008 | Previous Calibration | December 13, 2007 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 11:30 | End Time (MST) | 14:20 |
| Analyzer 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 | 0.849 | N/A | | |
| 23.812 | 24.672 | 0.9651 | Correlation Coefficient | 0.999986 |
| 11.894 | 12.825 | 0.9274 | | |
| 5.956 | 6.855 | 0.8688 | Slope | 0.999851 |
| | | | Intercept | -0.883368 |



Henry Pirker CO Calibration



January 14, 2008

Calibration ReportParameter **THC**Air Monitoring Network **PASZA****Station Information**

| | | | |
|-----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 14, 2008 | Previous Calibration | December 14, 2007 |
| Station Number | 1 | Station Location | Henry Pirker |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | Other: <input type="checkbox"/> |
| Start Time (MST) | 14:00 | End Time (MST) | 16:30 |
| Barometric Pressure | 0.907 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | Envionics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | 700 ppm CH4/ 299 ppm C3H8 | Cal Gas Expiry Date | 12/10/2005 |
| Cal Gas CH4 equiv | 1522.25 ppm | Cal Gas Cylinder # | ALM 005412 |
| DACS make | Focus AP1000 | DACS serial No. | 1 |
| DACS voltage range | 0 - 1 volt | DACS channel # | 9 |
| | Before | | After |
| Calculated slope | 1.062209 | Calculated slope | 0.990375 |
| Calculated intercept | 0.093326 | Calculated intercept | 0.575651 |
| Analyzer make | TEI Model 51C-LT | Analyzer serial # | 51CLT-79009-390 |

| | before | | after | |
|---------------------|--------|---------|--------|---------|
| Concentration range | 0 - 25 | ppm | 0 - 25 | ppm |
| THC sample pressure | 5.95 | psi | 6.09 | psi |
| THC span counts | 6894 | capture | 6923 | capture |
| THC zero counts | 1348 | capture | 1431 | 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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4990 | 0.00 | 0.00 | -0.56 | N/A |
| 4990 | 69.81 | 21.00 | 20.65 | 1.0171 |
| 4990 | 29.89 | 9.06 | 8.51 | 1.0654 |
| 4990 | 9.92 | 3.02 | 2.49 | 1.2129 |
| | | | | |
| 4990 | 0.00 | 0.00 | -0.56 | As Found Zero |
| 4990 | 64.92 | 19.55 | 20.65 | As Found Span |
| Average Correction Factor | | | | 1.0985 |

Calculated value of As Found Response: 22.626 ppm Percent Change of As Found: -15.7%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | -0.19 | ppm | 0.01 | ppm |
| Auto span | 25.27 | ppm | 21.77 | ppm |

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

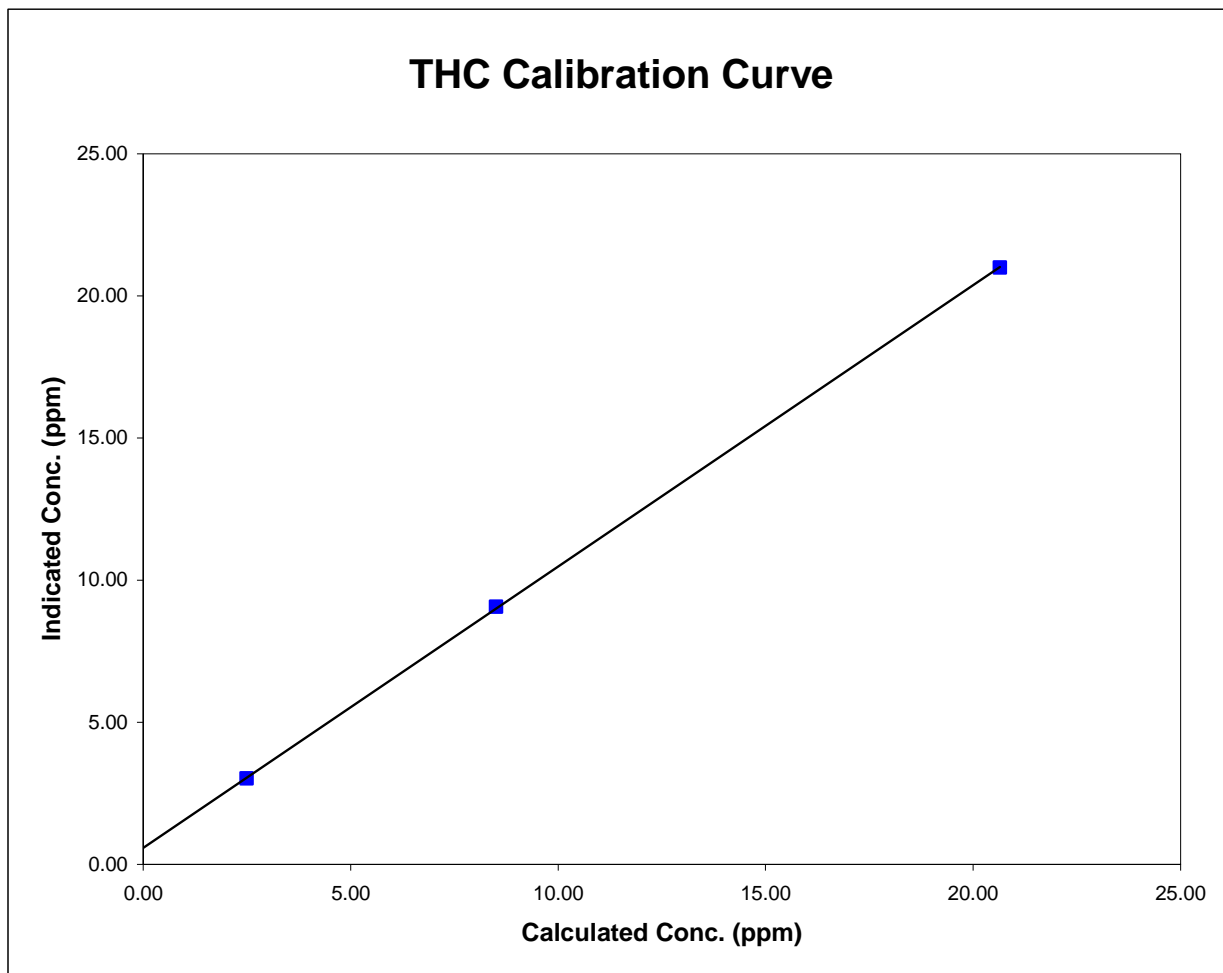
Parameter **THC**Air Monitoring Network **PASZA**

Station Information

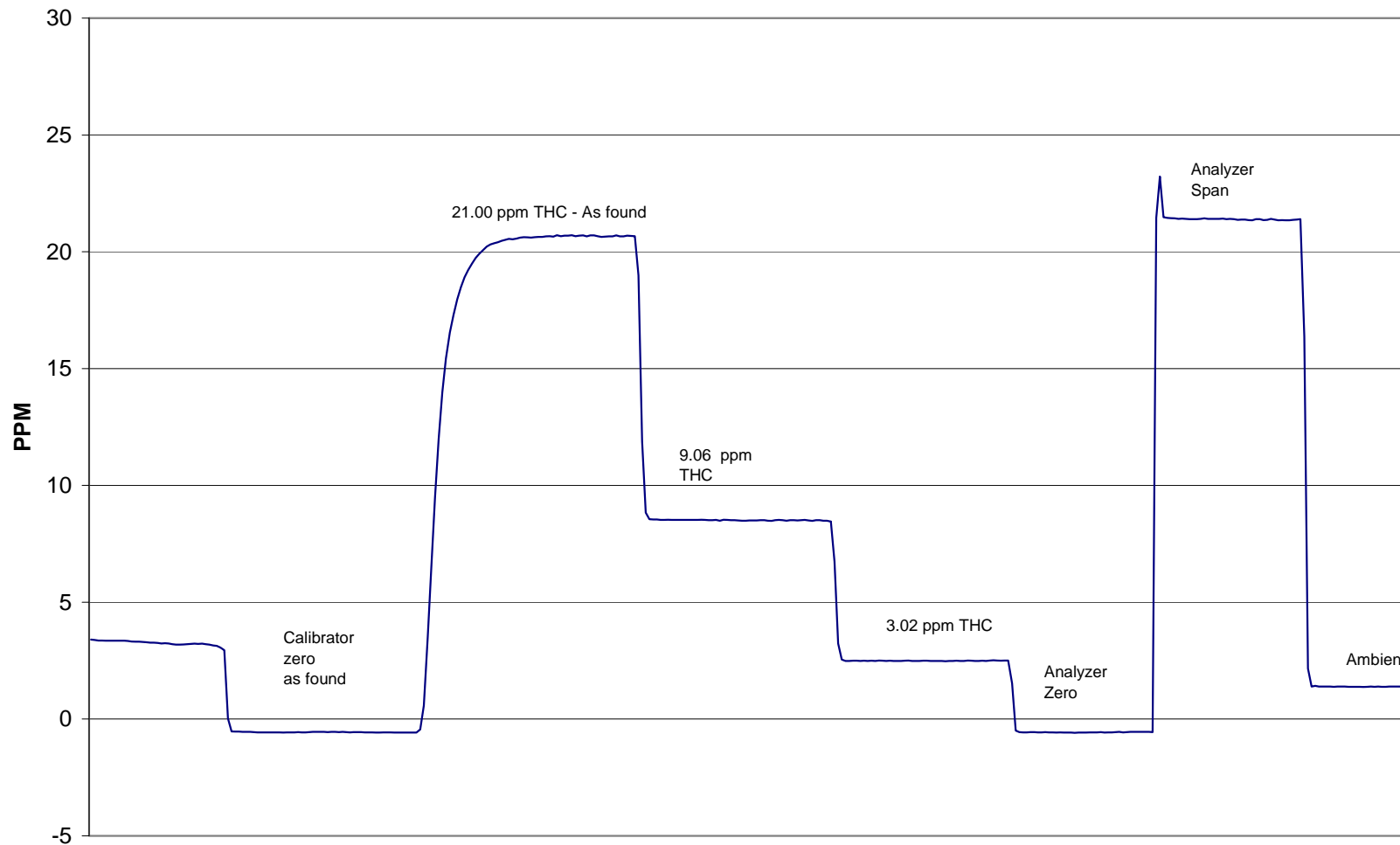
| | | | |
|---------------------|------------------|----------------------|-------------------|
| Calibration Date | January 14, 2008 | Previous Calibration | December 14, 2007 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 14:00 | End Time (MST) | 16:30 |
| Analyzer 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 | -0.564 | N/A | | |
| 21.002 | 20.649 | 1.0171 | Correlation Coefficient | 0.999980 |
| 9.064 | 8.508 | 1.0654 | | |
| 3.020 | 2.490 | 1.2129 | Slope | 0.990375 |
| | | | Intercept | 0.575651 |



Henry Pirker THC Calibration



January 14, 2008

Calibration ReportParameter **TRS**Air Monitoring Network **PASZA****Station Information**

| | | | |
|----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 14, 2008 | Previous Calibration | December 13, 2007 |
| Station Number | 1 | Station Location | Henry Pirker |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | Other: <input type="checkbox"/> |
| Start Time (MST) | 9:30 | End Time (MST) | 12:00 |
| Barometric Pressure | 0.907 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | Envionics 6100 | Serial Number | 3474 |
| Cal Gas Conc | 5.14 ppb | Cal Gas Expiry Date | 7/31/2008 |
| | | Cal Gas Cylinder # | LL 74274 |
| DACS make | Focus AP1000 | DACS serial No. | 1 |
| DACS voltage range | 0 - 1 volt | DACS channel # | 9 |
| | Before | | After |
| Calculated slope | 1.019275 | Calculated slope | 0.985088 |
| Calculated intercept | -0.761279 | Calculated intercept | -0.568152 |
| Analyzer make | TEI 45C | Analyzer serial # | 630718528 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 100 | ppb | 0 - 100 | ppb |
| Coefficient | 0.871 | | 0.871 | |
| Background | 16.9 | | 17.2 | |
| Pressure | 654.8 | mm Hg | 649.2 | mm Hg |
| Flow | 453 | ccm | 455 | ccm |
| Lamp Voltage | 862 | V | 865 | V |

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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4987 | 0.00 | 0.00 | 0.50 | N/A |
| 4987 | 69.74 | 70.89 | 72.52 | 0.9775 |
| 4990 | 39.84 | 40.71 | 41.91 | 0.9713 |
| 4990 | 9.97 | 10.25 | 11.08 | 0.9257 |
| | | | | |
| 4990 | 0.00 | 0.00 | 0.50 | As Found Zero |
| 4990 | 69.75 | 70.86 | 72.52 | As Found Span |
| Average Correction Factor | | | | 0.9582 |

Calculated value of As Found Response: 72.7 ppb Percent Change of As Found: -2.5%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.21 | ppb | 0.14 | ppb |
| Auto span | 36.53 | ppb | 36.98 | ppb |

Notes: No adjustments preformedCalibration Performed By: Conor Whiteley

Calibration Summary

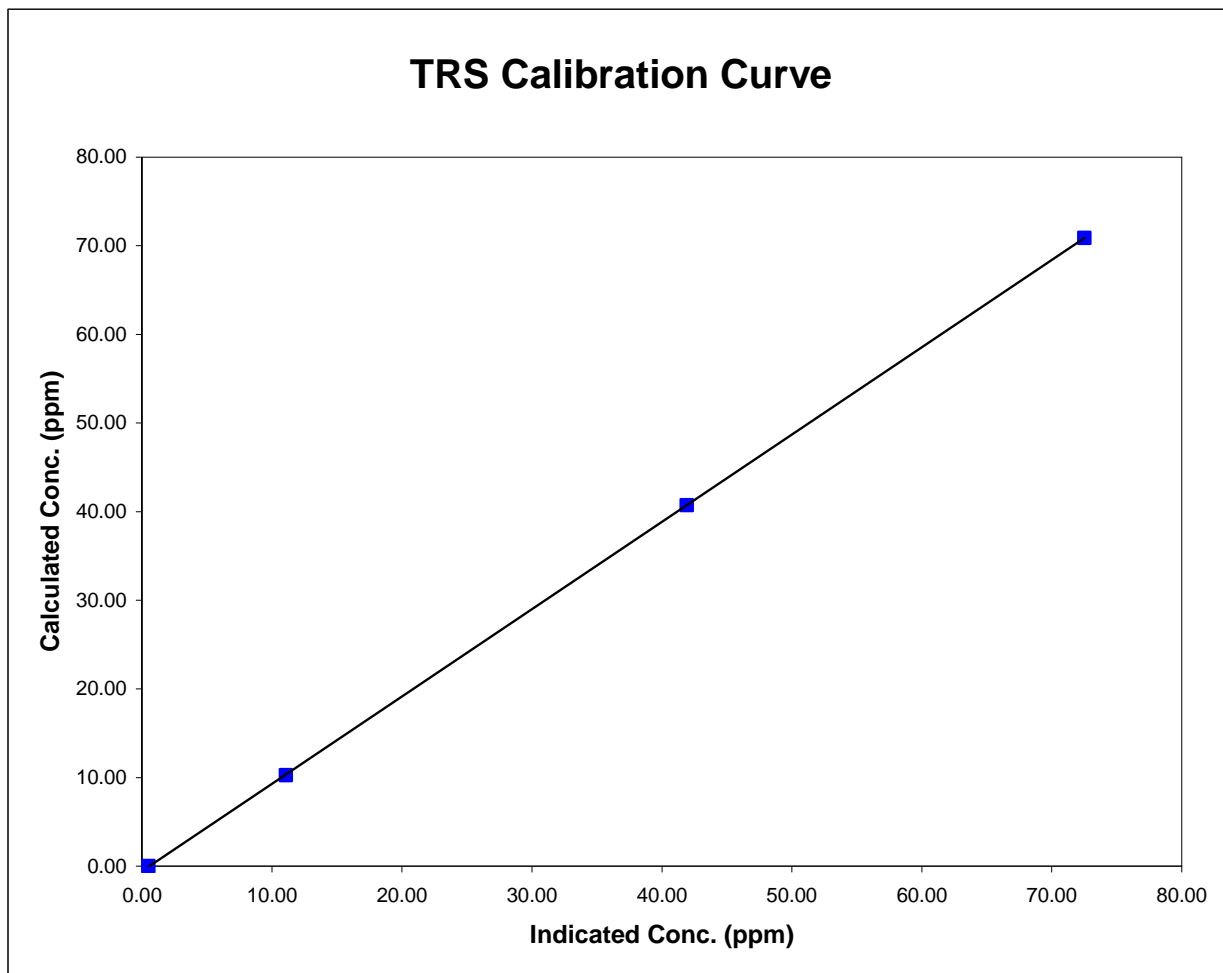
Parameter **TRS**Air Monitoring Network **PASZA**

Station Information

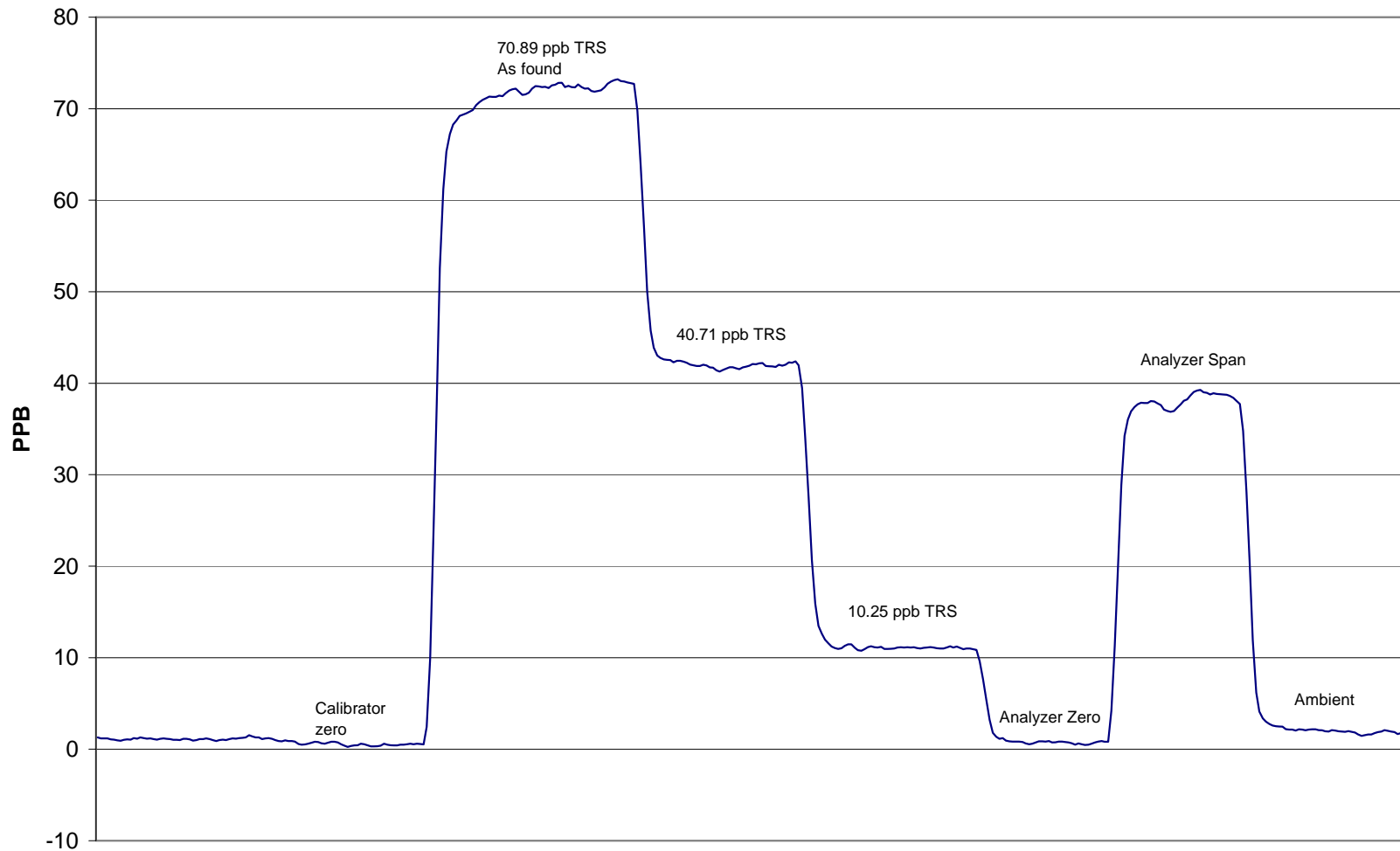
| | | | |
|---------------------|------------------|----------------------|-------------------|
| Calibration Date | January 14, 2008 | Previous Calibration | December 13, 2007 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 9:30 | End Time (MST) | 12:00 |
| Analyzer make/model | TEI 45C | Analyzer serial # | 630718528 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.000 | 0.495 | N/A | | |
| 70.888 | 72.520 | 0.9775 | Correlation Coefficient | 0.999995 |
| 40.713 | 41.914 | 0.9713 | | |
| 10.253 | 11.077 | 0.9257 | Slope | 0.985088 |
| | | | Intercept | -0.568152 |



Henry Pirker TRS Calibration



January 14, 2008

Calibration Report

Parameter **TRS**Air Monitoring Network **PASZA**

Station Information

| | | | |
|----------------------|----------------------------------|----------------------------------|----------------------------------|
| Calibration Date | January 31, 2008 | Previous Calibration | January 14, 2008 |
| Station Number | 1 | Station Location | Henry Pirker |
| Reason: | <input type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | <input type="checkbox"/> Other: |
| Start Time (MST) | 16:30 | End Time (MST) | 18:50 |
| Barometric Pressure | 0.907 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | Envionics 6100 | Serial Number | 3474 |
| Cal Gas Conc | 5.14 ppb | Cal Gas Expiry Date | 7/31/2008 |
| | | Cal Gas Cylinder # | LL 74274 |
| DACS make | Focus AP1000 | DACS serial No. | 1 |
| DACS voltage range | 0 - 1 volt | DACS channel # | 9 |
| | Before | | After |
| Calculated slope | 1.019275 | Calculated slope | 1.027449 |
| Calculated intercept | -0.761279 | Calculated intercept | -0.691877 |
| Analyzer make | TEI 45C | Analyzer serial # | 630718528 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 100 | ppb | 0 - 100 | ppb |
| Coefficient | 0.871 | | 0.871 | |
| Background | 16.9 | | 17.2 | |
| Pressure | 654.8 | mm Hg | 649.2 | mm Hg |
| Flow | 453 | ccm | 455 | ccm |
| Lamp Voltage | 862 | V | 865 | V |

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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4988 | 0.00 | 0.00 | 0.67 | N/A |
| 4988 | 69.77 | 70.90 | 69.68 | 1.0175 |
| | | | | |
| | | | | |
| 4988 | 0.00 | 0.00 | 0.67 | As Found Zero |
| 4988 | 69.75 | 70.88 | 69.68 | As Found Span |
| Average Correction Factor | | | | 1.0175 |

Calculated value of As Found Response: 69.6 ppb Percent Change of As Found: 1.8%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.21 | ppb | 2.38 | ppb |
| Auto span | 36.53 | ppb | 35.85 | ppb |

Notes: Investigating TRS span issues, looks to be a Sox scrubber problem, but I will have to find one to replace the current one...

Calibration Performed By: Conor Whiteley

Calibration Summary

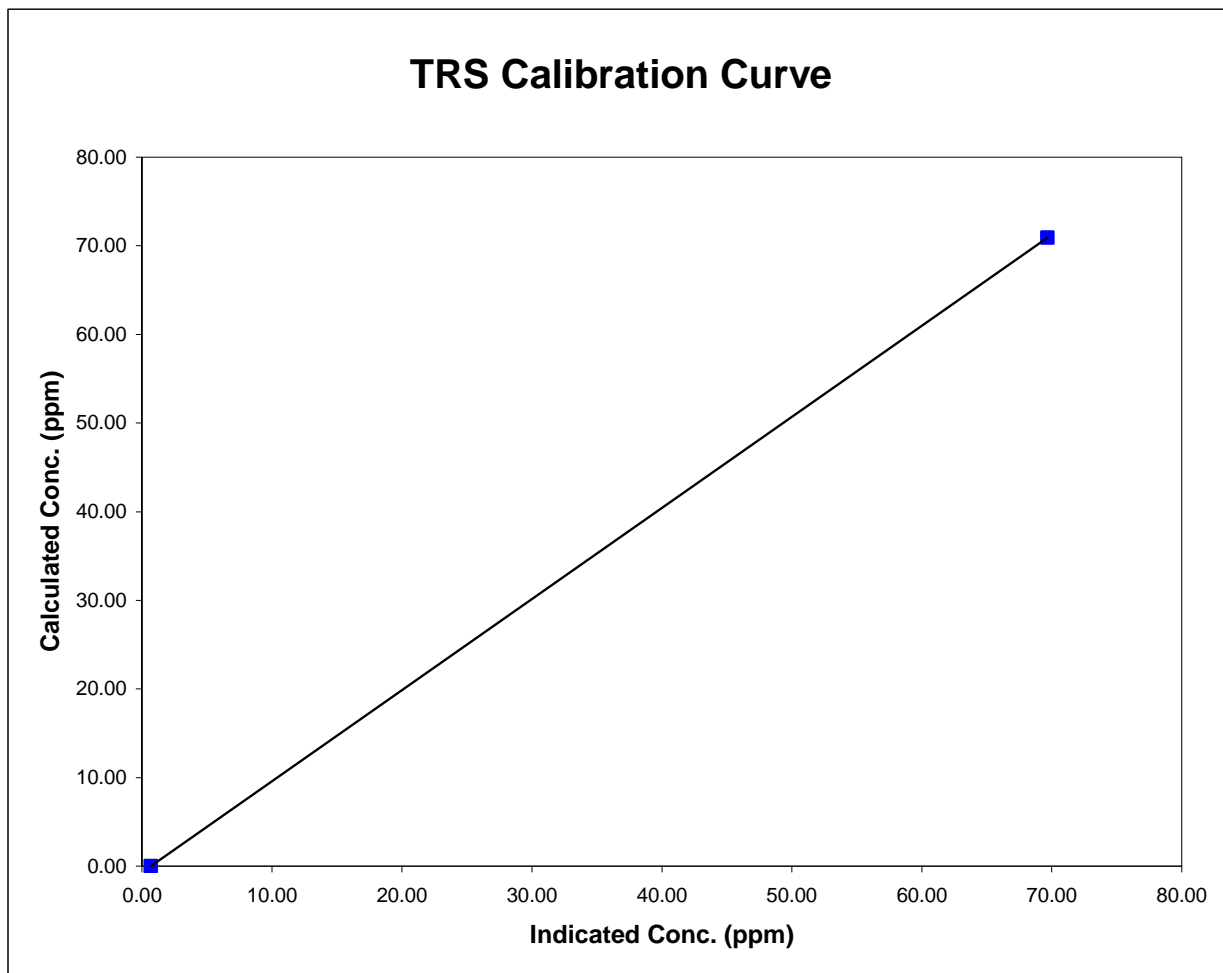
Parameter **TRS**Air Monitoring Network **PASZA**

Station Information

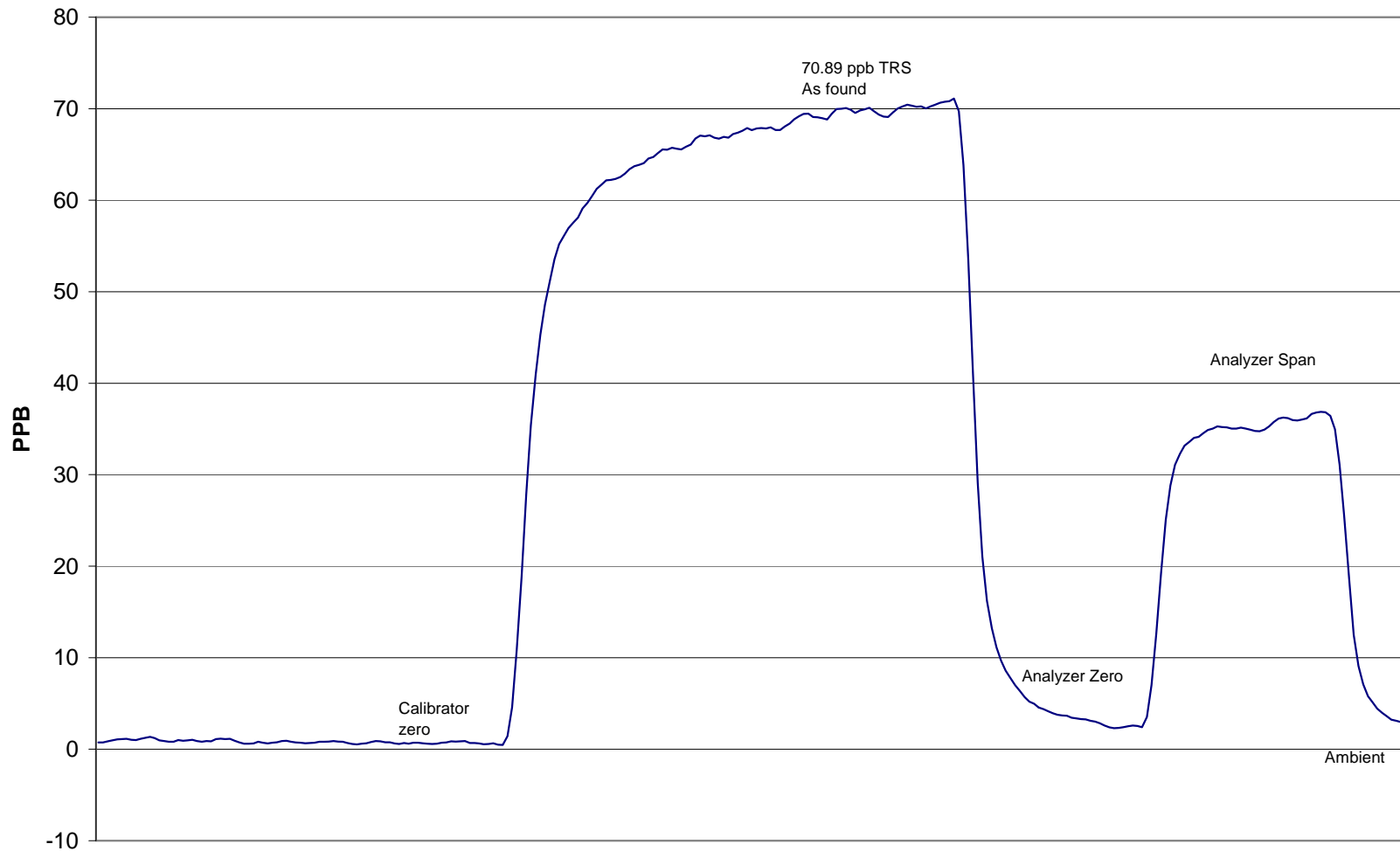
| | | | |
|---------------------|------------------|----------------------|------------------|
| Calibration Date | January 31, 2008 | Previous Calibration | January 14, 2008 |
| Station Number | 1 | Station Location | Henry Pirker |
| Start Time (MST) | 16:30 | End Time (MST) | 18:50 |
| Analyzer make/model | TEI 45C | Analyzer serial # | 630718528 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.000 | 0.673 | N/A | | |
| 70.904 | 69.683 | 1.0175 | Correlation Coefficient | 1.000000 |
| | | | Slope | 1.027449 |
| | | | Intercept | -0.691877 |



Henry Pirker TRS Calibration



January 31, 2008

Calibration Report



Parameter **SO₂**
 Air Monitoring Network **PASZA**

Station Information

| | | | |
|-----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 15, 2008 | Previous Calibration | December 14, 2007 |
| 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) | 11:55 | End Time (MST) | 14:30 |
| Barometric Pressure | 0.931 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | 50.3 ppm | Cal Gas Expiry Date | 1/2/2009 |
| Correction factor | 0.031647 | Cal Gas Cylinder # | LL16161 |
| DACS make | Focus AP1000 | DACS serial No. | 52620 |
| DACS voltage range | 0 - 10 volt | DACS channel # | 6 |
| | Before | | After |
| Calculated slope | 1.008435 | Calculated slope | 1.010044 |
| Calculated intercept | -1.439672 | Calculated intercept | -1.778470 |
| Analyzer make | Teco 43i | Analyzer serial # | 701120008 |

| | before | | after | |
|---------------------|----------|-------|----------|-------|
| Concentration range | 0 - 1000 | ppb | 0 - 1000 | ppb |
| Background | 8.9 | | 8.9 | |
| coefficient | 0.928 | | 0.928 | |
| Lamp Voltage | 837 | volts | 838 | volts |
| Chamber Temp | 45 | Deg C | 45 | Deg C |
| Perm Gas Temp | 45 | Deg C | 45 | Deg C |
| Pressure | 668.6 | mm Hg | 671 | mm Hg |
| Sample Flow | 448 | ccm | 447 | ccm |
| Lamp Intensity | 89 | % | 88 | % |

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) |
|---------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4990 | 0.0 | 0.00 | 0.9 | N/A |
| 4990 | 39.87 | 398.71 | 396.1 | 1.0066 |
| 4990 | 19.94 | 200.20 | 200.3 | 0.9995 |
| 4990 | 9.94 | 100.00 | 101.8 | 0.9828 |
| | | | | |
| 4990 | 0.0 | 0.00 | 0.9 | As Found Zero |
| 4990 | 39.9 | 399.11 | 396.1 | As Found Span |
| Average Correction Factor | | | | 0.9963 |

Calculated value of As Found Response: 397.119 ppm Percent Change of As Found: 0.5%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | -0.5 | ppm | -0.9 | ppm |
| Auto span | 276.1 | ppm | 270.9 | ppm |

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

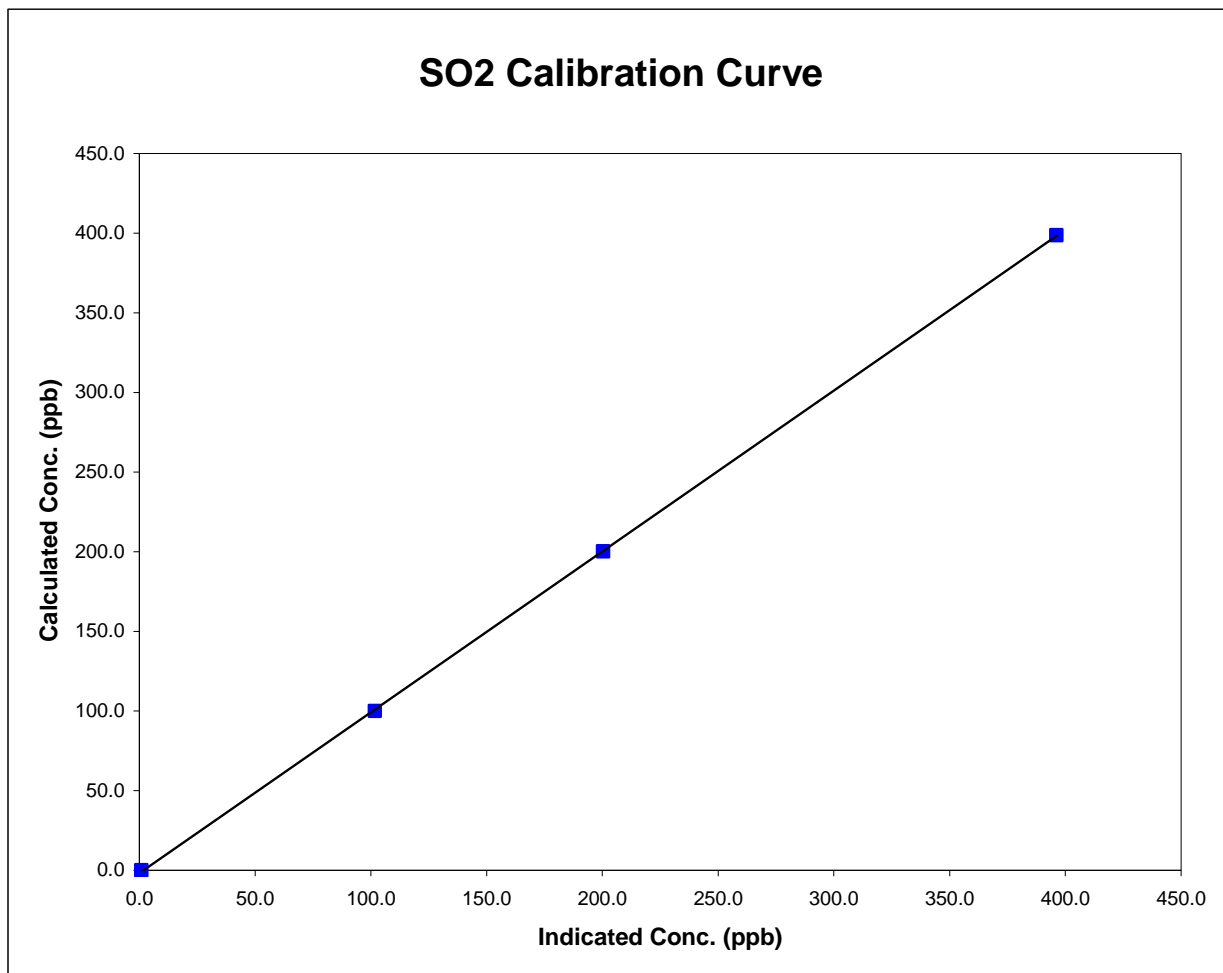
Parameter **SO2**Air Monitoring Network **PASZA**

Station Information

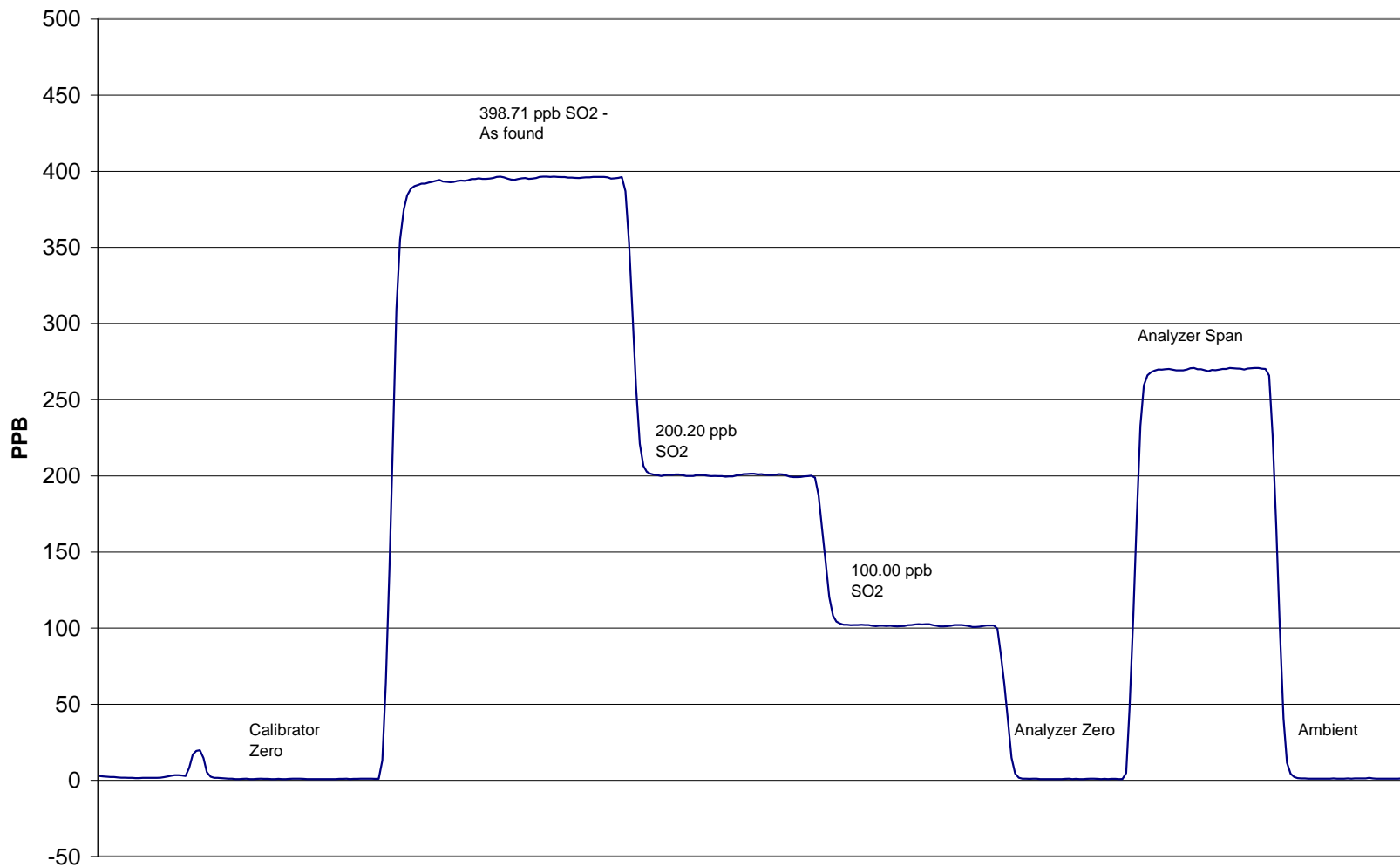
| | | | |
|---------------------|------------------|----------------------|-------------------|
| Calibration Date | January 15, 2008 | Previous Calibration | December 14, 2007 |
| Station Number | 2 | Station Location | Evergreen Park |
| Start Time (MST) | 11:55 | End Time (MST) | 14:30 |
| Analyzer 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 | 0.9 | N/A | | |
| 398.7 | 396.1 | 1.0066 | Correlation Coefficient | 0.999976 |
| 200.2 | 200.3 | 0.9995 | | |
| 100.0 | 101.8 | 0.9828 | Slope | 1.010044 |
| | | | Intercept | -1.778470 |



Evergreen Park SO2 Calibration



January 15, 2008

Calibration Report

Parameter **TRS**Air Monitoring Network **PASZA**

Station Information

| | | | |
|----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 15, 2007 | Previous Calibration | December 14, 2007 |
| 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) | 13:40 | End Time (MST) | 16:00 |
| Barometric Pressure | 0.931 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | Envionics 6100 | Serial Number | 3474 |
| Cal Gas Conc | 5.14 ppm | Cal Gas Expiry Date | 7/31/2008 |
| Correction factor | 0.031647 | Cal Gas Cylinder # | LL 74274 |
| DACS make | Focus AP1000 | DACS serial No. | 52620 |
| DACS voltage range | 0 - 10 volt | DACS channel # | 5 |
| | Before | | After |
| Calculated slope | 1.001093 | Calculated slope | 1.027015 |
| Calculated intercept | 0.372246 | Calculated intercept | -0.774906 |
| Analyzer make | TEI Model 43C | Analyzer serial # | 0436610005 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 100 | ppb | 0 - 100 | ppb |
| Background | 16 | ppb | 16.6 | ppb |
| coefficient | 0.976 | | 1.027 | |
| Lamp Voltage | 791 | volts | 793 | volts |
| Chamber Temp | 44.3 | Deg C | 44.3 | Deg C |
| Perm Gas Temp | 45 | Deg C | 45 | Deg C |
| Pressure | 635.4 | mm Hg | 650.5 | mm Hg |
| Sample Flow | 467 | ccm | 475 | ccm |
| Lamp Intensity | 45,838 | mv | 44,726 | 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) |
|---------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4990 | 0.00 | 0.00 | -0.5 | N/A |
| 4990 | 79.72 | 80.83 | 79.1 | 1.0218 |
| 4990 | 39.88 | 40.75 | 40.7 | 1.0012 |
| 4990 | 9.97 | 10.25 | 12.1 | 0.8473 |
| | | | | |
| 4990 | 0.00 | 0.00 | -0.5 | As Found Zero |
| 4990 | 80.00 | 81.10 | 77.4 | As Found Span |
| Average Correction Factor | | | | 0.9568 |

Calculated value of As Found Response: 78.40 ppm Percent Change of As Found: 3.3%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.1 | ppm | 1.7 | ppm |
| Auto span | 71.9 | ppm | 69.1 | ppm |

Notes: Calibrated TRS, calibration not sticking, replacing UV lamp as per Kelly B.

Calibration Performed By: Conor Whiteley

Calibration Summary

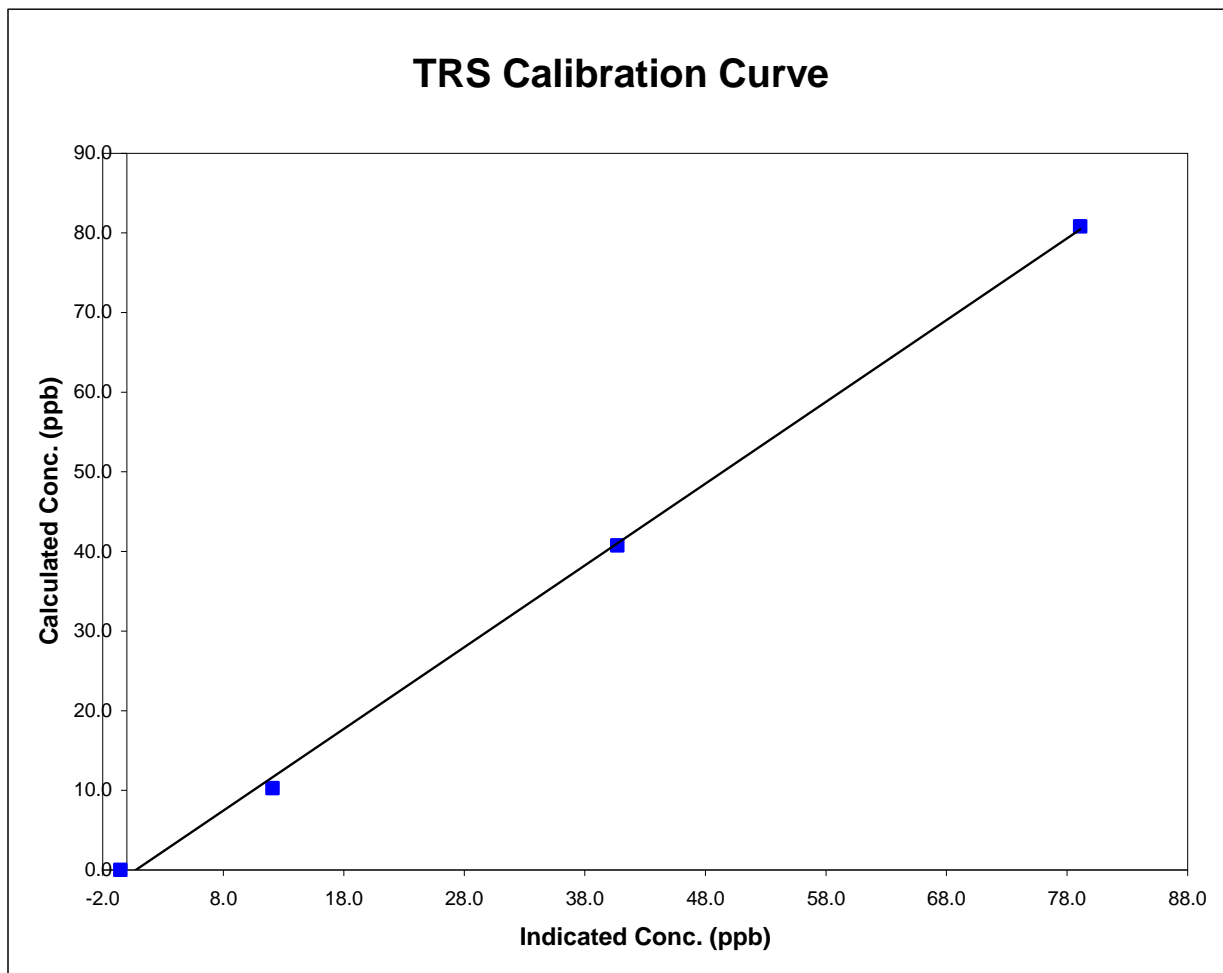
Parameter **TRS**Air Monitoring Network **PASZA**

Station Information

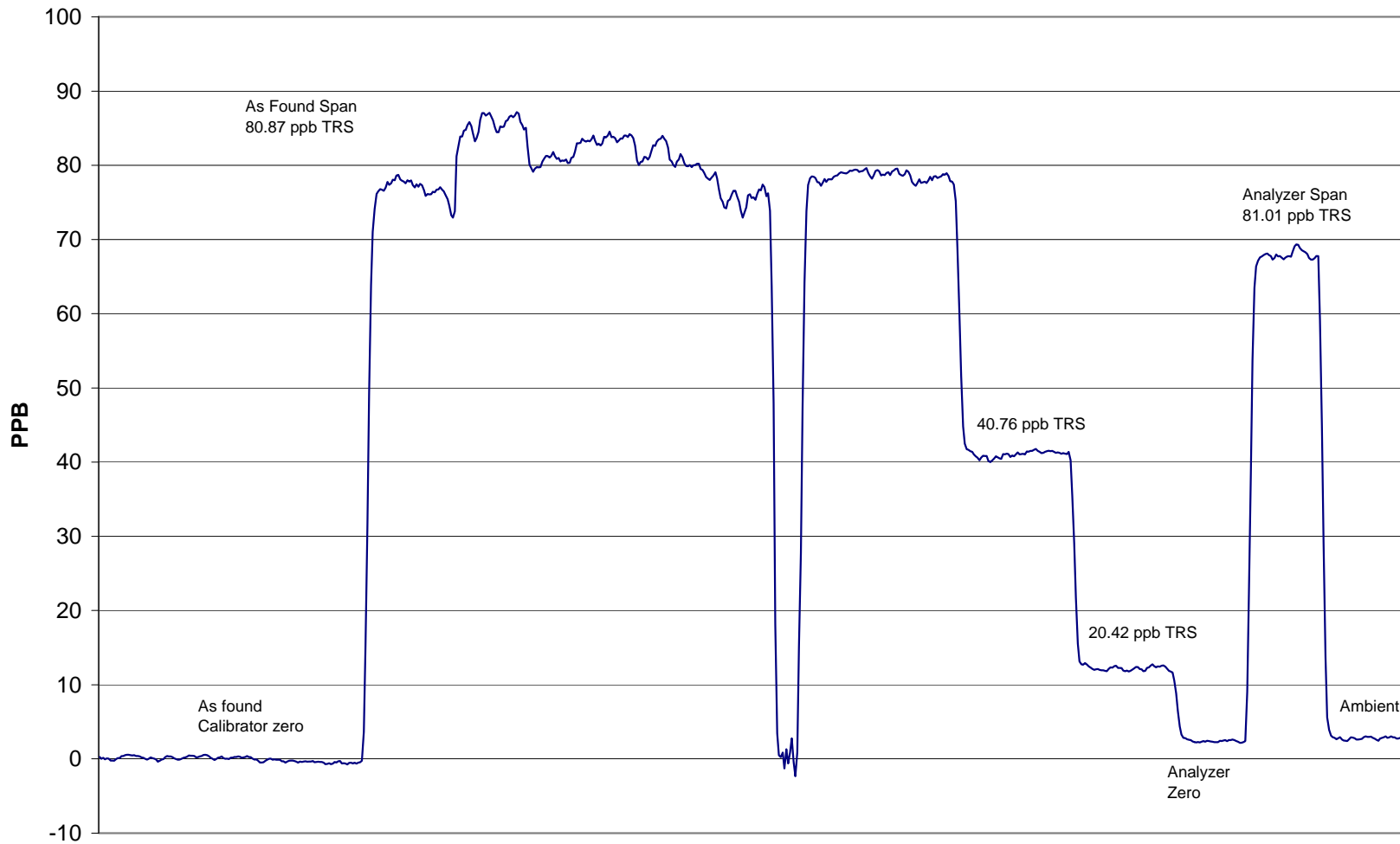
| | | | |
|---------------------|------------------|----------------------|-------------------|
| Calibration Date | January 15, 2007 | Previous Calibration | December 14, 2007 |
| Station Number | 2 | Station Location | Evergreen Park |
| Start Time (MST) | 13:40 | End Time (MST) | 16:00 |
| Analyzer 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 | -0.5 | N/A | | |
| 80.8 | 79.1 | 1.0218 | Correlation Coefficient | 0.999019 |
| 40.8 | 40.7 | 1.0012 | | |
| 10.2 | 12.1 | 0.8473 | Slope | 1.027015 |
| | | | | |
| | | | Intercept | -0.774906 |
| | | | | |



Evergreen Park TRS Calibration



January 15, 2007

Calibration Report

Parameter **TRS**Air Monitoring Network **PASZA**

Station Information

| | | | |
|----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 16, 2007 | Previous Calibration | January 15, 2007 |
| 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) | 9:50 | End Time (MST) | |
| Barometric Pressure | 0.931 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | Envionics 6100 | Serial Number | 3474 |
| Cal Gas Conc | 5.14 ppm | Cal Gas Expiry Date | 7/31/2008 |
| Correction factor | 0.031647 | Cal Gas Cylinder # | LL 74274 |
| DACS make | Focus AP1000 | DACS serial No. | 52620 |
| DACS voltage range | 0 - 10 volt | DACS channel # | 5 |
| | Before | | After |
| Calculated slope | 1.029853 | Calculated slope | 0.996136 |
| Calculated intercept | -0.942352 | Calculated intercept | 0.000148 |
| Analyzer make | TEI Model 43C | Analyzer serial # | 0436610005 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 100 | ppb | 0 - 100 | ppb |
| Background | 16.6 | ppb | 19.6 | ppb |
| coefficient | 1.027 | | 1.05 | |
| Lamp Voltage | 793 | volts | 794 | volts |
| Chamber Temp | 44.3 | Deg C | 44.3 | Deg C |
| Perm Gas Temp | 45 | Deg C | 44.97 | Deg C |
| Pressure | 650.5 | mm Hg | 636.1 | mm Hg |
| Sample Flow | 475 | ccm | 467 | ccm |
| Lamp Intensity | 44,726 | mv | 44,726 | 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) |
|---------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4990 | 0.00 | 0.00 | 0.1 | N/A |
| 4990 | 79.72 | 80.83 | 81.2 | 0.9950 |
| 4990 | 39.84 | 40.71 | 40.7 | 1.0005 |
| 4990 | 9.90 | 10.18 | 10.2 | 1.0015 |
| | | | | |
| 4990 | 0.00 | 0.00 | 2.5 | As Found Zero |
| 4990 | 80.00 | 81.10 | 79.4 | As Found Span |
| Average Correction Factor | | | | 0.9990 |

Calculated value of As Found Response: 78.23 ppm Percent Change of As Found: 3.5%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 1.5 | ppm | -1.2 | ppm |
| Auto span | 69.1 | ppm | 60.5 | ppm |

Notes: Adjusted Zero, Adjusted TRS

Calibration Performed By: Conor Whiteley

Calibration Summary



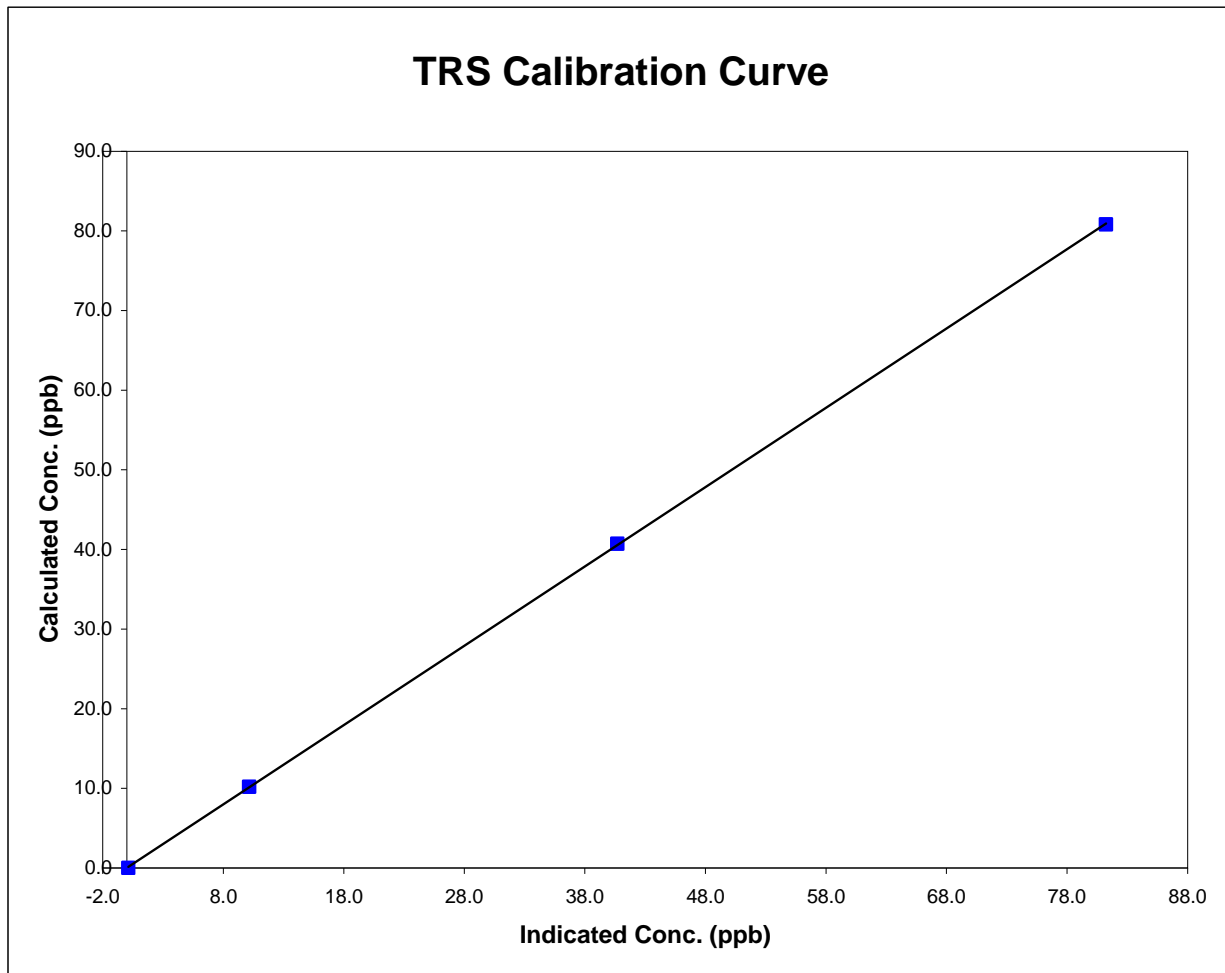
Parameter **TRS**
 Air Monitoring Network **PASZA**

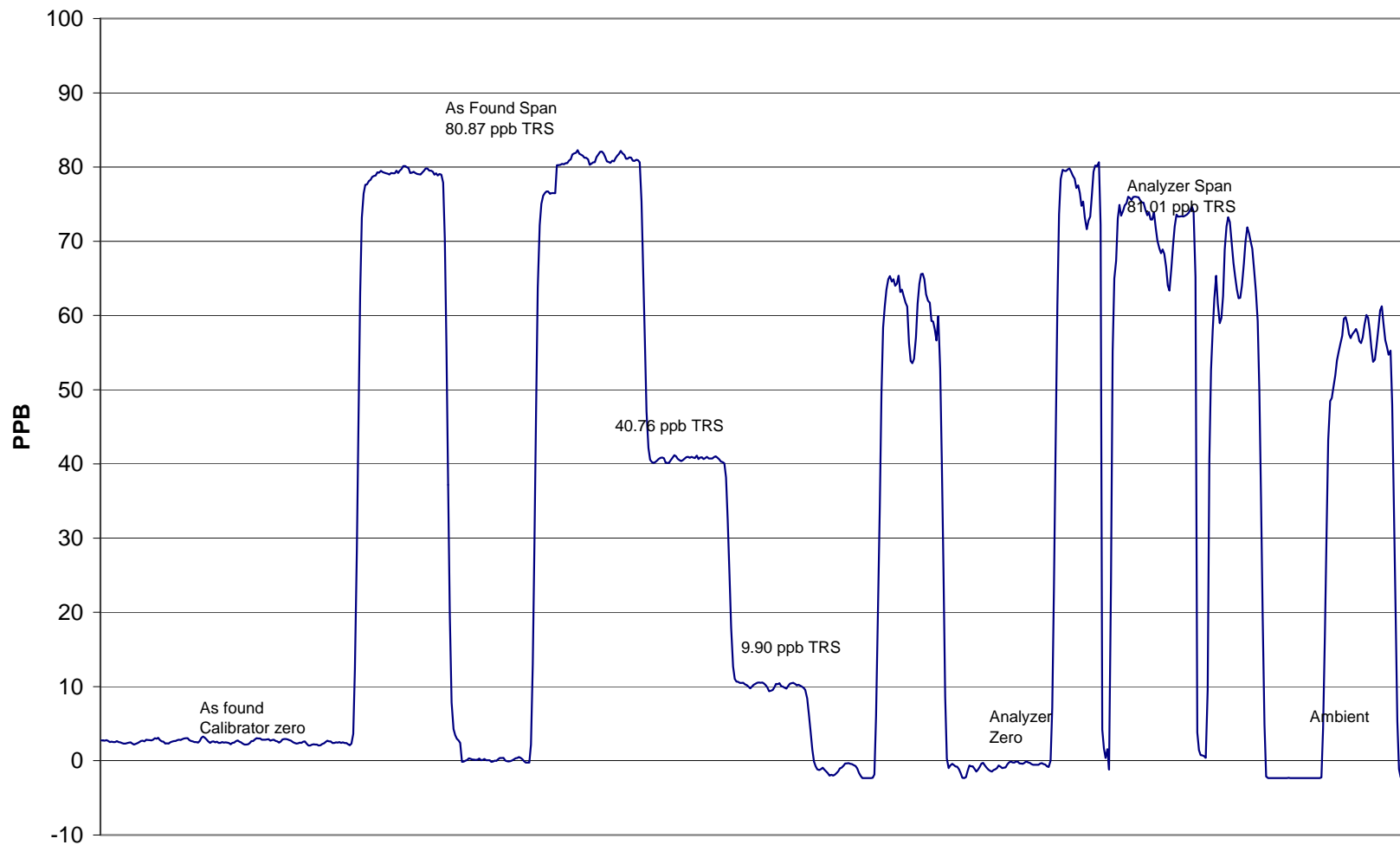
Station Information

| | | | |
|---------------------|------------------|----------------------|------------------|
| Calibration Date | January 16, 2007 | Previous Calibration | January 15, 2007 |
| Station Number | 2 | Station Location | Evergreen Park |
| Start Time (MST) | 9:50 | End Time (MST) | 0:00 |
| 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 | | |
| 80.8 | 81.2 | 0.9950 | Correlation Coefficient | 0.999984 |
| 40.7 | 40.7 | 1.0005 | | |
| 10.2 | 10.2 | 1.0015 | Slope | 0.996136 |
| | | | | |
| | | | Intercept | 0.000148 |
| | | | | |



Evergreen Park TRS Calibration**January 16, 2007**

Calibration Report



Parameter **TRS**
Air Monitoring Network **PASZA**

Station Information

| | | | |
|----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 23, 2007 | Previous Calibration | January 16, 2007 |
| Station Number | 2 | Station Location | Evergreen Park |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | Other: | analyzer repair |
| Start Time (MST) | 16:30 | End Time (MST) | 21:00 |
| Barometric Pressure | 0.919 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | Envionics 6100 | Serial Number | 3474 |
| Cal Gas Conc | 5.14 ppm | Cal Gas Expiry Date | 7/31/2008 |
| Correction factor | 0.031239 | Cal Gas Cylinder # | LL 74274 |
| DACS make | Focus AP1000 | DACS serial No. | 52620 |
| DACS voltage range | 0 - 10 volt | DACS channel # | 5 |
| | Before | | After |
| Calculated slope | 1.029767 | Calculated slope | 0.987029 |
| Calculated intercept | -0.949638 | Calculated intercept | 0.390227 |
| Analyzer make | TEI Model 43C | Analyzer serial # | 0436610005 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 100 | ppb | 0 - 100 | ppb |
| Background | 19.6 | ppb | 19.6 | ppb |
| coefficient | 1.05 | | 1.05 | |
| Lamp Voltage | 794 | volts | 794 | volts |
| Chamber Temp | 44.3 | Deg C | 44.3 | Deg C |
| Perm Gas Temp | 44.97 | Deg C | 44.97 | Deg C |
| Pressure | 636.1 | mm Hg | 636.1 | mm Hg |
| Sample Flow | 467 | ccm | 467 | ccm |
| Lamp Intensity | 44,726 | mv | 44,726 | 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) |
|---------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4990 | 0.00 | 0.00 | -0.3 | N/A |
| 4990 | 79.78 | 80.89 | 81.7 | 0.9896 |
| 4990 | 39.84 | 40.71 | 40.5 | 1.0064 |
| 4990 | 9.90 | 10.18 | 10.0 | 1.0127 |
| | | | | |
| 4990 | 0.00 | 0.00 | -2.3 | As Found Zero |
| 4990 | 80.00 | 81.10 | 30.5 | As Found Span |
| Average Correction Factor | | | | 1.0029 |

Calculated value of As Found Response: 32.82 ppm Percent Change of As Found: 59.5%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 1.5 | ppm | 0.0 | ppm |
| Auto span | 69.1 | ppm | 69.3 | ppm |

Notes: Installed brand new UV lamp and Trigger Pack

Calibration Performed By: Conor Whiteley

Calibration Summary

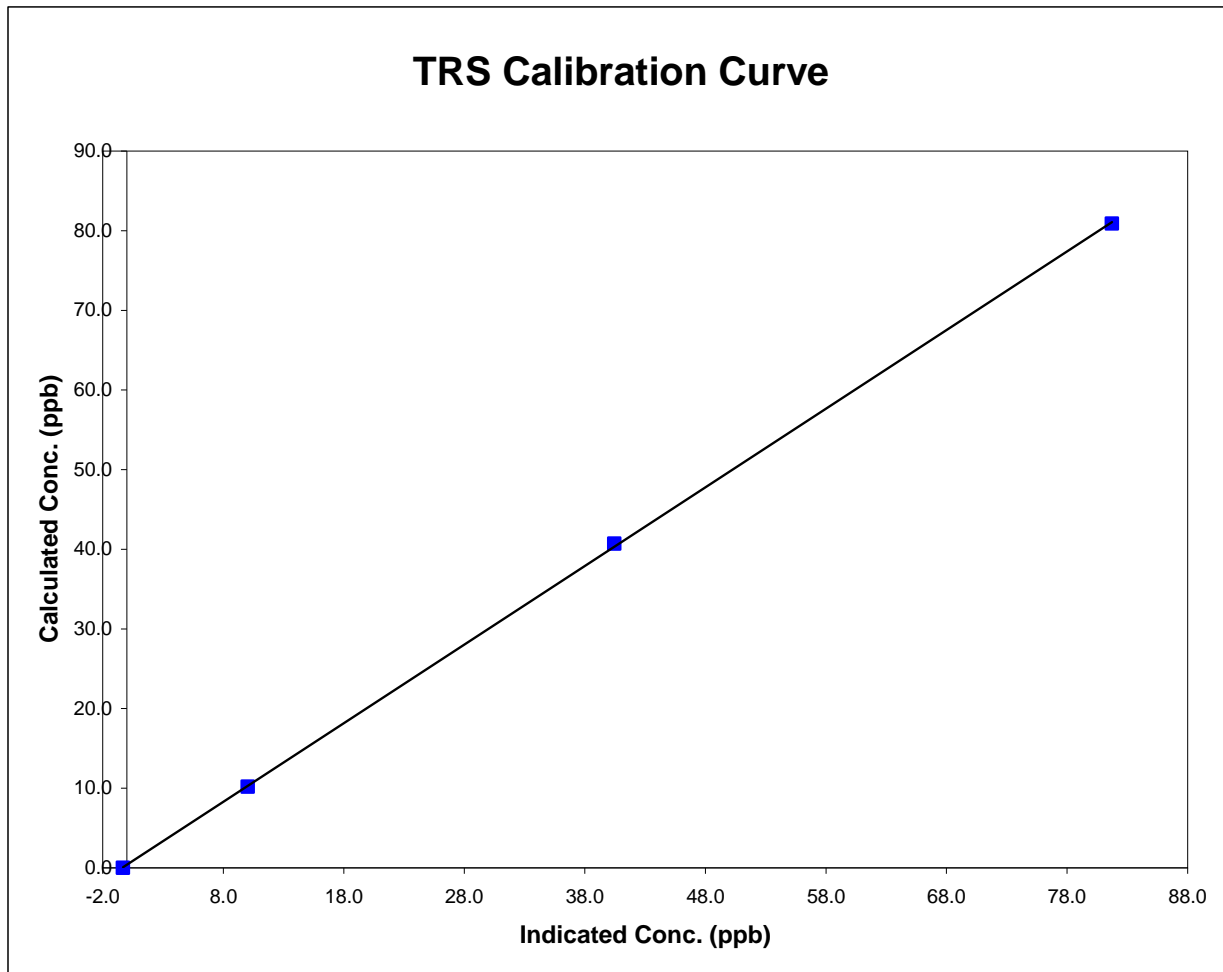
Parameter **TRS**Air Monitoring Network **PASZA**

Station Information

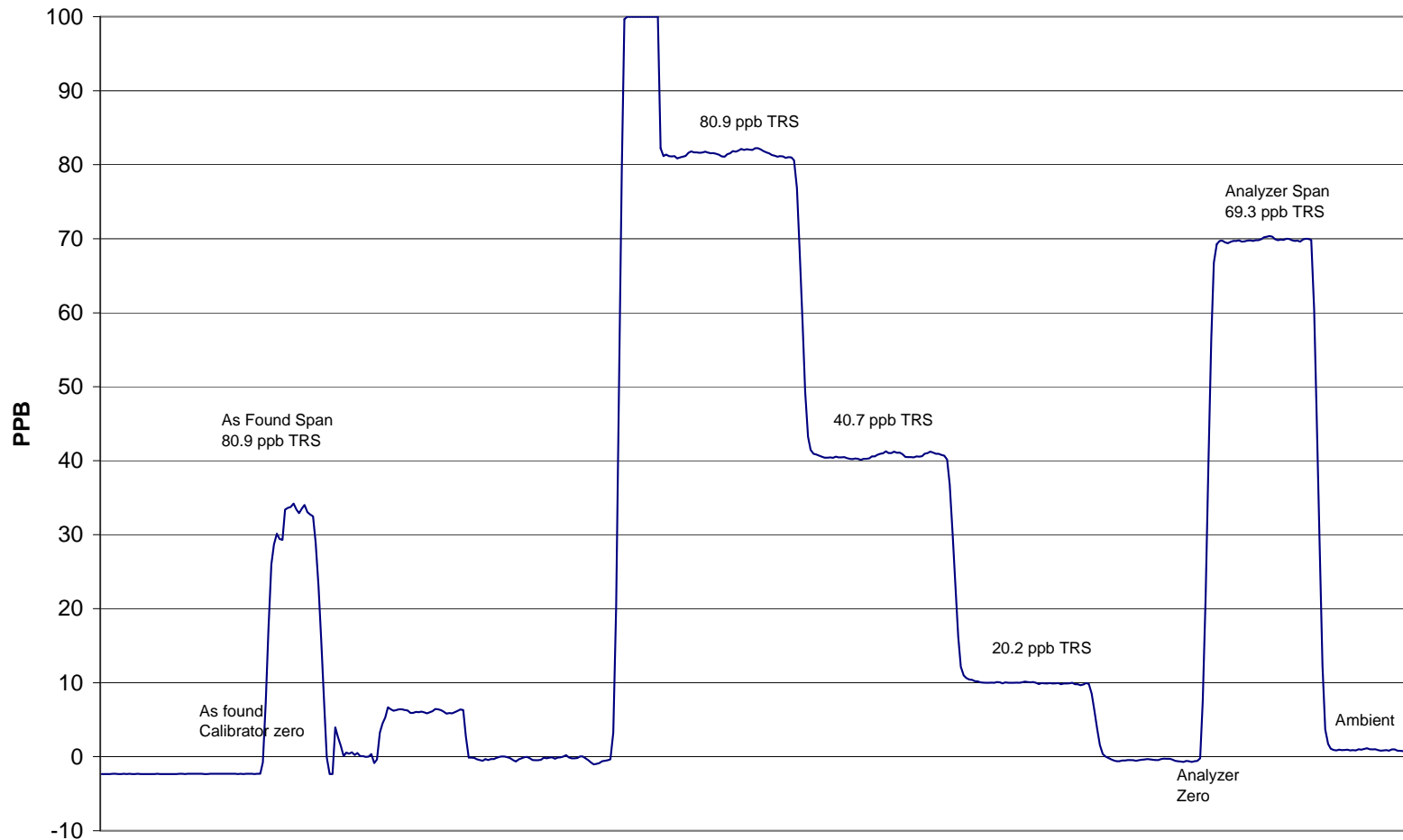
| | | | |
|---------------------|------------------|----------------------|------------------|
| Calibration Date | January 23, 2007 | Previous Calibration | January 16, 2007 |
| Station Number | 2 | Station Location | Evergreen Park |
| Start Time (MST) | 16:30 | End Time (MST) | 21:00 |
| Analyzer 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 | -0.3 | N/A | | |
| 80.9 | 81.7 | 0.9896 | Correlation Coefficient | 0.999947 |
| 40.7 | 40.5 | 1.0064 | | |
| 10.2 | 10.0 | 1.0127 | Slope | 0.987029 |
| | | | Intercept | 0.390227 |



Evergreen Park TRS Calibration



January 23, 2007

Calibration Report



Parameter

SO₂

Air Monitoring Network

PASZA

Station Information

| | | | |
|-----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 17, 2008 | Previous Calibration | December 6, 2007 |
| Station Number | 3 | Station Location | Smoky Heights |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | <input type="checkbox"/> Other: |
| Start Time (MST) | 12:05 | End Time (MST) | 14:45 |
| Barometric Pressure | 0.930 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | 50.3 ppm | Cal Gas Expiry Date | 1/2/2009 |
| Correction factor | 0.031613 | Cal Gas Cylinder # | LL16161 |
| DACS make | Focus AP1000 | DACS serial No. | 45272 |
| DACS voltage range | 0 - 10 volt | DACS channel # | 6 |
| | Before | | After |
| Calculated slope | 1.012710 | Calculated slope | 0.997867 |
| Calculated intercept | -0.802536 | Calculated intercept | -1.830752 |
| Analyzer make | Teco 43i | Analyzer serial # | 701120009 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 500 | ppb | 0 - 500 | ppb |
| Background | 6.6 | | 6.7 | |
| coefficient | 0.745 | | 0.745 | |
| Lamp Voltage | 943 | volts | 936 | volts |
| Chamber Temp | 45.2 | Deg C | 45.2 | Deg C |
| Perm Gas Temp | 44.99 | Deg C | 44.97 | Deg C |
| Pressure | 667.2 | mm Hg | 677.7 | mm Hg |
| Sample Flow | 443 | ccm | 451 | ccm |
| Lamp Intensity | 87 | % | 88 | % |

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) |
|---------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4990 | 0.0 | 0.00 | 0.2 | N/A |
| 4990 | 39.92 | 399.21 | 400.8 | 0.9960 |
| 4990 | 19.91 | 199.90 | 203.8 | 0.9811 |
| 4990 | 9.98 | 100.42 | 103.6 | 0.9697 |
| | | | | |
| 4990 | 0.0 | 0.00 | 0.2 | As Found Zero |
| 4990 | 39.92 | 399.21 | 400.8 | As Found Span |
| Average Correction Factor | | | | 0.9823 |

Calculated value of As Found Response: 404.850 ppm Percent Change of As Found: -1.4%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | -0.6 | ppm | -1.6 | ppm |
| Auto span | 311.6 | ppm | 309.4 | ppm |

Notes:

Calibration Performed By:

Conor Whiteley

Calibration Summary



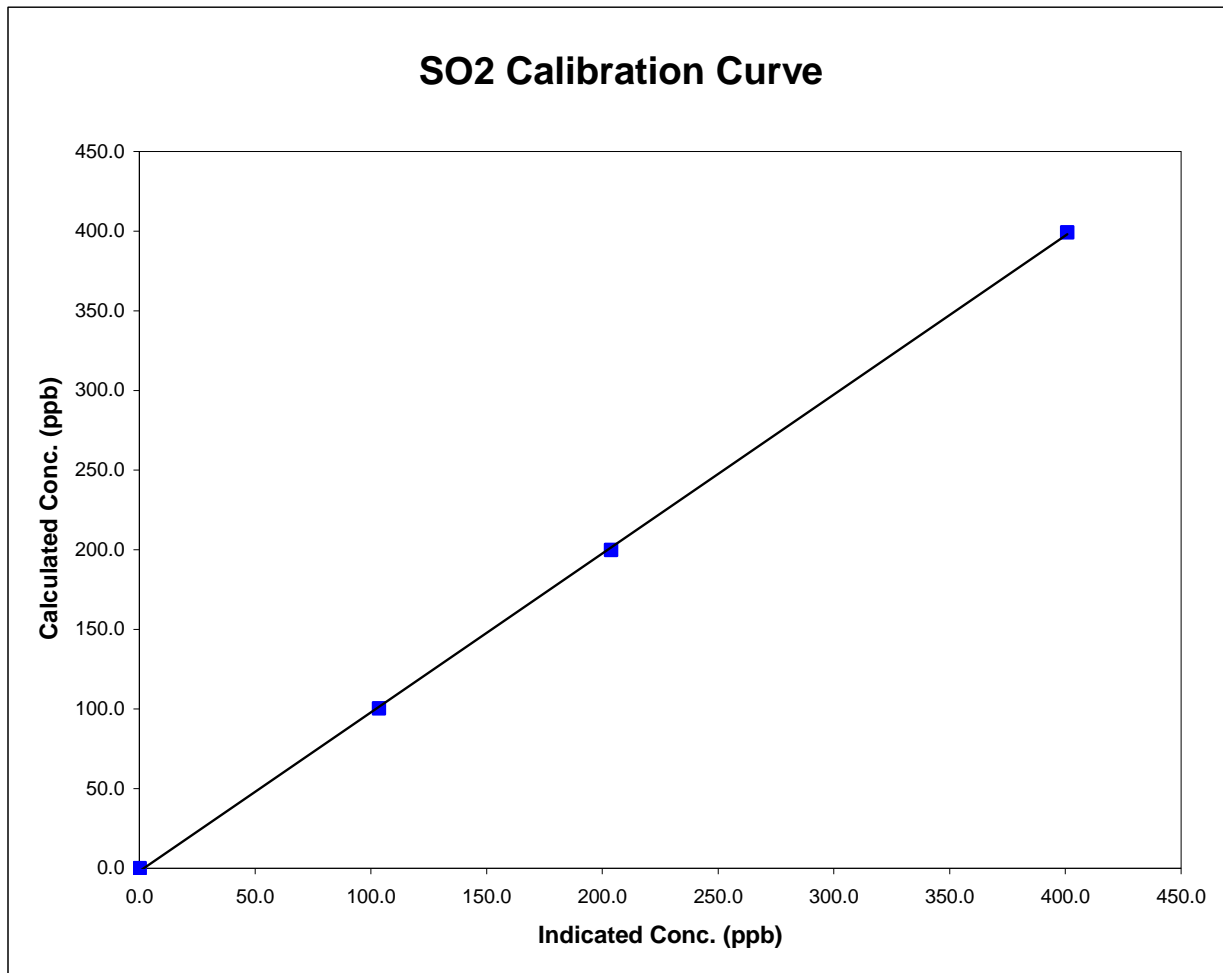
Parameter **SO2**
 Air Monitoring Network **PASZA**

Station Information

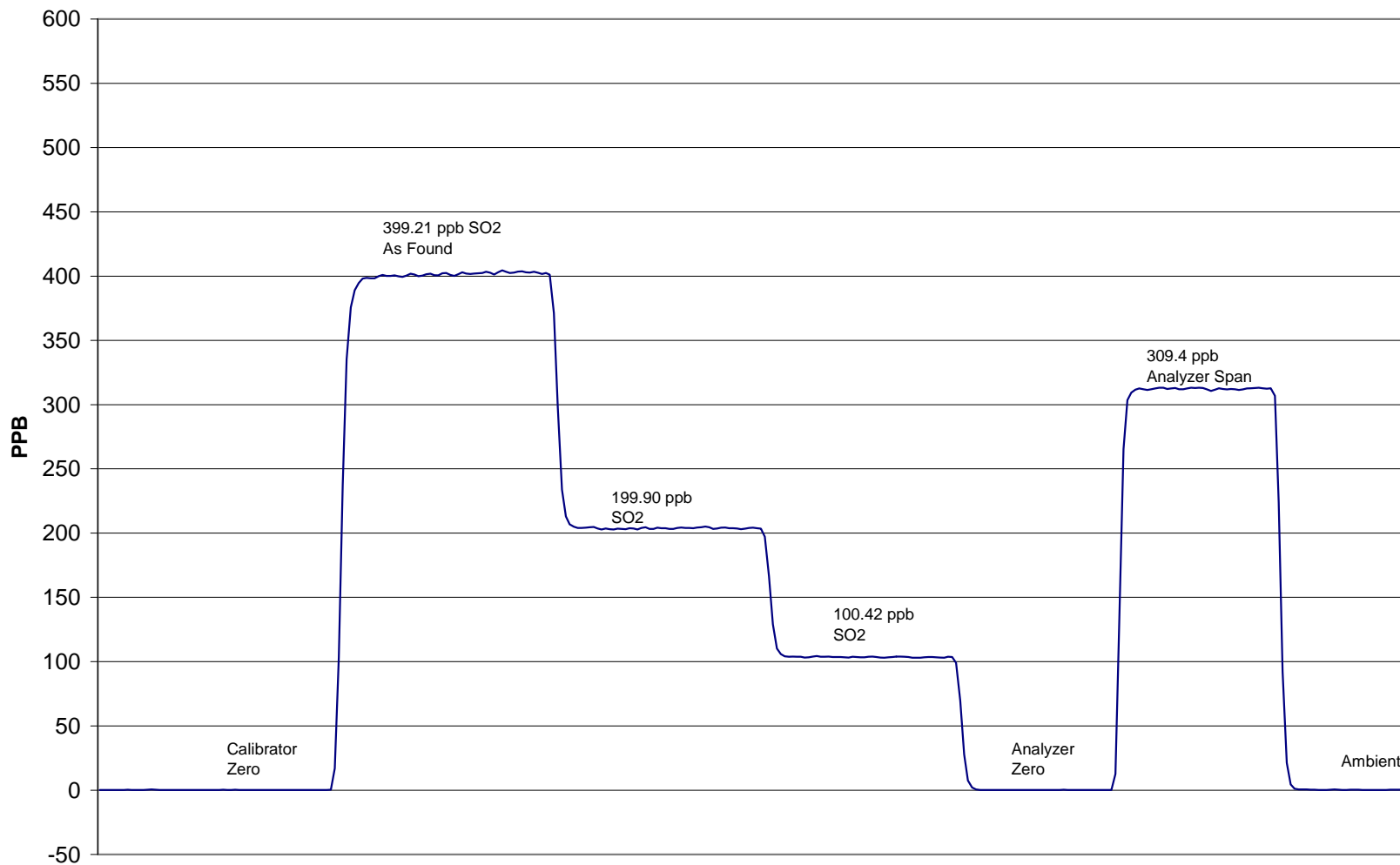
| | | | |
|---------------------|------------------|----------------------|------------------|
| Calibration Date | January 17, 2008 | Previous Calibration | December 6, 2007 |
| Station Number | 3 | Station Location | Smoky Heights |
| Start Time (MST) | 12:05 | End Time (MST) | 14:45 |
| Analyzer make/model | Teco 43i | Analyzer serial # | 701120009 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.2 | N/A | | |
| 399.2 | 400.8 | 0.9960 | Correlation Coefficient | 0.999915 |
| 199.9 | 203.8 | 0.9811 | | |
| 100.4 | 103.6 | 0.9697 | Slope | 0.997867 |
| | | | Intercept | -1.830752 |



Smoky Heights SO2 Calibration



January 17, 2008

Calibration Report

Parameter **TRS**Air Monitoring Network **PASZA**

Station Information

| | | | |
|----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 17, 2008 | Previous Calibration | December 6, 2007 |
| Station Number | 3 | Station Location | Smoky Heights |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | Other: <input type="checkbox"/> |
| Start Time (MST) | 10:15 | End Time (MST) | 13:00 |
| Barometric Pressure | 0.930 ATM | Station Temperature | 20.0 Deg C |
| Calibrator | Envionics 6100 | Serial Number | 3474 |
| Cal Gas Conc | 5.14 ppm | Cal Gas Expiry Date | 7/31/2008 |
| Correction factor | 0.031613 | Cal Gas Cylinder # | LL 74274 |
| DACS make | Focus AP1000 | DACS serial No. | 52620 |
| DACS voltage range | 0 - 10 volt | DACS channel # | 5 |
| | Before | | After |
| Calculated slope | 1.016778 | Calculated slope | 1.017460 |
| Calculated intercept | -0.441479 | Calculated intercept | -0.832947 |
| Analyzer make | TEI Model 43C | Analyzer serial # | 0436610005 |

| | before | | after | |
|---------------------|--------|-------|--------|-------|
| Concentration range | 100 | ppb | 100 | ppb |
| Background | 11.2 | ppb | 11.5 | ppb |
| coefficient | 1.006 | | 1.006 | |
| Lamp Voltage | 775 | volts | 775 | volts |
| Chamber Temp | 43.9 | Deg C | 43.8 | Deg C |
| Perm Gas Temp | 45.02 | Deg C | 45.02 | Deg C |
| Pressure | 505.1 | mm Hg | 484 | mm Hg |
| Sample Flow | 780 | ccm | 744 | ccm |
| Lamp Intensity | 32,307 | mv | 32,355 | 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) |
|---------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4990 | 0.0 | 0.00 | 0.7 | N/A |
| 4990 | 79.77 | 80.88 | 80.3 | 1.0075 |
| 4990 | 39.87 | 40.74 | 40.9 | 0.9959 |
| 4990 | 9.92 | 10.20 | 10.9 | 0.9361 |
| | | | | |
| 4990 | 0.0 | 0.00 | 0.7 | As Found Zero |
| 4990 | 79.7 | 80.83 | 80.3 | As Found Span |
| Average Correction Factor | | | | 0.9798 |

Calculated value of As Found Response: 80.42 ppm Percent Change of As Found: 0.5%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.3 | ppm | -0.1 | ppm |
| Auto span | 42.4 | ppm | 42.4 | ppm |

Notes: No Adjustments Made

Calibration Performed By: Conor Whiteley

Calibration Summary

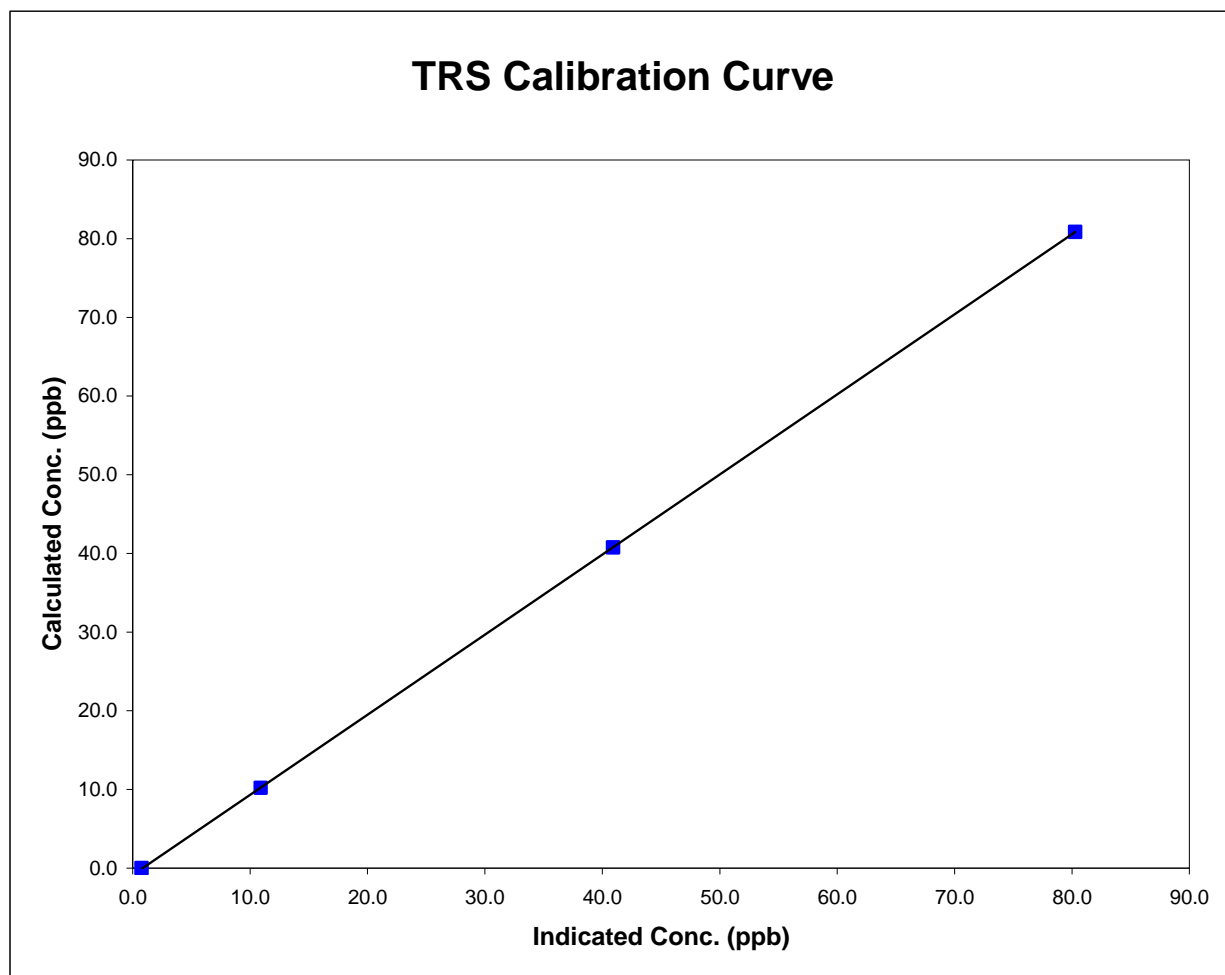
Parameter **TRS**Air Monitoring Network **PASZA**

Station Information

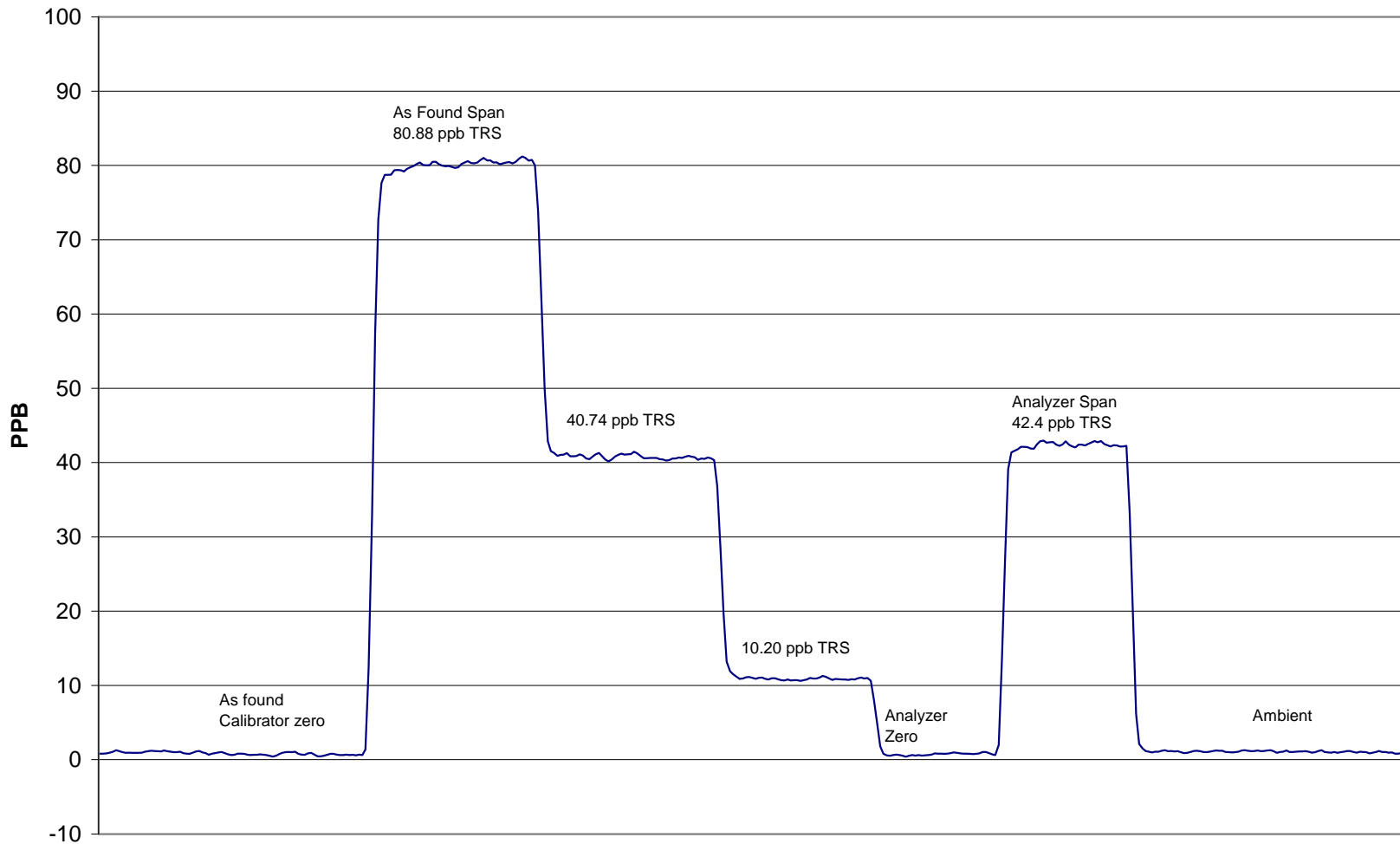
| | | | |
|---------------------|------------------|----------------------|------------------|
| Calibration Date | January 17, 2008 | Previous Calibration | December 6, 2007 |
| Station Number | 3 | Station Location | Smoky Heights |
| Start Time (MST) | 10:15 | End Time (MST) | 13:00 |
| Analyzer make/model | TEI Model 43C | Analyzer serial # | 0436610005 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.7 | N/A | | |
| 80.9 | 80.3 | 1.0075 | Correlation Coefficient | 0.999997 |
| 40.7 | 40.9 | 0.9959 | | |
| 10.2 | 10.9 | 0.9361 | Slope | 1.017460 |
| | | | Intercept | -0.832947 |



Smoky Heights TRS Calibration



January 17, 2008

Calibration Report
 Parameter **SO2**
 Air Monitoring Network **PASZA**
Station Information

| | | | |
|-----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 4, 2008 | Previous Calibration | December 5, 2007 |
| 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) | 10:20 | End Time (MST) | 12:55 |
| Barometric Pressure | 0.880 atm | Station Temperature | 20.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | 10.06 ppm | Cal Gas Expiry Date | 7/27/2009 |
| Gas Cert Reference | CC 114395 | | |
| DACS make | Focus AP1000 | DACS serial No. | 45269 |
| DACS voltage range | 0 - 10 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 | 1.012745 | Calculated slope | 0.965142 |
| Calculated intercept | 0.058379 | Calculated intercept | 0.055132 |
| Analyzer make | TEI Model 43CTL | Analyzer serial # | 43CTL-74200-376 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 100 | ppb | 0 - 100 | ppb |
| Background | 2.8 | | 2.86 | |
| Coefficient | 1.03 | | 1.03 | |
| PMT | -813 | V | -812 | V |
| UV Lamp Voltage | 1021 | V | 1011 | V |
| Chamber Temp | 45 | Deg C | 45 | Deg C |
| Pressure | 668.8 | mm Hg | 645.5 | mm Hg |
| Sample Flow | 0.467 | LPM | 0.453 | LPM |
| Lamp Intesity | 86 | % | 86% | % |

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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4990 | 0.00 | 0.0 | -0.3 | N/A |
| 4990 | 39.86 | 79.7 | 82.4 | 0.9674 |
| 4990 | 19.96 | 40.1 | 41.6 | 0.9629 |
| 4990 | 9.92 | 20.0 | 20.8 | 0.9580 |
| 4990 | 0.00 | 0.0 | -0.3 | As found zero |
| 4990 | 39.86 | 79.7 | 82.4 | As found span |
| Average Correction Factor | | | | 0.9628 |

Calculated value of As Found Response: 83.815 ppm Percent Change of As Found: -5.1%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | -0.2 | ppm | -0.2 | ppm |
| Auto span | 53.9 | ppm | 56.5 | ppm |

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

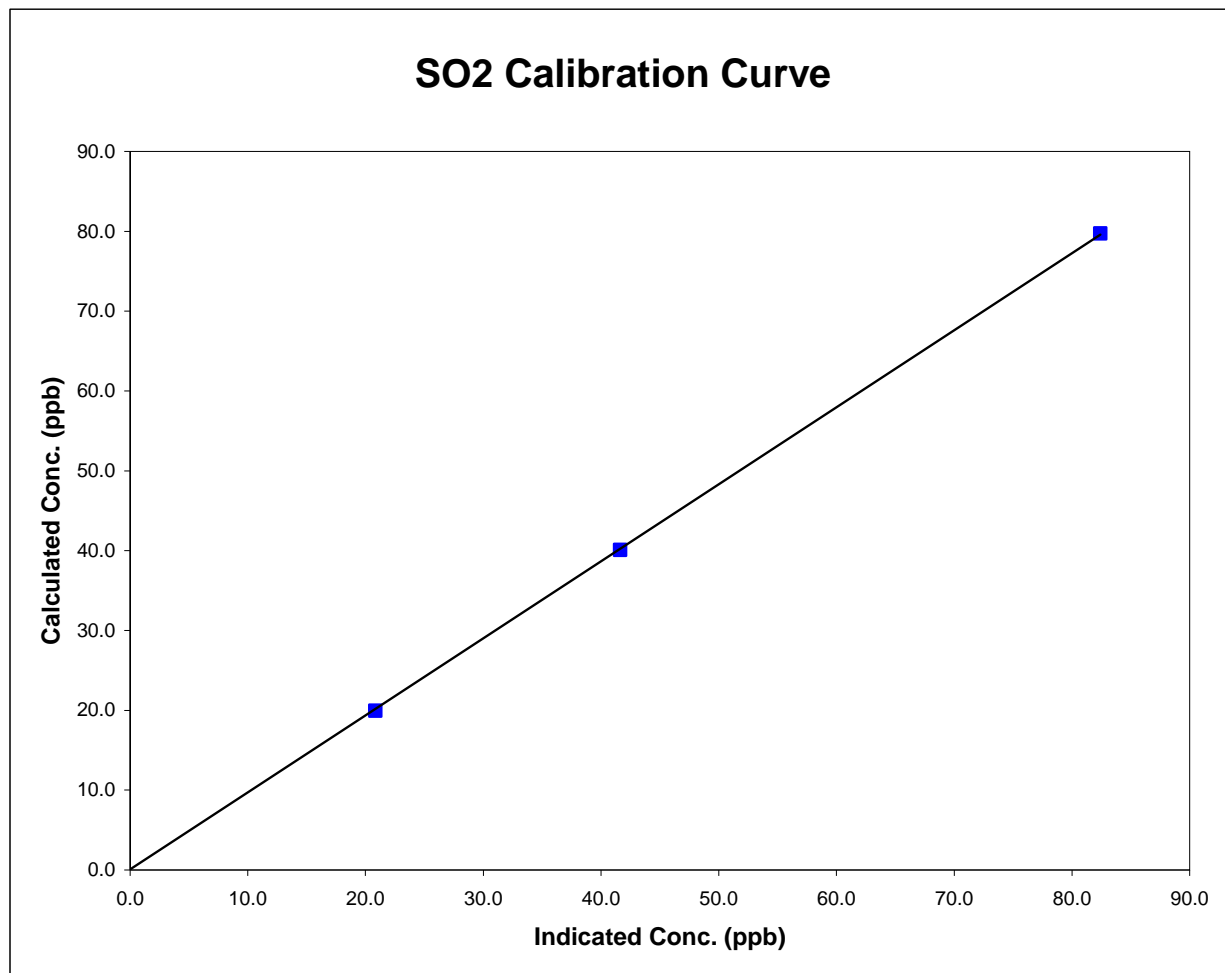
Parameter **SO2**Air Monitoring Network **PASZA**

Station Information

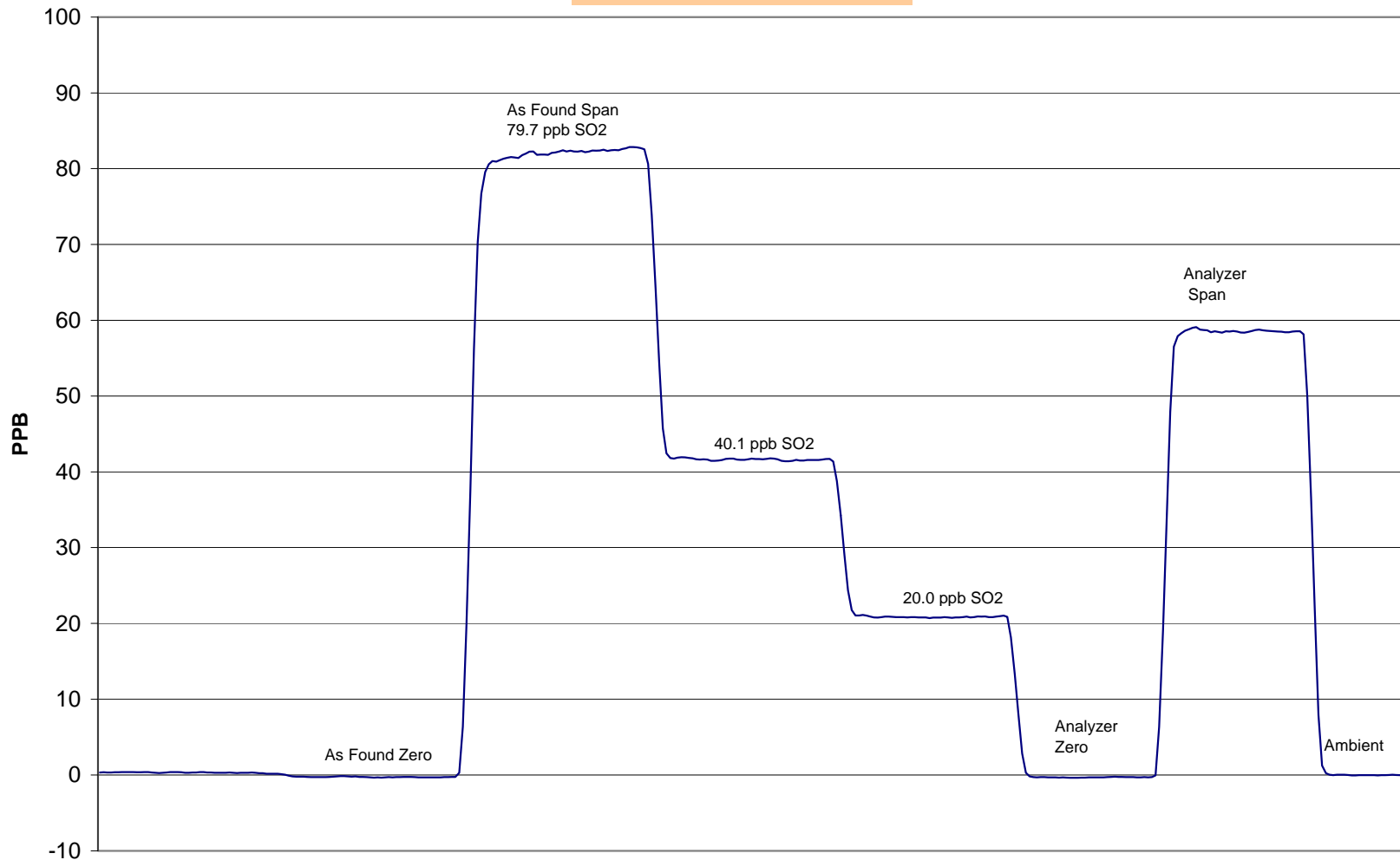
| | | | |
|---------------------|-----------------|----------------------|------------------|
| Calibration Date | January 4, 2008 | Previous Calibration | December 5, 2007 |
| Station Number | 4 | Station Location | Beaverlodge |
| Start Time (MST) | 10:20 | End Time (MST) | 12:55 |
| Analyzer make/model | TEI Model 43CTL | Analyzer serial # | 43CTL-74200-376 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|----------|
| 0.0 | -0.3 | N/A | | |
| 79.7 | 82.4 | 0.9674 | Correlation Coefficient | 0.999962 |
| 40.1 | 41.6 | 0.9629 | | |
| 20.0 | 20.8 | 0.9580 | Slope | 0.965142 |
| | | | | |
| | | | Intercept | 0.055132 |
| | | | | |



Beaverlodge SO2 Calibration



January 4, 2008

Calibration Report

Parameter

NOx-NO-NO₂

Air Monitoring Network

PASZA**Station Information**

| | | | |
|---------------------|---|---------------------------------------|----------------------------------|
| Calibration Date | January 4, 2008 | Previous Calibration | December 5, 2007 |
| Station Number | 4 | Station Location | Beaverlodge |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Installation | <input type="checkbox"/> Removal |
| Start Time (MST) | 10:20:00 | End Time (MST) | 14:20:00 |
| Barometric Pressure | 0.880 Atm | Station Temperature | 20.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| NO Cal Gas Conc | 50.1 ppm | Cal Gas Cert. Date | 2-Jan-07 |
| NOx Cal Gas Conc | 50.2 ppm | Cal Gas Serial # | CC 114395 |

DACS Information

| | | | |
|-----------|--------------|-----------------|-------|
| DACS make | FOCUS AP1000 | DACS serial No. | 45269 |
|-----------|--------------|-----------------|-------|

| Parameter | | NO ₂ | NO _x | NO |
|---------------|-------------|-----------------|-----------------|------------|
| Before | Data Slope | 0.991055 | 0.990048 | 0.993226 |
| | Data Offset | -0.055510 | -1.078086 | -0.987284 |
| After | Data Slope | 0.985341 | 0.981955 | 0.974864 |
| | Data Offset | 1.100655 | -0.782428 | -0.675589 |
| Channel # | | 8 | 6 | 7 |
| Voltage Range | | 0 - 10 VDC | 0 - 10 VDC | 0 - 10 VDC |

Analyzer Information

| | | | |
|---------------------|--------------|-------------------|--------------|
| Analyzer make/model | TEI Model 42 | Analyzer serial # | 42-28486-231 |
|---------------------|--------------|-------------------|--------------|

| Test Point | before | | after | |
|-----------------------------|----------|-------|----------|-------|
| Concentration range | 0 - 1000 | ppb | 0 - 1000 | ppb |
| NO background | 1.3 | ppb | 1.3 | mV |
| NO _x background | 1.3 | ppb | 1.3 | mV |
| NO coefficient | 1.061 | | 1.061 | |
| NO _x coefficient | 0.999 | | 0.999 | |
| PMT Voltage | -636 | V | -636 | V |
| Chamber Temp | 49.2 | Deg C | 49.2 | Deg C |
| Cooler Temp | -2.2 | Deg C | -2.1 | Deg C |
| Converter Temp | 324.0 | Deg C | 324.0 | Deg C |
| Sample Flow | 0.776 | LPM | 0.773 | LPM |
| Ozonator Flow | 0.087 | LPM | 0.083 | LPM |
| Pressure | 175.4 | mm Hg | 166.2 | mm Hg |

Notes:

Calibration Report

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



Station Information

Calibration Date: **January 4, 2008** Station Location: **Beaverlodge**

Calibration Data

| | Dilution flow rate (ccm) | Source gas flow rate (ccm) | Calculated NO _x conc (ppb) | Calculated NO conc (ppb) | Calculated NO ₂ conc (ppb) | Indicated NO _x conc (ppb) | Indicated NO conc (ppb) | Indicated NO ₂ conc (ppb) | NO _x Correction factor | NO Correction factor |
|---------------------------|--------------------------|----------------------------|---------------------------------------|--------------------------|---------------------------------------|--------------------------------------|-------------------------|--------------------------------------|-----------------------------------|----------------------|
| zero | 4990 | 0.00 | 0.0 | 0.0 | 0.0 | -0.3 | -0.4 | -0.4 | N/A | N/A |
| 1 | 4990 | 39.86 | 397.8 | 397.0 | 0.8 | 405.6 | 407.6 | -2.6 | 0.9808 | 0.9740 |
| 2 | 4990 | 19.96 | 200.0 | 199.6 | 0.4 | 204.3 | 205.3 | -1.5 | 0.9787 | 0.9721 |
| 3 | 4990 | 9.92 | 99.6 | 99.4 | 0.2 | 103.8 | 104.2 | -0.9 | 0.9599 | 0.9543 |
| AFZ | 4990 | 0.00 | 0.0 | 0.0 | 0.0 | -0.3 | -0.4 | -0.4 | 0.0000 | 0.0000 |
| AFS | 4990 | 39.92 | 398.4 | 397.6 | 0.8 | 405.6 | 407.6 | -2.6 | 0.9823 | 0.9755 |
| Average Correction Factor | | | | | | | | | 0.9731 | 0.9668 |

As Found Concentrations: NO_x= 404.8 NO= 407.0 As Found Percent Change NO_x= 1.6% NO= 2.4%

GPT Calibration Data

Dilution Flow 4990 ccm Source Gas Flow 39.86 ccm

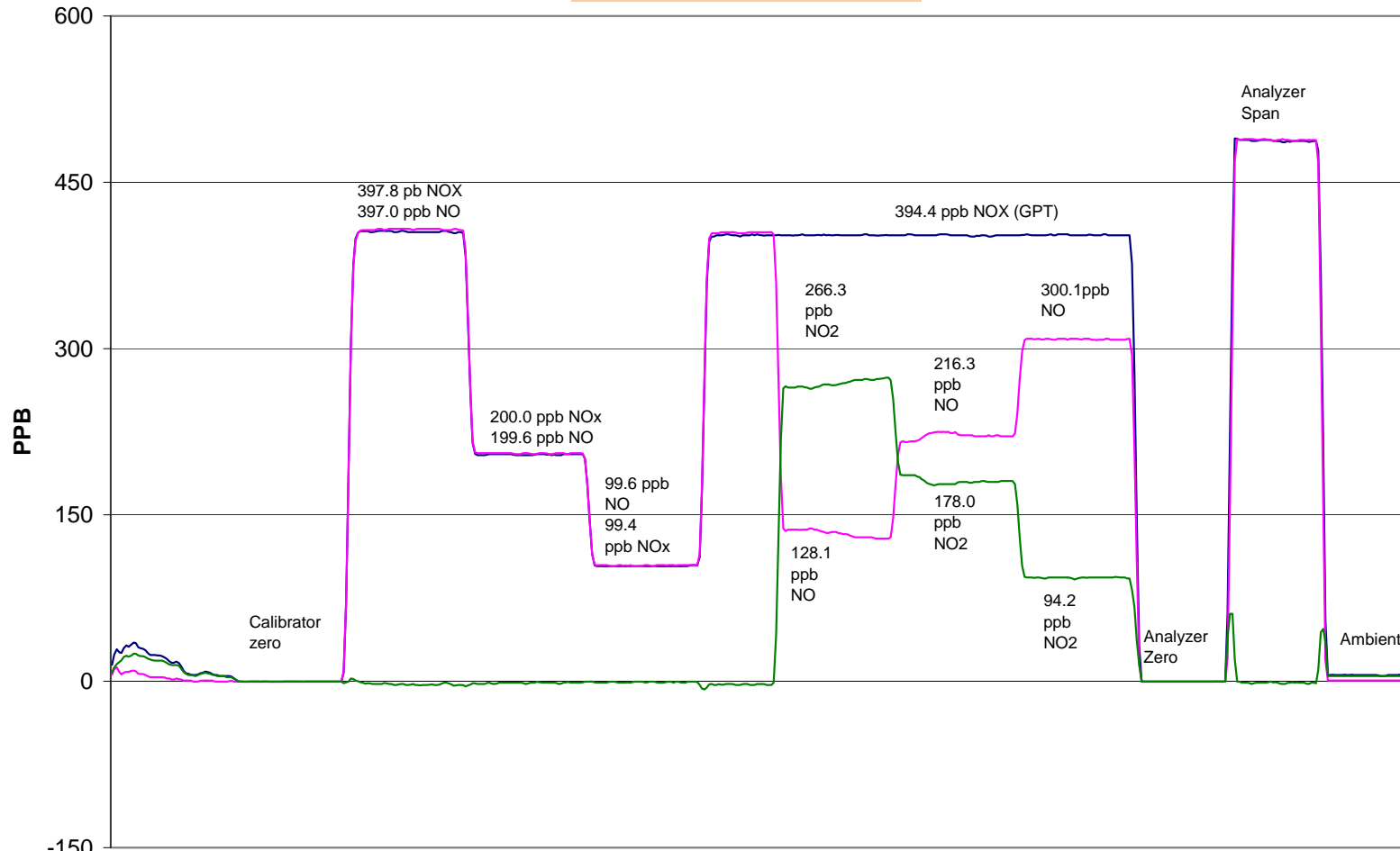
| O3 Setpoint (ppb) | Calculated NO _x conc (ppb) | Calculated NO conc (ppb) | Calculated NO ₂ conc (ppb) | Indicated NO _x conc (ppb) | Indicated NO conc (ppb) | Indicated NO ₂ conc (ppb) | NO _x Correction factor | NO Correction factor | NO ₂ Correction factor | Converter Efficiency |
|---------------------------|---------------------------------------|--------------------------|---------------------------------------|--------------------------------------|-------------------------|--------------------------------------|-----------------------------------|----------------------|-----------------------------------|----------------------|
| 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | N/A | N/A | N/A |
| NO point | 394.4 | 393.8 | 0.6 | 402.3 | 404.6 | -2.8 | 0.9803 | 0.9732 | N/A | N/A |
| 300 | 394.4 | 128.1 | 266.3 | 402.3 | 132.1 | 269.7 | 0.9802 | 0.9697 | 0.9875 | 101.3% |
| 200 | 394.4 | 216.3 | 178.0 | 402.3 | 222.6 | 179.3 | 0.9801 | 0.9718 | 0.9929 | 100.7% |
| 100 | 394.4 | 300.1 | 94.2 | 402.5 | 308.6 | 93.5 | 0.9797 | 0.9727 | 1.0080 | 99.2% |
| Average Correction Factor | | | | | | | 0.9800 | 0.9714 | 0.9961 | 100.4% |

AIC Data

| Parameter | Previous calibration | | | | Current calibration | | | |
|-----------|----------------------|-----------------|-------|-----|---------------------|-----------------|-------|-----|
| | NO _x | NO ₂ | NO | | NO _x | NO ₂ | NO | |
| Auto zero | -1.3 | -0.4 | -1.3 | ppb | -1.0 | 0.8 | -1.0 | ppb |
| Auto span | 487.4 | 3.1 | 485.2 | ppb | 477.6 | -0.3 | 475.1 | ppb |

Calibration Performed By: Conor Whiteley

Beaverlodge NOx Calibration



January 4, 2008

Calibration Summary

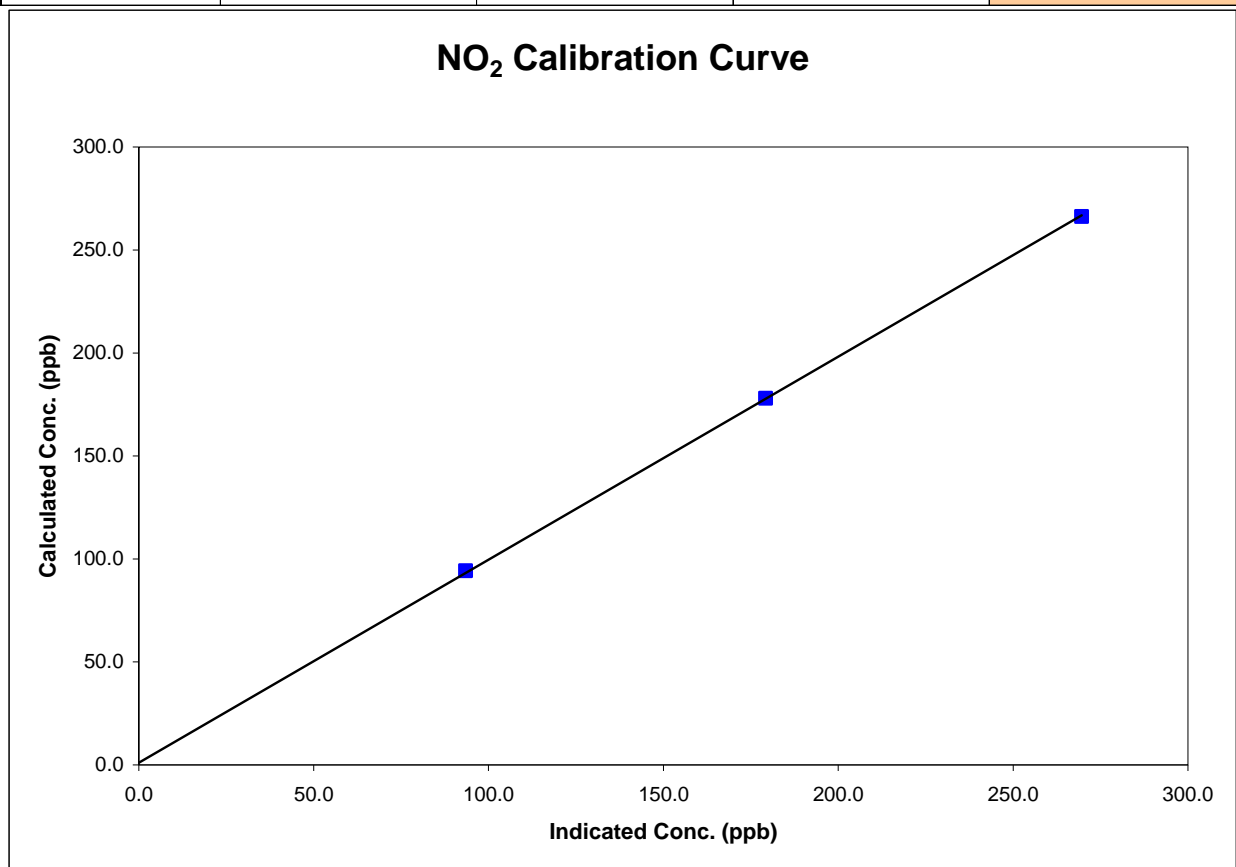
Parameter **NO₂**Air Monitoring Network **PASZA**

Station Information

| | | | |
|------------------|-----------------|----------------------|------------------|
| Calibration Date | January 4, 2008 | Previous Calibration | December 5, 2007 |
| Station Number | 4 | Station Location | Beaverlodge |
| Start Time (MST) | 10:20 | End Time (MST) | 14:20 |
| Analyzer make | TEI Model 42 | Analyzer serial # | 42-28486-231 |

Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|----------|
| 0.0 | -0.4 | 0.0000 | Correlation Coefficient | 0.999951 |
| 266.3 | 269.7 | 0.9875 | | |
| 178.0 | 179.3 | 0.9929 | | |
| 94.2 | 93.5 | 1.0080 | | |
| | | | Slope | 0.985341 |
| | | | Intercept | 1.100655 |



Calibration Summary

Parameter **NO_x**
 Air Monitoring Network **PASZA**

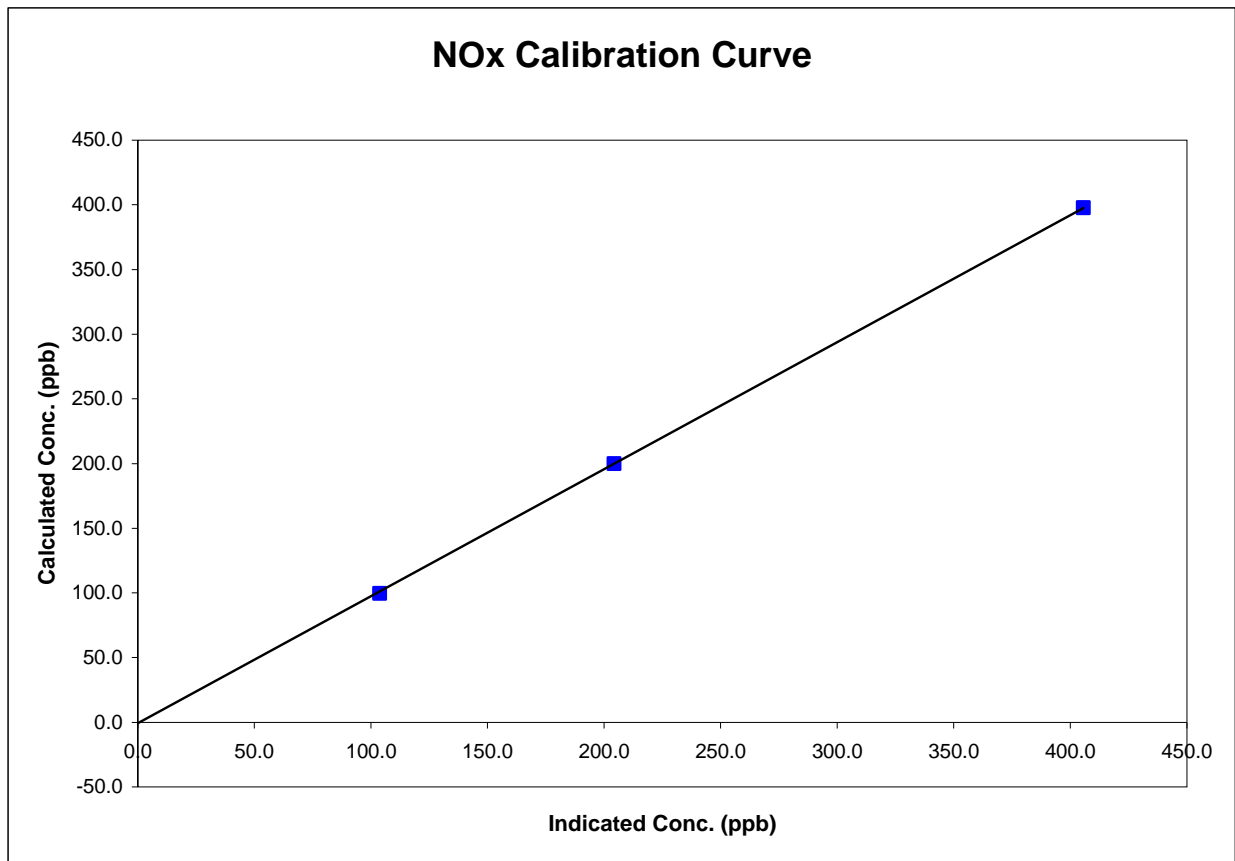


Station Information

| | | | |
|------------------|-----------------|----------------------|------------------|
| Calibration Date | January 4, 2008 | Previous Calibration | December 5, 2007 |
| Station Number | 4 | Station Location | Beaverlodge |
| Start Time (MST) | 10:20 | End Time (MST) | 14:20 |
| Analyzer make | TEI Model 42 | Analyzer serial # | 42-28486-231 |

Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | -0.3 | 0.0000 | Correlation Coefficient | 0.999959 |
| 397.8 | 405.6 | 0.9808 | | |
| 200.0 | 204.3 | 0.9787 | | |
| 99.6 | 103.8 | 0.9599 | | |
| | | | Slope | 0.981955 |
| | | | Intercept | -0.782428 |



Calibration Summary



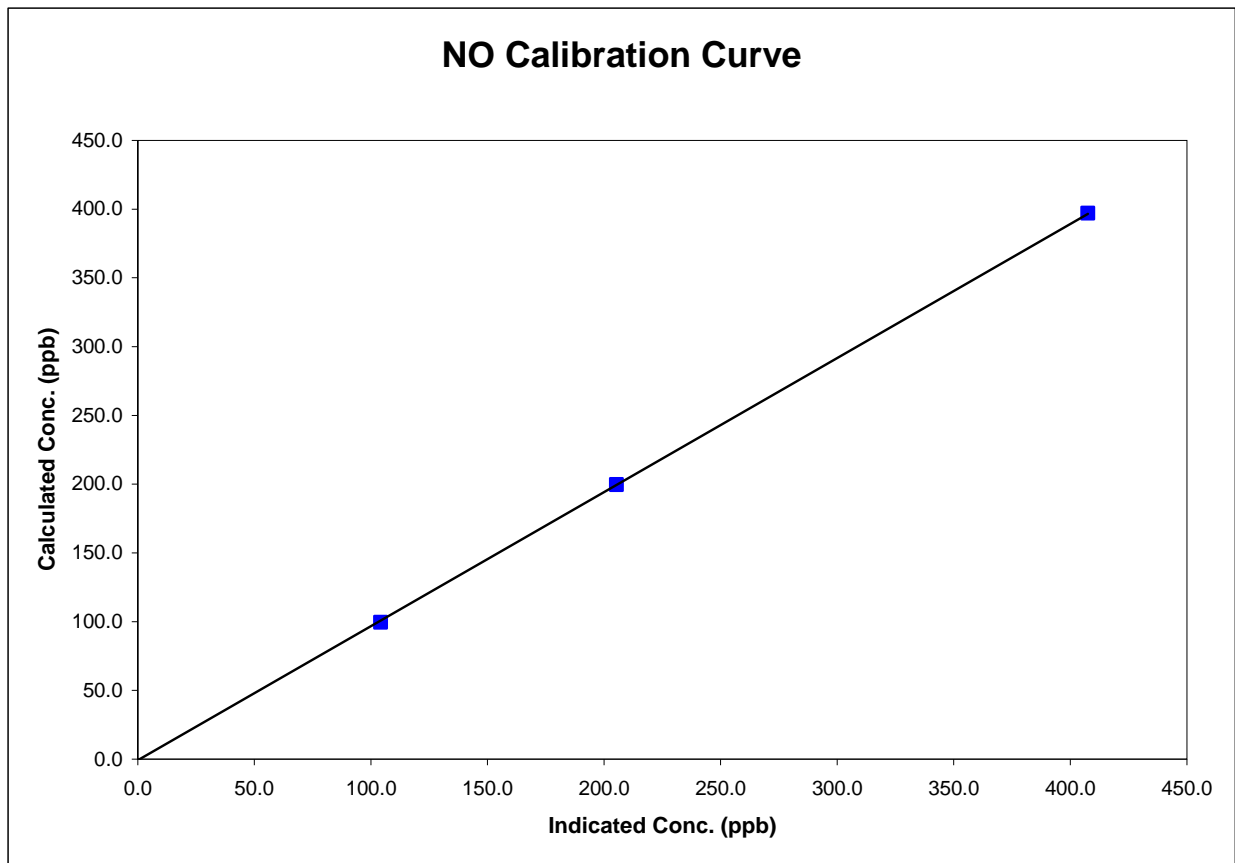
Parameter **NO**
 Air Monitoring Network **PASZA**

Station Information

| | | | |
|------------------|-----------------|----------------------|------------------|
| Calibration Date | January 4, 2008 | Previous Calibration | December 5, 2007 |
| Station Number | 4 | Station Location | Beaverlodge |
| Start Time (MST) | 10:20 | End Time (MST) | 14:20 |
| Analyzer make | TEI Model 42 | Analyzer serial # | 42-28486-231 |

Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | -0.4 | N/A | | |
| 397.0 | 407.6 | 0.9740 | Correlation Coefficient | 0.999961 |
| 199.6 | 205.3 | 0.9721 | | |
| 99.4 | 104.2 | 0.9543 | Slope | 0.974864 |
| | | | Intercept | -0.675589 |



Calibration Report

Parameter **O3**Air Monitoring Network **PASZA**

Station Information

| | | | |
|-----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 4, 2008 | Previous Calibration | December 5, 2007 |
| Station Number | 4 | Station Location | Beaverlodge |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | Other: <input type="checkbox"/> |
| Start Time (MST) | 13:40 | End Time (MST) | 16:15 |
| Barometric Pressure | 0.880 atm | Station Temperature | 20.0 Deg C |
| Calibrator | Enviroics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | NA | Cal Gas Expiry Date | NA |
| DACS make | Focus AP1000 | DACS serial No. | 45269 |
| DACS voltage range | 0 - 1 volt | DACS channel # | 5 |
| | Before | | After |
| Calculated slope | 0.994661 | Calculated slope | 0.975295 |
| Calculated intercept | 1.913623 | Calculated intercept | -0.342185 |
| Analyzer make | Teco 49C | Analyzer serial # | 49C-76443-383 |

| | before | | after | |
|---------------------|-------------|-------|-------------|-------|
| Concentration range | 0 - 500 | ppb | 0 - 500 | ppb |
| offset | -0.20 | ppb | -0.20 | ppb |
| slope | 1.074 | | 1.042 | |
| Lamp temp | 56.3 | mV | 56.3 | mV |
| Lamp Intensity A/B | 79654/77070 | mV | 78046/75580 | mV |
| Pressure | 672.7 | mm Hg | 645.8 | mm Hg |
| Flow A | 742 | ccm | 724 | ccm |
| Flow B | 697 | ccm | 677 | 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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4990 | 0.00 | 0.0 | -0.2 | N/A |
| 4990 | 0.00 | 266.3 | 272.3 | 0.9778 |
| 4990 | 0.00 | 178.0 | 184.3 | 0.9657 |
| 4990 | 0.00 | 94.2 | 97.1 | 0.9699 |
| 4990 | 0.00 | 0.0 | -0.2 | As found zero |
| 4990 | 0.00 | 266.3 | 272.3 | As found span |
| Average Correction Factor | | | | 0.9711 |

Calculated value of As Found Response: 273.0 ppm Percent Change of As Found: 2.5%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 1.9 | ppb | -0.5 | ppb |
| Auto span | 115.3 | ppb | 112.0 | ppb |

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

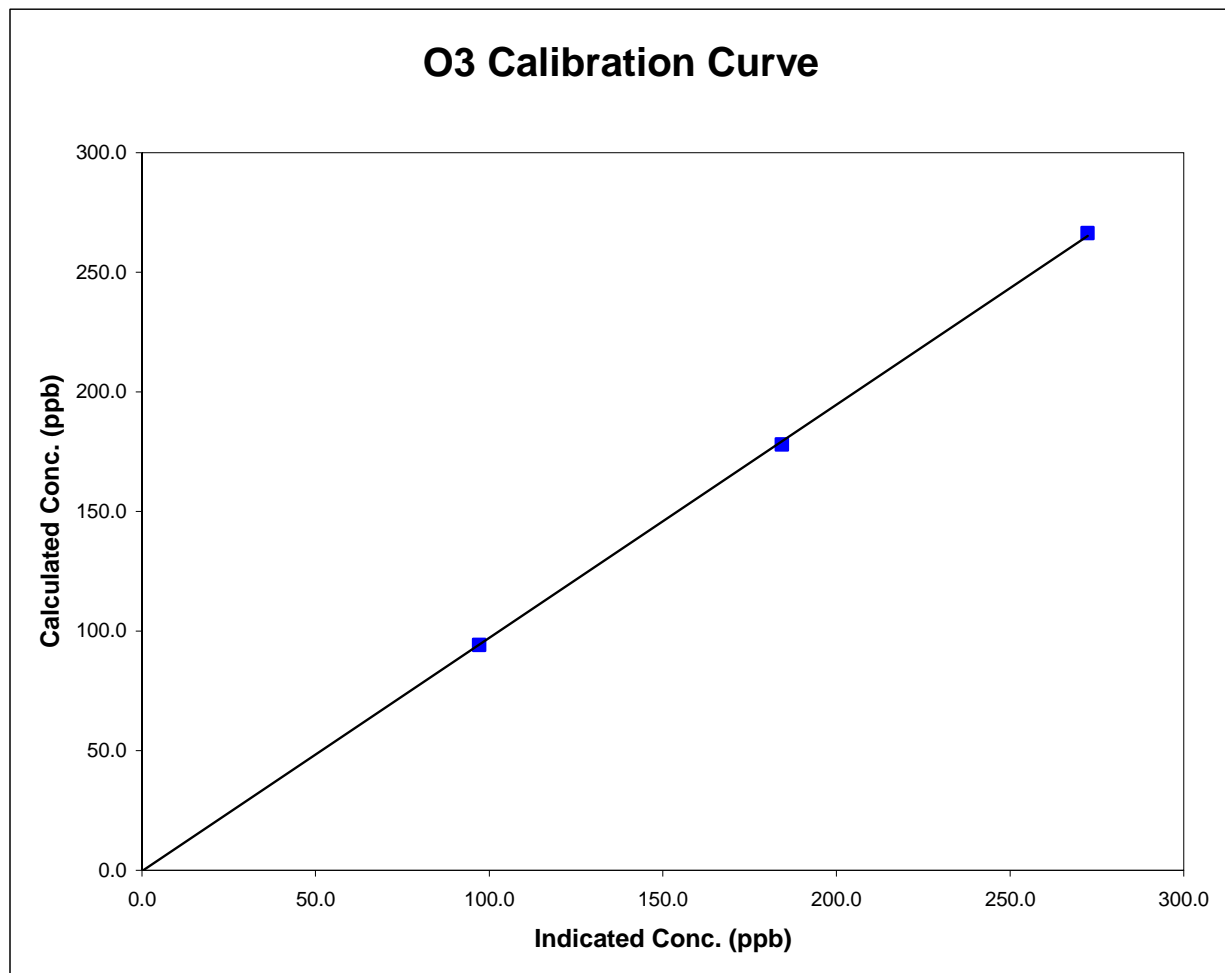
Parameter **O3**Air Monitoring Network **PASZA**

Station Information

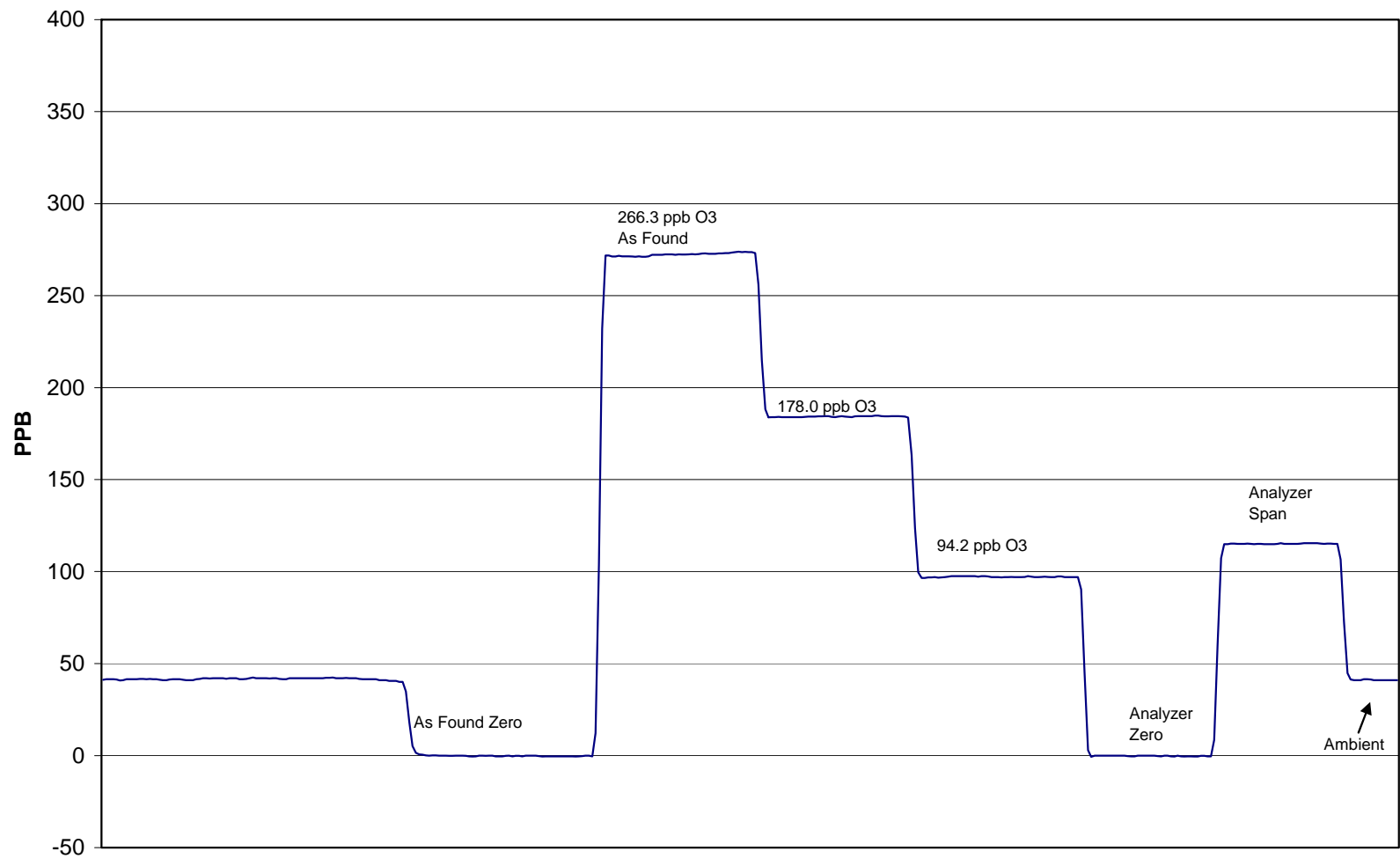
| | | | |
|---------------------|-----------------|----------------------|------------------|
| Calibration Date | January 4, 2008 | Previous Calibration | December 5, 2007 |
| Station Number | 4 | Station Location | Beaverlodge |
| Start Time (MST) | 13:40 | End Time (MST) | 16:15 |
| Analyzer make/model | Teco 49C | Analyzer serial # | 49C-76443-383 |

Calibration Data

| Calculated concentration (ppm) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | -0.2 | NA | | |
| 266.3 | 272.3 | 0.9778 | Correlation Coefficient | 0.999912 |
| 178.0 | 184.3 | 0.9657 | | |
| 94.2 | 97.1 | 0.9699 | Slope | 0.975295 |
| | | | Intercept | -0.342185 |



Beaverlodge O3 Calibration



January 4, 2008

Calibration Report



Parameter **SO2**
Air Monitoring Network **PASZA**

Station Information

| | | | |
|-----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 8, 2008 | Previous Calibration | December 10, 2007 |
| Station Number | 8 | Station Location | Rover - Spirit River |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | Other: <input type="checkbox"/> |
| Start Time (MST) | 12:40 | End Time (MST) | 15:45 |
| Barometric Pressure | 27.37 inches Hg | Station Temperature | 22.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | 50.3 ppm | Cal Gas Expiry Date | 7/27/2009 |
| Gas Cert Reference | LL 16161 | | |
| DACS make | Focus AP1000 | DACS serial No. | 52662 |
| DACS voltage range | 0 - 10 volt | DACS channel # | 9 |
| | Before | | After |
| DACS Scale High | 500 | DACS slope | 500 |
| DACS Scale Low | 0 | DACS intercept | 0 |
| Calculated slope | 0.992926 | Calculated slope | 0.999852 |
| Calculated intercept | -1.121894 | Calculated intercept | -1.241810 |
| Analyzer make | TEI 43C | Analyzer serial # | 609716238 |

| | before | | after | |
|---------------------|--------|-------|-------|-------|
| Concentration range | 0-500 | ppb | 0-500 | ppb |
| Background | 8 | | 8 | |
| Coefficient | 1.156 | | 1.137 | |
| UV Lamp Voltage | 744 | V | 740 | V |
| Chamber Temp | 44.5 | C | 44.5 | C |
| Perm Gas Temp | 45 | C | 45 | C |
| Pressure | 679.6 | mm Hg | 667.3 | mm Hg |
| Sample Flow | 488 | LPM | 481 | LPM |
| Lamp Intesity | 34319 | Hz | 34409 | 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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4988 | 0.00 | 0.0 | 0.1 | N/A |
| 4988 | 39.80 | 398.2 | 398.9 | 0.9981 |
| 4988 | 19.88 | 199.7 | 201.4 | 0.9916 |
| 4988 | 9.92 | 99.8 | 102.4 | 0.9748 |
| 4988 | 0.00 | 0.0 | 0.1 | As found zero |
| 4988 | 39.94 | 399.5 | 406.0 | As found span |
| Average Correction Factor | | | | 0.9882 |

Calculated value of As Found Response: 401.995 ppm Percent Change of As Found: -0.6%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | -0.9 | ppm | -0.9 | ppm |
| Auto span | 262.5 | ppm | 274.5 | ppm |

Notes: Adjusted SO2 Span

Calibration Performed By: Conor Whiteley

Calibration Summary



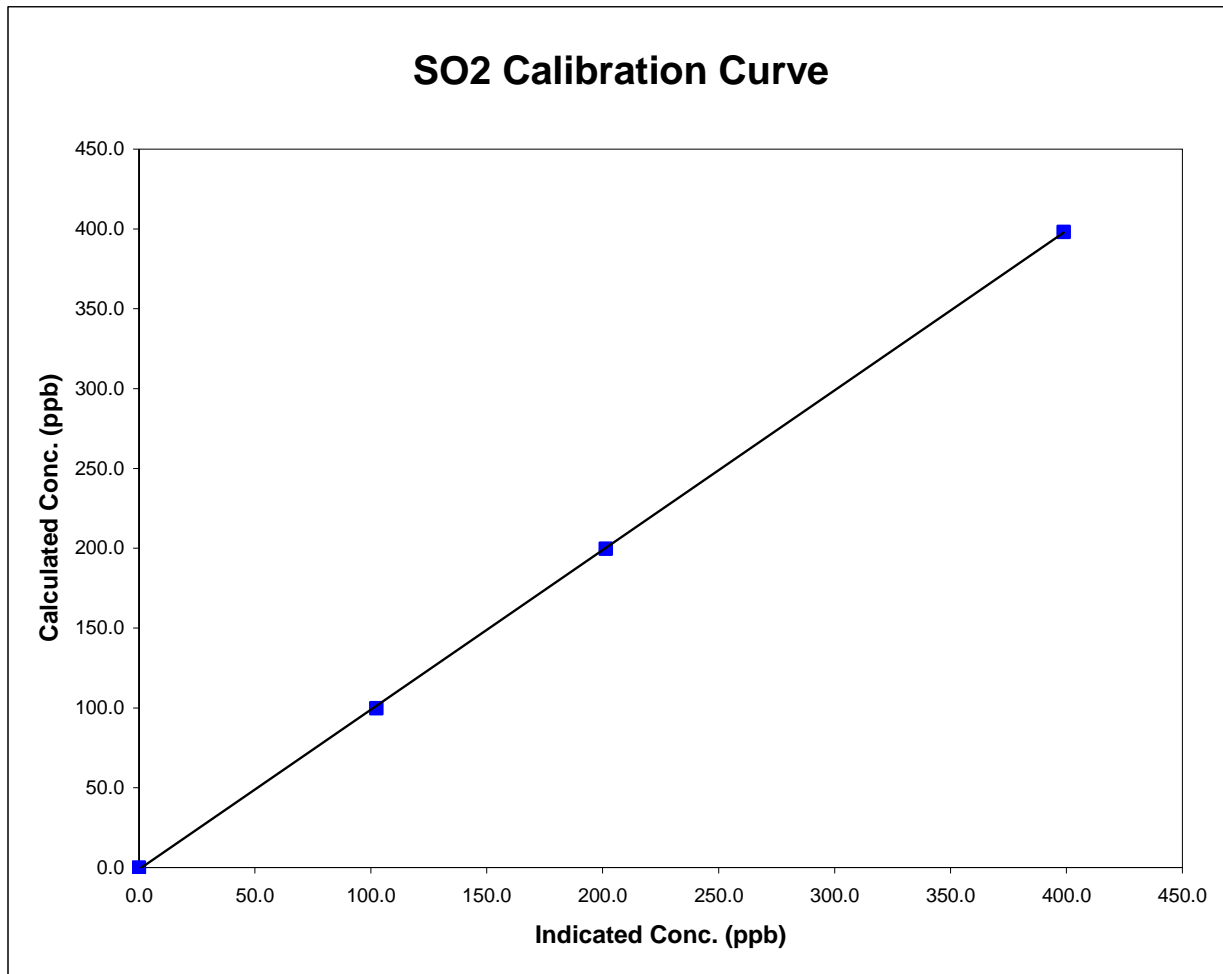
Parameter **SO2**
 Air Monitoring Network **PASZA**

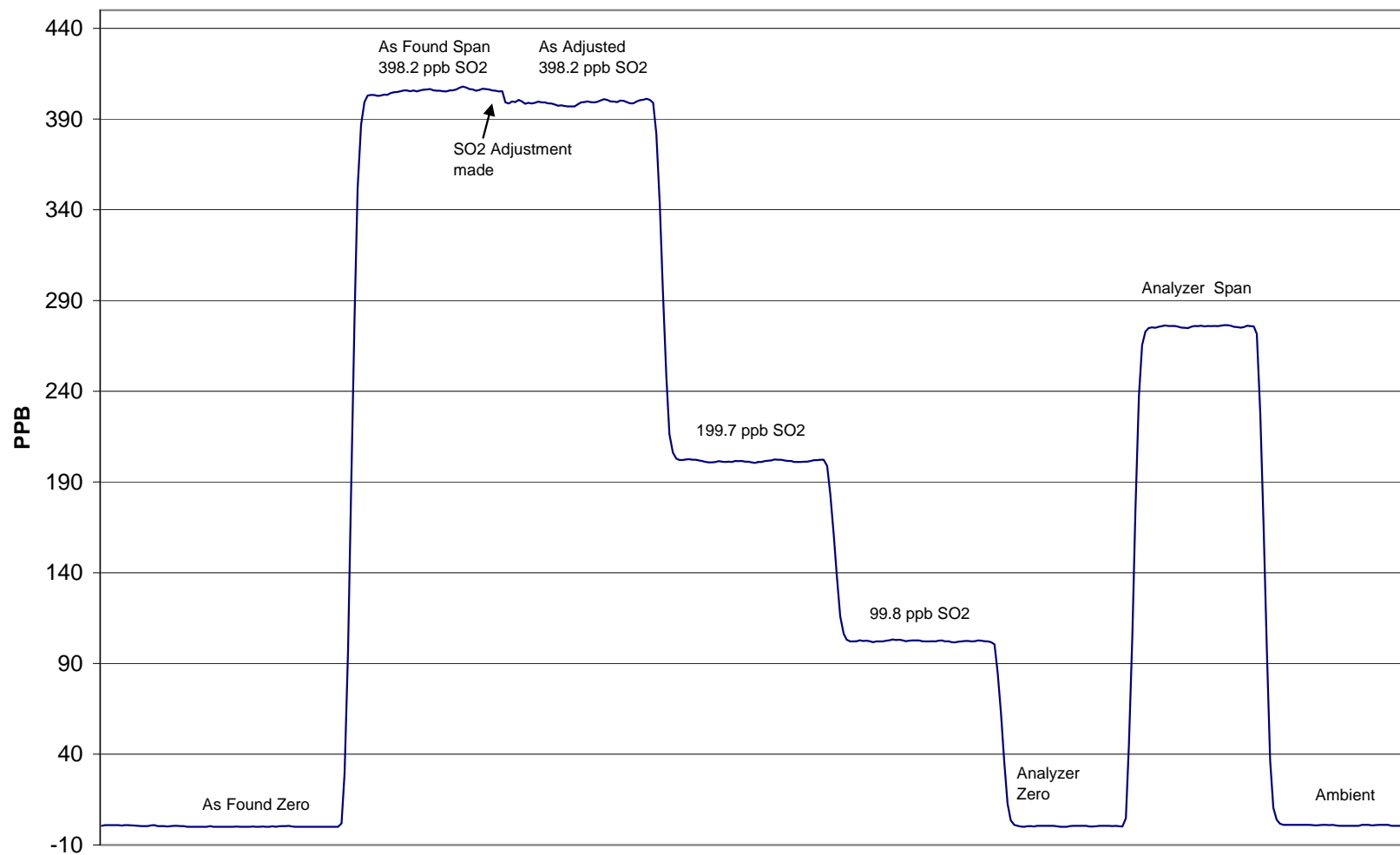
Station Information

| | | | |
|---------------------|-----------------|----------------------|----------------------|
| Calibration Date | January 8, 2008 | Previous Calibration | December 10, 2007 |
| Station Number | 8 | Station Location | Rover - Spirit River |
| Start Time (MST) | 12:40 | End Time (MST) | 15:45 |
| 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 | | |
| 398.2 | 398.9 | 0.9981 | Correlation Coefficient | 0.999958 |
| 199.7 | 201.4 | 0.9916 | | |
| 99.8 | 102.4 | 0.9748 | Slope | 0.999852 |
| | | | Intercept | -1.241810 |



Spirit River SO2 Calibration

January 8, 2008

Calibration Report



Parameter **TRS**
 Air Monitoring Network **PASZA**

Station Information

| | | | |
|-----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 9, 2008 | Previous Calibration | December 11, 2007 |
| Station Number | 6 | Station Location | Portable - Spirit River |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | <input type="checkbox"/> Other: |
| Start Time (MST) | 11:50 | End Time (MST) | 14:30 |
| Barometric Pressure | 27.5 inches Hg | Station Temperature | 21.0 Deg C |
| Calibrator | Envionics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | 5.14 ppm | Cal Gas Expiry Date | 11/15/2005 |
| Gas Cert Reference | LL 74274 | | |
| DACS make | Focus AP1000 | DACS serial No. | 52662 |
| DACS voltage range | 0 - 5 volt | DACS channel # | 8 |
| | Before | | After |
| DACS Scale High | 100 | DACS slope | 100 |
| DACS Scale Low | 0 | DACS intercept | 0 |
| Calculated slope | 0.983091 | Calculated slope | 0.986486 |
| Calculated intercept | 0.115516 | Calculated intercept | -0.067829 |
| Analyzer make | TEI 43C | Analyzer serial # | 609716238 |

| | before | | after | |
|---------------------|---------|------|---------|------|
| Concentration range | 0 - 100 | ppb | 0 - 100 | ppb |
| Background | 4.8 | ppb | 9.3 | ppb |
| Coefficient | 1.055 | | 1.496 | |
| Lamp Voltage | 800 | V | 807 | V |
| Chamber Temp | 44.0 | C | 44.0 | C |
| Perm gas Temp | 45 | C | 44.9 | C |
| Pressure | 669 | mmHg | 656 | mmHg |
| Sample Flow | 445 | ccm | 431 | ccm |
| Lamp Intensity | 37857.0 | Hz | 39264.0 | 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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4988 | 0.0 | 0.0 | 0.2 | N/A |
| 4988 | 69.80 | 70.9 | 72.1 | 0.9844 |
| 4988 | 39.78 | 40.7 | 41.2 | 0.9875 |
| 4988 | 19.85 | 20.4 | 20.6 | 0.9867 |
| 4988 | 0.00 | 0.0 | 0.2 | As found zero |
| 4988 | 69.74 | 70.9 | 72.1 | As found span |
| Average Correction Factor | | | | 0.9862 |

Calculated value of As Found Response: 70.79 ppm Percent Change of As Found: 0.1%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.2 | ppm | 0.2 | ppm |
| Auto span | 76.3 | ppm | 77.1 | ppm |

Notes: No adjustments made

Calibration Performed By: Conor Whiteley

Calibration Summary



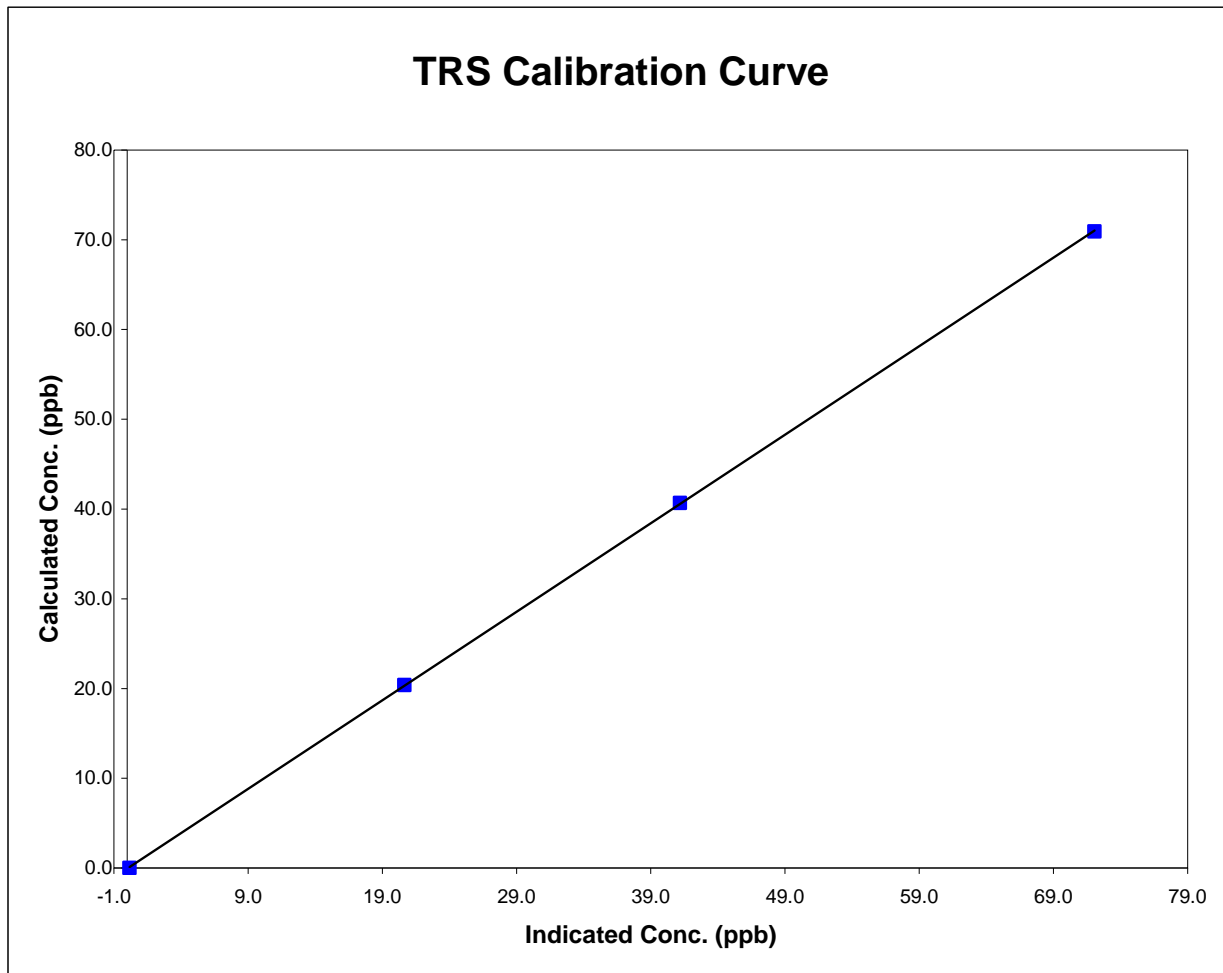
Parameter **TRS**
 Air Monitoring Network **PASZA**

Station Information

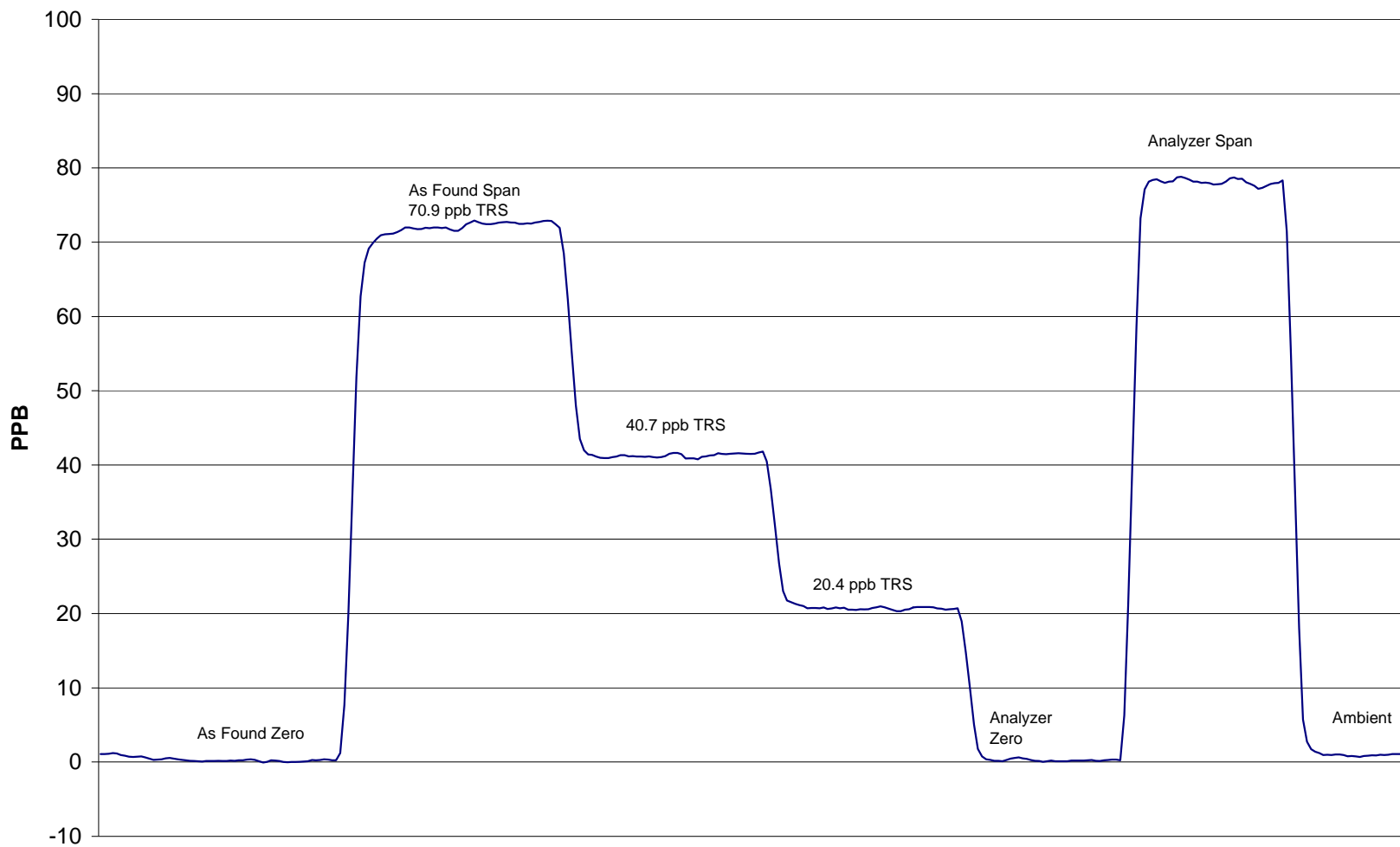
| | | | |
|---------------------|-----------------|----------------------|-------------------------|
| Calibration Date | January 9, 2008 | Previous Calibration | December 11, 2007 |
| Station Number | 6 | Station Location | Portable - Spirit River |
| Start Time (MST) | 11:50 | End Time (MST) | 14:30 |
| 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 | 0.2 | N/A | | |
| 70.9 | 72.1 | 0.9844 | Correlation Coefficient | 0.999988 |
| 40.7 | 41.2 | 0.9875 | | |
| 20.4 | 20.6 | 0.9867 | | |
| | | | Slope | 0.986486 |
| | | | Intercept | -0.067829 |



Spirit River TRS Calibration



January 9, 2008

Calibration Report



Parameter **O3**
 Air Monitoring Network **PASZA**

Station Information

| | | | |
|----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 9, 2008 | Previous Calibration | December 10, 2007 |
| Station Number | 8 | Station Location | Rover - Spirit River |
| Reason: | <input checked="" type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | Other: <input type="checkbox"/> |
| Start Time (MST) | 10:12 | End Time (MST) | 12:45 |
| Barometric Pressure | 0.920 atm | Station Temperature | 21.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| DACS make | Focus AP1000 | DACS serial No. | 52662 |
| DACS voltage range | 0-5 | DACS channel # | 7 |
| | Before | | After |
| Calculated slope | 1.034885 | Calculated slope | 0.998089 |
| Calculated intercept | 0.929610 | Calculated intercept | 1.173136 |
| Analyzer make | TEI Model 49C | Analyzer serial # | 609-716240 |

| | before | | after | |
|---------------------|--------|-------|--------|-------|
| Concentration range | 0-500 | ppb | 0-500 | ppb |
| Offset | 0 | ppb | 0 | ppb |
| Span | 1.022 | | 1.022 | |
| Cell A | 112151 | Hz | 113174 | Hz |
| Cell B | 111132 | Hz | 111092 | Hz |
| Pressure | 679 | in Hg | 669 | in Hg |
| CellA Flow | 669 | ccm | 670 | ccm |
| Cell B Flow | 665 | cmm | 664 | 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 | 0.00 | 0.0 | 0.3 | N/A |
| 4990 | 0.00 | 265.9 | 266.1 | 0.9992 |
| 4990 | 0.00 | 181.9 | 181.1 | 1.0046 |
| 4990 | 0.00 | 102.3 | 99.0 | 1.0334 |
| 4990 | 0.00 | 0.0 | 0.3 | As found zero |
| 4990 | 0.00 | 300.0 | 266.1 | As found span |
| Average Correction Factor | | | | 1.0124 |

Calculated value of As Found Response: 276.0 ppm Percent Change of As Found: -8.0%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 2.5 | ppb | 2.2 | ppb |
| Auto span | 348.8 | ppb | 379.1 | ppb |

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary



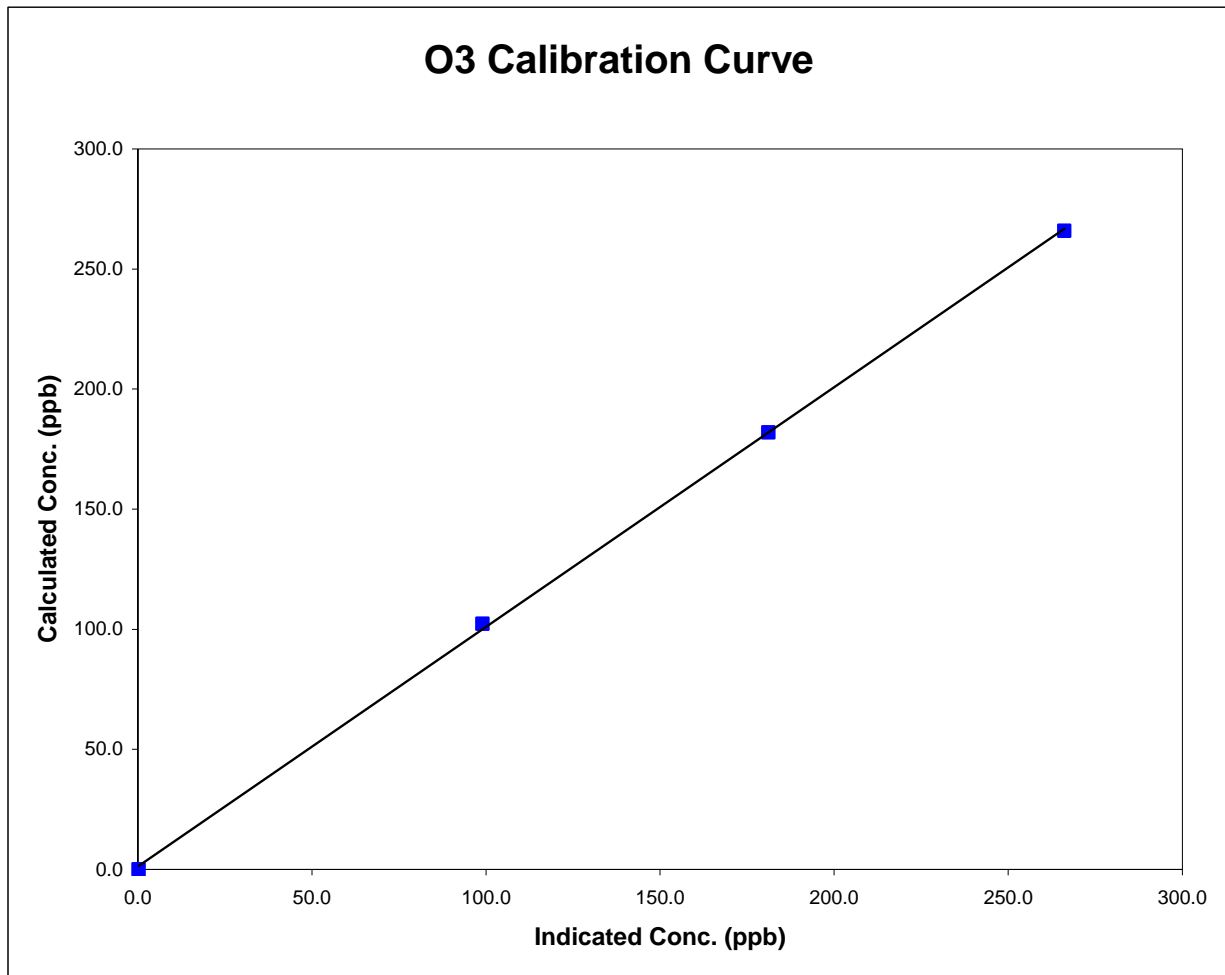
Parameter **O3**
 Air Monitoring Network **PASZA**

Station Information

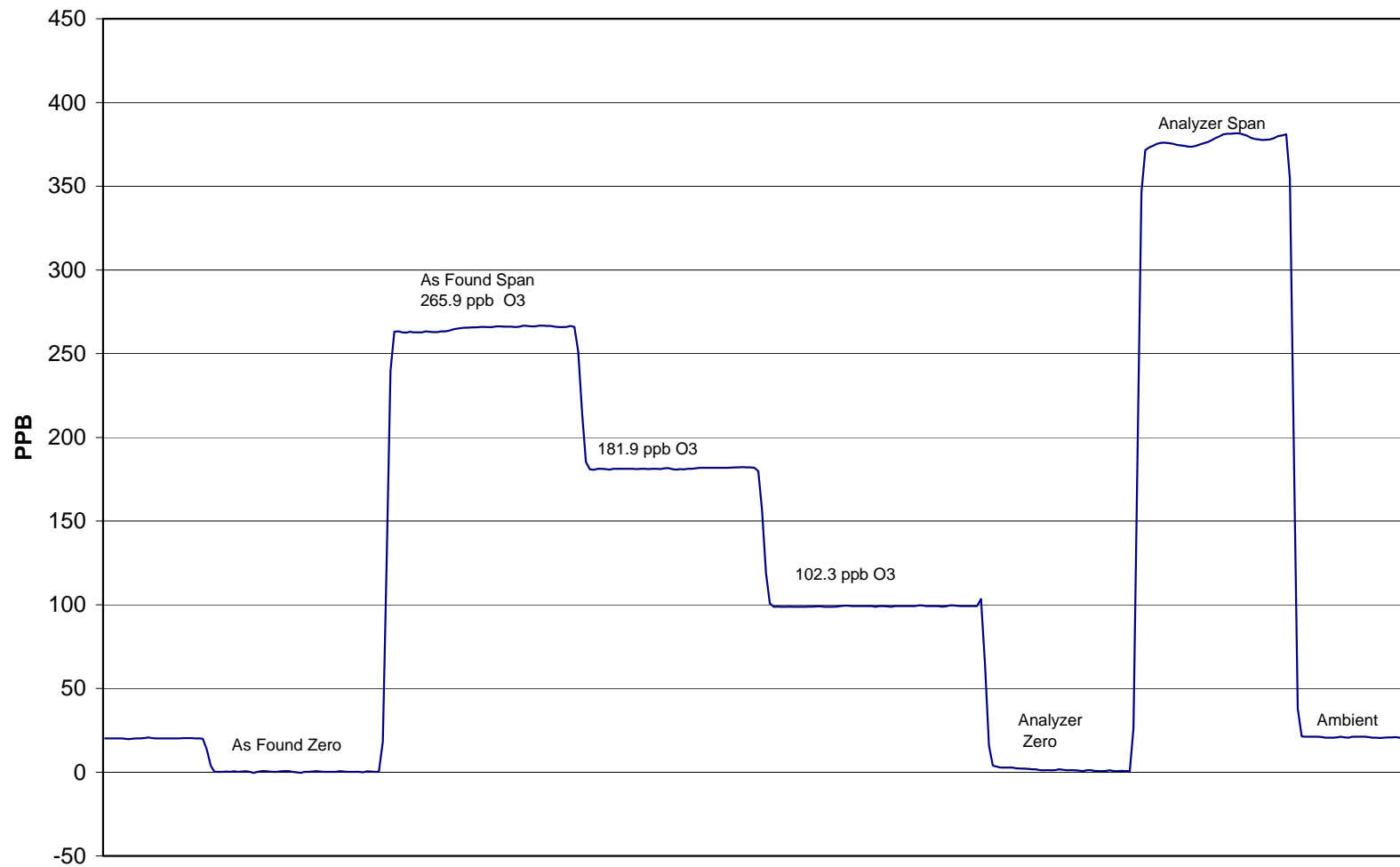
| | | | |
|---------------------|-----------------|----------------------|----------------------|
| Calibration Date | January 9, 2008 | Previous Calibration | December 10, 2007 |
| Station Number | 8 | Station Location | Rover - Spirit River |
| Start Time (MST) | 10:12 | End Time (MST) | 12:45 |
| Analyzer make/model | TEI Model 49C | Analyzer serial # | 609-716240 |

Calibration Data

| Calculated concentration (ppm) (Cc) | Indicated concentration (ppm) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|----------|
| 0.0 | 0.3 | NA | | |
| 265.9 | 266.1 | 0.9992 | Correlation Coefficient | 0.999786 |
| 181.9 | 181.1 | 1.0046 | | |
| 102.3 | 99.0 | 1.0334 | Slope | 0.998089 |
| | | | Intercept | 1.173136 |



Spirit River O3 Calibration



January 9, 2008

Calibration Report

Parameter

NOx-NO-NO₂

Air Monitoring Network

PASZA**Station Information**

| | | | |
|---------------------|------------------------|----------------------|-----------------------------|
| Calibration Date | January 8, 2008 | Previous Calibration | December 10, 2007 |
| Station Number | 8 | Station Location | Rover - Spirit River |
| Reason: | Routine | Installation | Removal |
| Start Time (MST) | 12:30 | End Time (MST) | 16:30 |
| Barometric Pressure | 27.37 Inches Hg | Station Temperature | 22.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| NO Cal Gas Conc | 48.9 ppm | Cal Gas Expiry Date | 2-Jan-09 |
| NOx Cal Gas Conc | 48.9 ppm | Cal Gas Serial # | LL-16161 |

DACS Information

DACS make **FOCUS AP1000** DACS serial No. **52662**

| Parameter | | NO2 | NOx | NO |
|---------------|-------------|-------------------|-------------------|-------------------|
| Before | Data Slope | 0.986211 | 0.988894 | 0.988037 |
| | Data Offset | 0.145279 | -1.358579 | -1.518898 |
| After | Data Slope | 1.004452 | 1.006997 | 1.005280 |
| | Data Offset | -0.070086 | -1.357492 | -1.328860 |
| Channel # | | 8 | 6 | 7 |
| Voltage Range | | 0 - 10 VDC | 0 - 10 VDC | 0 - 10 VDC |

Analyzer Information

Analyzer make/model **TECO 42i** Analyzer serial # **701120011**

| Test Point | before | | after | |
|---------------------|--------|-------|--------|-------|
| Concentration range | 0-1000 | ppb | 0-1000 | ppb |
| NO background | 4.2 | ppb | 4.2 | mV |
| NOx background | 4.4 | ppb | 4.4 | mV |
| NO coefficient | 0.689 | | 0.712 | |
| NOx coefficient | 0.999 | | 0.999 | |
| Chamber Temp | 50.2 | Deg C | 50.1 | Deg C |
| Cooler Temp | -2.7 | Deg C | -3.0 | Deg C |
| NO2 Converter Temp | 323.7 | Deg C | 326.3 | Deg C |
| Sample Flow | 654.0 | ccm | 632.0 | ccm |
| Ozonator Flow | OK | LPM | OK | LPM |
| Pressure | 161.4 | mm Hg | 166.3 | mm Hg |

Notes:

Calibration Performed By: Conor Whiteley

Calibration Report

Parameter

NOx-NO-NO₂

Air Monitoring Network

PASZA**Station Information**

| | | | |
|---------------------|------------------------|----------------------|-----------------------------|
| Calibration Date | January 8, 2008 | Previous Calibration | December 10, 2007 |
| Station Number | 8 | Station Location | Rover - Spirit River |
| Reason: | Routine | Installation | Removal |
| Start Time (MST) | 12:30 | End Time (MST) | 16:30 |
| Barometric Pressure | 27.37 Inches Hg | Station Temperature | 22.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| NO Cal Gas Conc | 48.9 ppm | Cal Gas Expiry Date | 2-Jan-09 |
| NOx Cal Gas Conc | 48.9 ppm | Cal Gas Serial # | LL-16161 |

DACS Information

DACS make **FOCUS AP1000** DACS serial No. **52662**

| Parameter | | NO2 | NOx | NO |
|---------------|-------------|-------------------|-------------------|-------------------|
| Before | Data Slope | 0.986211 | 0.988894 | 0.988037 |
| | Data Offset | 0.145279 | -1.358579 | -1.518898 |
| After | Data Slope | 1.004452 | 1.006997 | 1.005280 |
| | Data Offset | -0.070086 | -1.357492 | -1.328860 |
| Channel # | | 8 | 6 | 7 |
| Voltage Range | | 0 - 10 VDC | 0 - 10 VDC | 0 - 10 VDC |

Analyzer Information

Analyzer make/model **TECO 42i** Analyzer serial # **701120011**

| Test Point | before | | after | |
|---------------------|--------|-------|--------|-------|
| Concentration range | 0-1000 | ppb | 0-1000 | ppb |
| NO background | 4.2 | ppb | 4.2 | mV |
| NOx background | 4.4 | ppb | 4.4 | mV |
| NO coefficient | 0.689 | | 0.712 | |
| NOx coefficient | 0.999 | | 0.999 | |
| Chamber Temp | 50.2 | Deg C | 50.1 | Deg C |
| Cooler Temp | -2.7 | Deg C | -3.0 | Deg C |
| NO2 Converter Temp | 323.7 | Deg C | 326.3 | Deg C |
| Sample Flow | 654.0 | ccm | 632.0 | ccm |
| Ozonator Flow | OK | LPM | OK | LPM |
| Pressure | 161.4 | mm Hg | 166.3 | mm Hg |

Notes:

Calibration Performed By: Conor Whiteley

Calibration Report



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

Station Information

Calibration Date: **January 8, 2008** Station Location: **Rover - Spirit River**

Calibration Data

| | Dilution flow rate (ccm) | Source gas flow rate (ccm) | Calculated NOx conc (ppb) | Calculated NO conc (ppb) | Calculated NO ₂ conc (ppb) | Indicated NOx conc (ppb) | Indicated NO conc (ppb) | Indicated NO ₂ conc (ppb) | NOx Correction factor | NO Correction factor |
|---------------------------|--------------------------|----------------------------|---------------------------|--------------------------|---------------------------------------|--------------------------|-------------------------|--------------------------------------|-----------------------|----------------------|
| zero | 4988 | 0.00 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.5 | N/A | N/A |
| 1 | 4988 | 39.80 | 387.1 | 387.1 | 0.0 | 385.2 | 385.7 | 0.4 | 1.0049 | 1.0035 |
| 2 | 4988 | 19.88 | 194.1 | 194.1 | 0.0 | 194.6 | 195.0 | 0.6 | 0.9974 | 0.9957 |
| 3 | 4988 | 9.92 | 97.0 | 97.0 | 0.0 | 98.8 | 99.2 | 0.3 | 0.9824 | 0.9776 |
| AFZ | 4988 | 0.00 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.5 | 0.0000 | 0.0000 |
| AFS | 4988 | 39.92 | 388.2 | 388.2 | 0.0 | 375.8 | 375.7 | 0.8 | 1.0332 | 1.0334 |
| Average Correction Factor | | | | | | | | | 0.9949 | 0.9923 |

As Found Concentrations: NO_x= 374.1 NO= 374.2 As Found Percent Change NO_x= -3.6% NO= -3.6%

GPT Calibration Data

Dilution Flow 4988 ccm Source Gas Flow 39.82 ccm

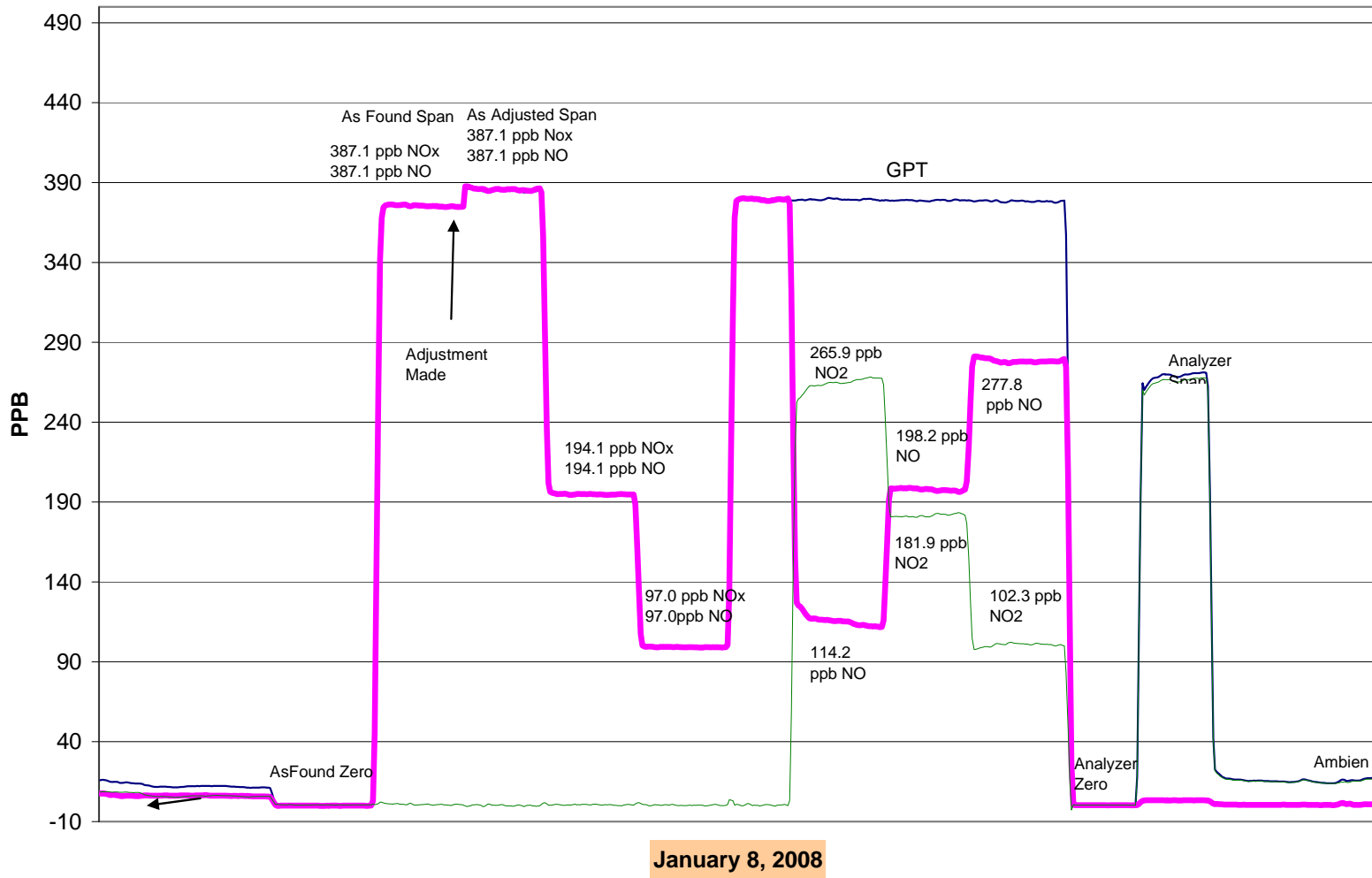
| O3 Setpoint (ppb) | Calculated NOx conc (ppb) | Calculated NO conc (ppb) | Calculated NO ₂ conc (ppb) | Indicated NOx conc (ppb) | Indicated NO conc (ppb) | Indicated NO ₂ conc (ppb) | NOx Correction factor | NO Correction factor | NO ₂ Correction factor | Converter Efficiency |
|---------------------------|---------------------------|--------------------------|---------------------------------------|--------------------------|-------------------------|--------------------------------------|-----------------------|----------------------|-----------------------------------|----------------------|
| 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | N/A | N/A | N/A |
| NO point | 380.1 | 380.1 | 0.0 | 378.8 | 379.4 | 0.3 | 1.0033 | 1.0018 | N/A | N/A |
| 300 | 380.1 | 114.2 | 265.9 | 379.5 | 114.9 | 265.2 | 1.0016 | 0.9937 | 1.0027 | 99.7% |
| 200 | 380.1 | 198.2 | 181.9 | 378.7 | 198.4 | 181.0 | 1.0037 | 0.9986 | 1.0054 | 99.5% |
| 100 | 380.1 | 277.8 | 102.3 | 378.2 | 277.7 | 101.3 | 1.0050 | 1.0005 | 1.0096 | 99.0% |
| Average Correction Factor | | | | | | | 1.0034 | 0.9976 | 1.0059 | 99.4% |

AIC Data

| | Previous calibration | | | | Current calibration | | | |
|-----------|----------------------|-----------------|-----|-----|---------------------|-----------------|-----|-----|
| Parameter | NOx | NO ₂ | NO | | NOx | NO ₂ | NO | |
| Auto zero | 0.8 | 1.0 | 0.9 | ppb | 0.2 | 1.1 | 0.6 | ppb |
| Auto span | 268.8 | 264.0 | 4.1 | ppb | 268.1 | 265.4 | 2.0 | ppb |

Calibration Performed By: Conor Whiteley

Spirit River NOx Calibration



Calibration Summary

Parameter **NO₂**
 Air Monitoring Network **PASZA**

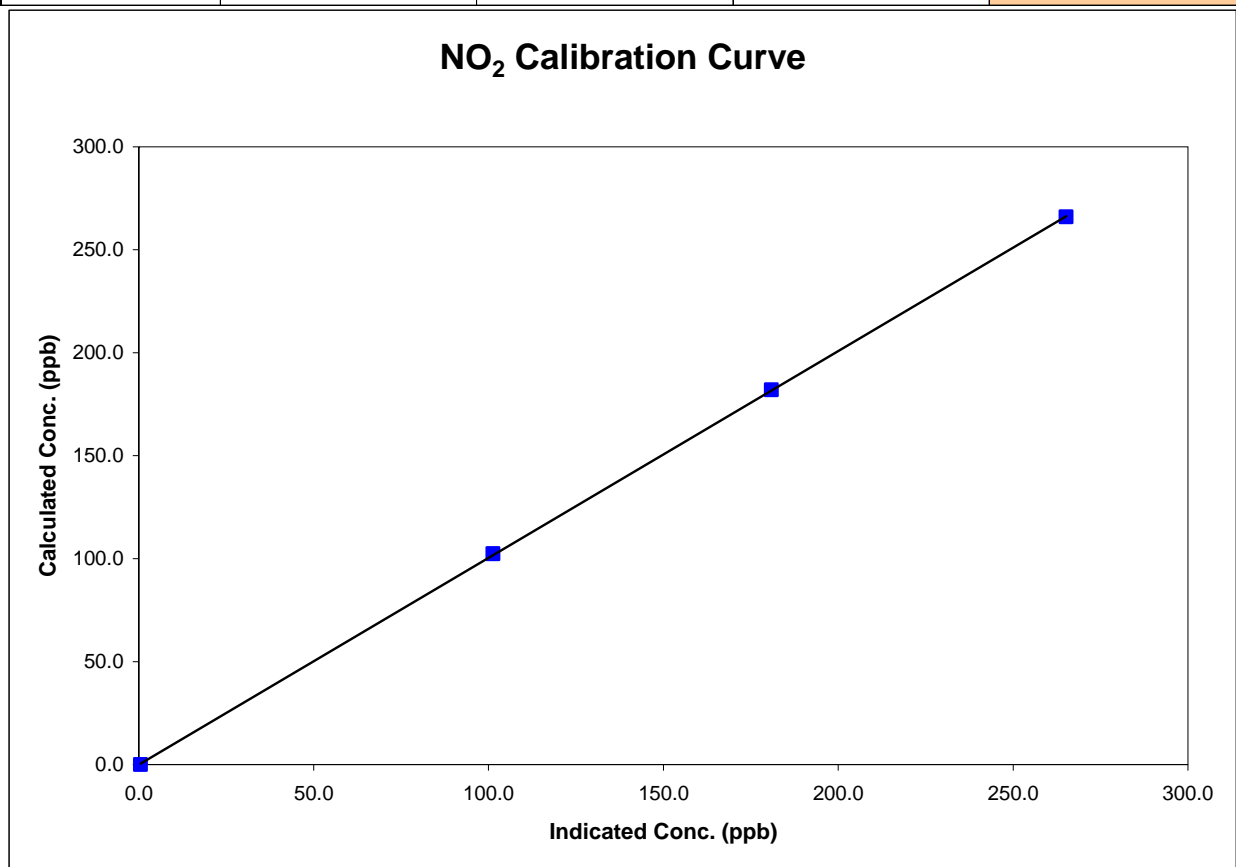


Station Information

| | | | |
|------------------|-----------------|----------------------|----------------------|
| Calibration Date | January 8, 2008 | Previous Calibration | December 10, 2007 |
| Station Number | 8 | Station Location | Rover - Spirit River |
| Start Time (MST) | 12:30 | End Time (MST) | 16:30 |
| Analyzer make | TECO 42i | Analyzer serial # | 701120011 |

Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.5 | 0.0000 | Correlation Coefficient | 0.999980 |
| 265.9 | 265.2 | 1.0027 | | |
| 181.9 | 181.0 | 1.0054 | | |
| 102.3 | 101.3 | 1.0096 | | |
| | | | Slope | 1.004452 |
| | | | Intercept | -0.070086 |



Calibration Summary

Parameter **NO_x**
 Air Monitoring Network **PASZA**

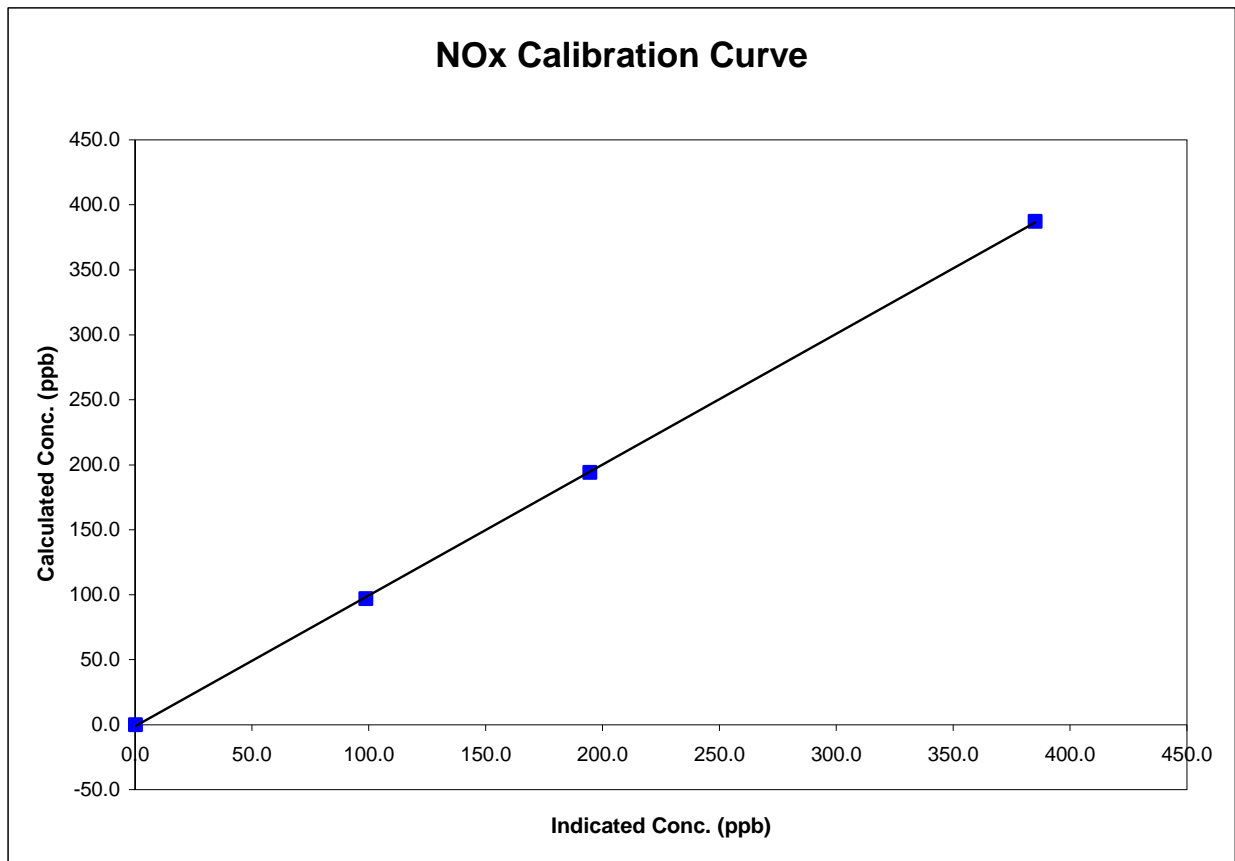


Station Information

| | | | |
|------------------|-----------------|----------------------|----------------------|
| Calibration Date | January 8, 2008 | Previous Calibration | December 10, 2007 |
| Station Number | 8 | Station Location | Rover - Spirit River |
| Start Time (MST) | 12:30 | End Time (MST) | 16:30 |
| Analyzer make | TECO 42i | Analyzer serial # | 701120011 |

Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.3 | 0.0000 | Correlation Coefficient | 0.999966 |
| 387.1 | 385.2 | 1.0049 | | |
| 194.1 | 194.6 | 0.9974 | | |
| 97.0 | 98.8 | 0.9824 | | |
| | | | Slope | 1.006997 |
| | | | Intercept | -1.357492 |



Calibration Summary

Parameter **NO**
 Air Monitoring Network **PASZA**

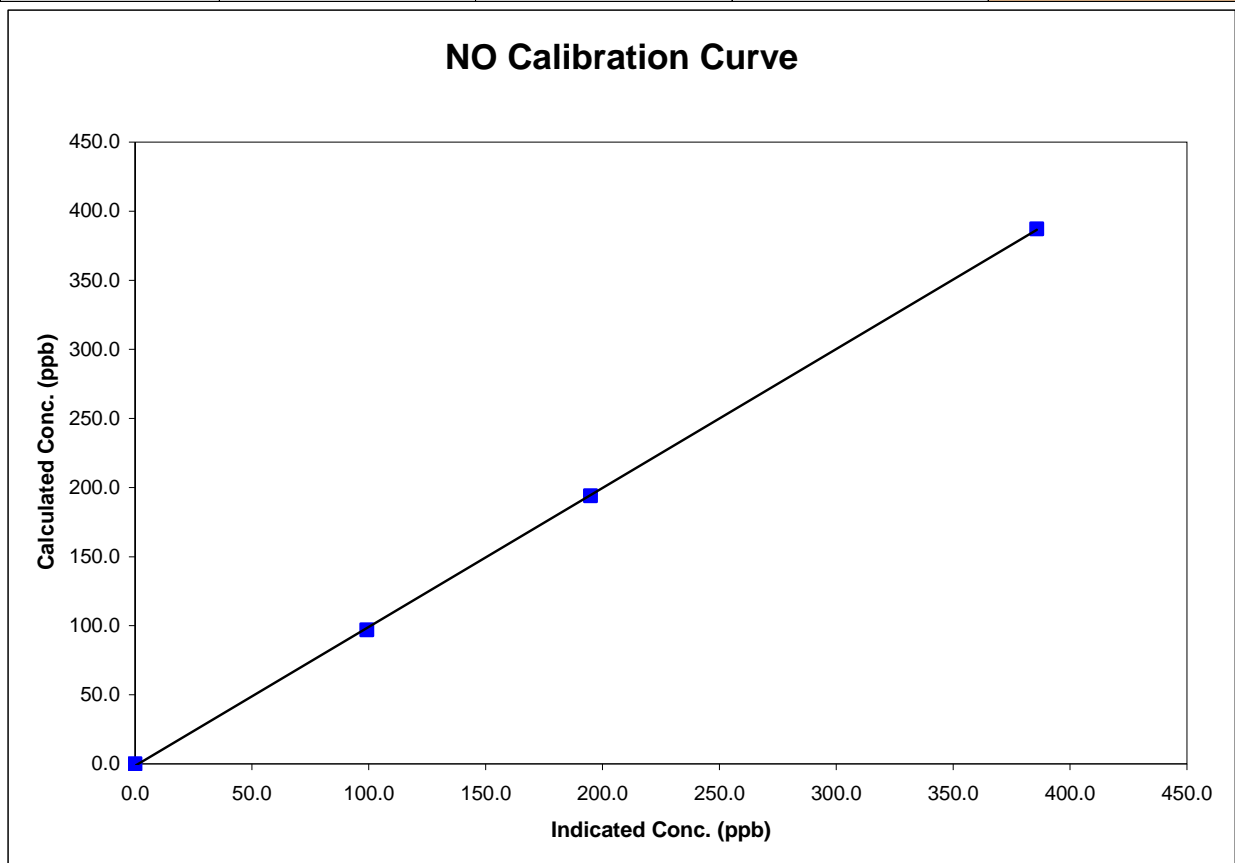


Station Information

| | | | |
|------------------|-----------------|----------------------|----------------------|
| Calibration Date | January 8, 2008 | Previous Calibration | December 10, 2007 |
| Station Number | 8 | Station Location | Rover - Spirit River |
| Start Time (MST) | 12:30 | End Time (MST) | 16:30 |
| Analyzer make | TECO 42i | Analyzer serial # | 701120011 |

Calibration Data

| Calculated conc (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|----------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.0 | N/A | | |
| 387.1 | 385.7 | 1.0035 | Correlation Coefficient | 0.999946 |
| 194.1 | 195.0 | 0.9957 | | |
| 97.0 | 99.2 | 0.9776 | | |
| | | | Slope | 1.005280 |
| | | | Intercept | -1.328860 |



Calibration Report



Parameter **SO2**
Air Monitoring Network **PASZA**

Station Information

| | | | |
|-----------------------|---|----------------------------------|----------------------------------|
| Calibration Date | January 22, 2008 | Previous Calibration | December 7, 2007 |
| 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) | 11:30 | End Time (MST) | 14:20 |
| Barometric Pressure | 27.84 inches Hg | Station Temperature | 23.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | 50.3 ppm | Cal Gas Expiry Date | 7/27/2009 |
| Gas Cert Reference | LL16161 | | |
| DACS make | Focus AP1000 | DACS serial No. | 45274 |
| DACS voltage range | 0 - 10 volt | DACS channel # | 4 |
| | Before | | After |
| DACS Scale High | 500 | DACS slope | 500 |
| DACS Scale Low | 0 | DACS intercept | 0 |
| Calculated slope | 1.018085 | Calculated slope | 0.999244 |
| Calculated intercept | -1.252793 | Calculated intercept | -2.160242 |
| Analyzer make | TEI 43i | Analyzer serial # | 43C-57351-313 |

| | before | | after | |
|---------------------|----------|-------|----------|-------|
| Concentration range | 0 - 1000 | ppb | 0 - 1000 | ppb |
| Background | 27.8 | | 28.2 | |
| Coefficient | 0.741 | | 0.758 | |
| UV Lamp Voltage | 700 | LPM | 697 | LPM |
| Chamber Temp | 43.9 | V | 44.2 | V |
| Perm Gas Temp | 30.5 | C | 30.5 | C |
| Pressure | 633.5 | in Hg | 641.9 | in Hg |
| Sample Flow | 0.473 | LPM | 0.474 | LPM |
| Lamp Intesity | 45521 | Hz | 45186 | 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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4992 | 0.00 | 0.0 | 0.5 | N/A |
| 4992 | 39.84 | 398.3 | 399.6 | 0.9967 |
| 4992 | 19.91 | 199.8 | 203.8 | 0.9806 |
| 4992 | 9.99 | 100.5 | 103.9 | 0.9674 |
| 4992 | 0.00 | 0.0 | 0.1 | As found zero |
| 4992 | 39.91 | 398.9 | 382.7 | As found span |
| Average Correction Factor | | | | 0.9816 |

Calculated value of As Found Response: 388.262 ppm Percent Change of As Found: 2.7%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | -0.7 | ppm | -2.0 | ppm |
| Auto span | 139.0 | ppm | 162.6 | ppm |

Notes: Adjusted SO2 Span

Calibration Performed By: Conor Whiteley

Calibration Summary



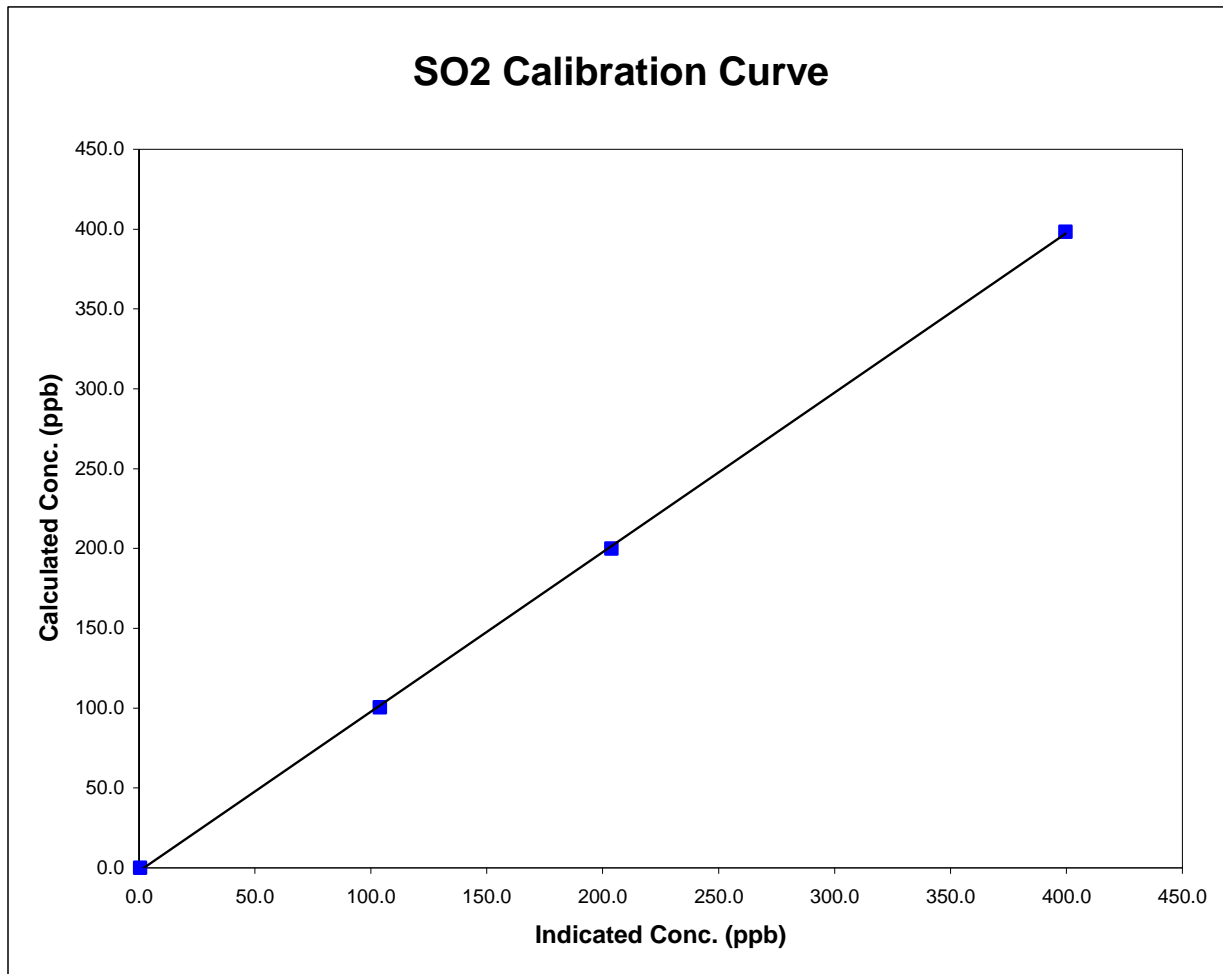
Parameter **SO2**
 Air Monitoring Network **PASZA**

Station Information

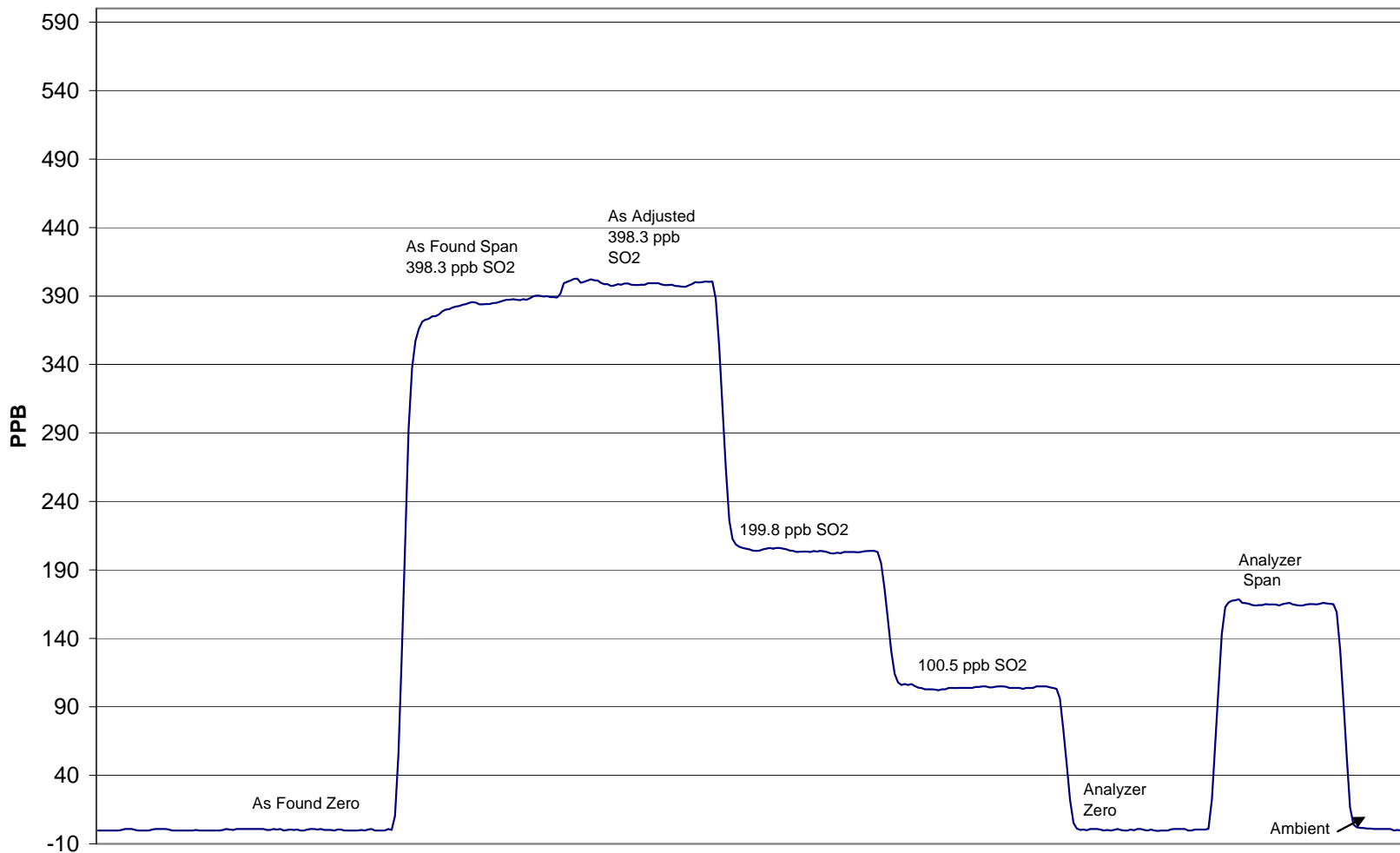
| | | | |
|---------------------|------------------|----------------------|------------------|
| Calibration Date | January 22, 2008 | Previous Calibration | December 7, 2007 |
| Station Number | 6 | Station Location | Valleyview |
| Start Time (MST) | 11:30 | End Time (MST) | 14:20 |
| Analyzer make/model | TEI 43i | Analyzer serial # | 43C-57351-313 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.5 | N/A | | |
| 398.3 | 399.6 | 0.9967 | Correlation Coefficient | 0.999907 |
| 199.8 | 203.8 | 0.9806 | | |
| 100.5 | 103.9 | 0.9674 | Slope | 0.999244 |
| | | | Intercept | -2.160242 |



Valleyview SO2 Calibration



January 22, 2008

Calibration Report
 Parameter **SO2**
 Air Monitoring Network **PASZA**
Station Information

| | | | |
|-----------------------|----------------------------------|----------------------------------|----------------------------------|
| Calibration Date | January 23, 2008 | Previous Calibration | January 22, 2008 |
| Station Number | 6 | Station Location | Valleyview |
| Reason: | <input type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | <input type="checkbox"/> Other: |
| Start Time (MST) | 12:15 | End Time (MST) | 14:10 |
| Barometric Pressure | 27.52 inches Hg | Station Temperature | 23.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | 50.3 ppm | Cal Gas Expiry Date | 7/27/2009 |
| Gas Cert Reference | LL16161 | | |
| DACS make | Focus AP1000 | DACS serial No. | 45274 |
| DACS voltage range | 0 - 10 volt | DACS channel # | 4 |
| | Before | | After |
| DACS Scale High | 500 | DACS slope | 500 |
| DACS Scale Low | 0 | DACS intercept | 0 |
| Calculated slope | 1.000033 | Calculated slope | 1.002229 |
| Calculated intercept | -1.981759 | Calculated intercept | 0.279153 |
| Analyzer make | TEI 43i | Analyzer serial # | 43C-57351-313 |

| | before | | after | |
|---------------------|----------|-------|----------|-------|
| Concentration range | 0 - 1000 | ppb | 0 - 1000 | ppb |
| Background | 28.2 | | 28.5 | |
| Coefficient | 0.758 | | 0.758 | |
| UV Lamp Voltage | 697 | LPM | 696 | LPM |
| Chamber Temp | 44.2 | V | 43.3 | V |
| Perm Gas Temp | 30.5 | C | 30.5 | C |
| Pressure | 641.9 | in Hg | 630.5 | in Hg |
| Sample Flow | 0.474 | LPM | 0.469 | LPM |
| Lamp Intesity | 45186 | Hz | 45523 | 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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4990 | 0.00 | 0.0 | -0.3 | N/A |
| 4990 | 39.83 | 398.3 | 397.1 | 1.0029 |
| | | | | |
| | | | | |
| 4990 | 0.00 | 0.0 | -0.3 | As found zero |
| 4990 | 39.83 | 398.3 | 397.1 | As found span |
| Average Correction Factor | | | | 1.0029 |

Calculated value of As Found Response: 395.459 ppm Percent Change of As Found: 0.7%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | -1.8 | ppm | 0.3 | ppm |
| Auto span | 162.9 | ppm | 170.3 | ppm |

 Notes: Rack Install As Found

 Calibration Performed By: Conor Whiteley

Calibration Summary

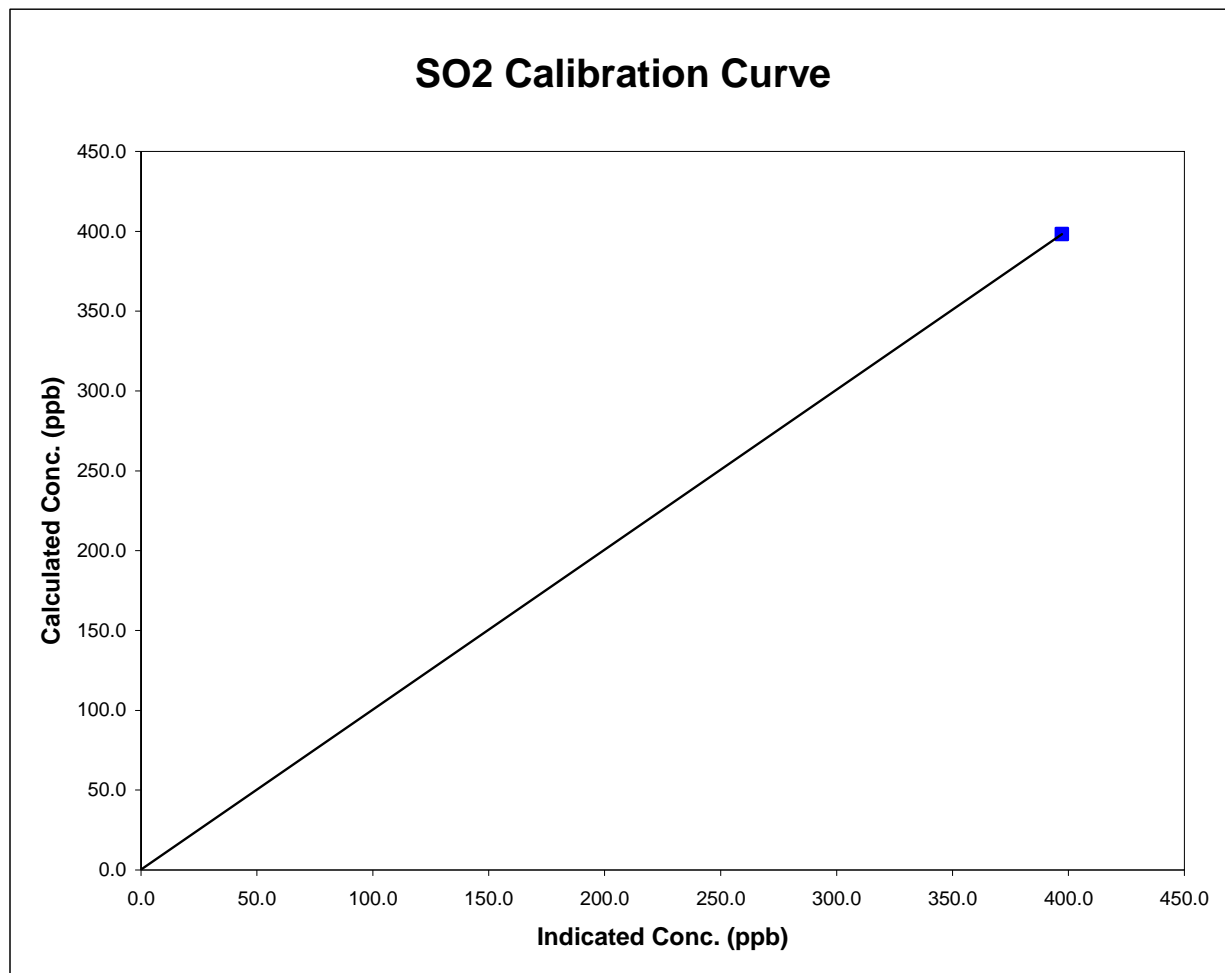
Parameter **SO2**Air Monitoring Network **PASZA**

Station Information

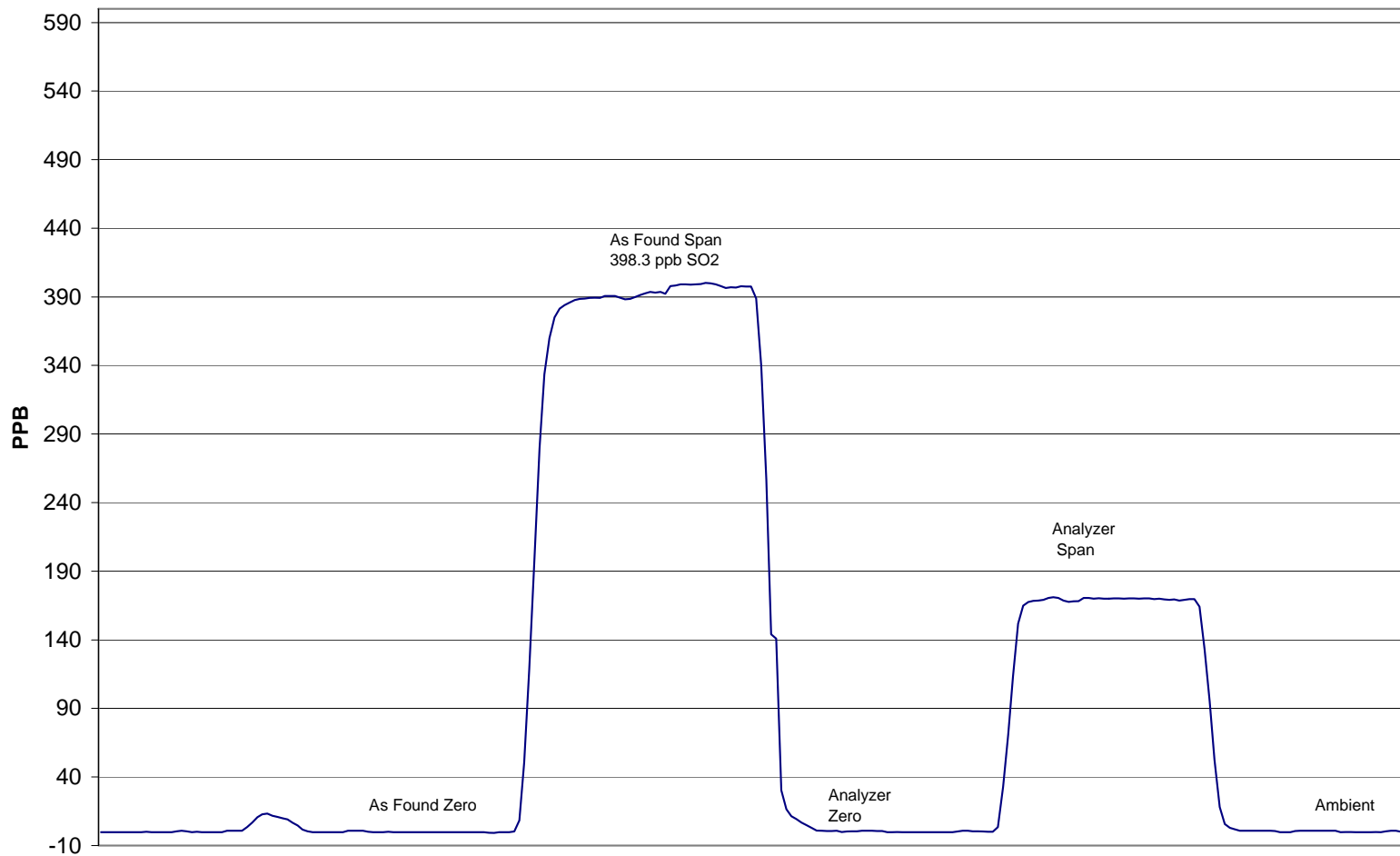
| | | | |
|---------------------|------------------|----------------------|------------------|
| Calibration Date | January 23, 2008 | Previous Calibration | January 22, 2008 |
| Station Number | 6 | Station Location | Valleyview |
| Start Time (MST) | 12:15 | End Time (MST) | 14:10 |
| Analyzer make/model | TEI 43i | Analyzer serial # | 43C-57351-313 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|----------|
| 0.0 | -0.3 | N/A | | |
| 398.3 | 397.1 | 1.0029 | Correlation Coefficient | 1.000000 |
| | | | Slope | 1.002229 |
| | | | Intercept | 0.279153 |



Valleyview SO2 Calibration



January 23, 2008

Calibration ReportParameter **H2S**Air Monitoring Network **PASZA****Station Information**

| | | | |
|-----------------------|----------------------------------|----------------------------------|----------------------------------|
| Calibration Date | January 22, 2008 | Previous Calibration | December 7, 2007 |
| Station Number | 5 | Station Location | Valleyview |
| Reason: | <input type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | <input type="checkbox"/> Other: |
| Start Time (MST) | 13:45 | End Time (MST) | 16:10 |
| Barometric Pressure | 27.99 inches Hg | Station Temperature | 23.0 Deg C |
| Calibrator | Enviroics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | 5.14 ppm | Cal Gas Expiry Date | 11/29/2006 |
| Gas Cert Reference | LL 74274 | | |
| DACS make | Focus AP1000 | DACS serial No. | 1 |
| DACS voltage range | 0 - 10 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 | 1.029111 | Calculated slope | 1.023808 |
| Calculated intercept | 0.049694 | Calculated intercept | -0.012858 |
| Analyzer make | TEI Model 43A | Analyzer serial # | 43A-25575-221 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 100 | ppb | 0 - 100 | ppb |
| Back Ground | 4.6 | ppb | 4.7 | ppb |
| Coefficient | 1.026 | | 1.026 | |
| Lamp Voltage | 806 | V | 802 | V |
| Chamber Temp | 45.1 | c | 45 | c |
| Perm Oven Temp | 45 | c | 44.98 | c |
| Pressure | 651 | mm Hg | 649 | mm Hg |
| Sample Flow | 430 | ccm | 433 | ccm |
| Lamp Intensity | 90.0 | % | 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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4991 | 0.00 | 0.0 | 0.0 | N/A |
| 4991 | 79.75 | 80.8 | 78.9 | 1.0243 |
| 4991 | 39.81 | 40.7 | 39.8 | 1.0211 |
| 4991 | 9.95 | 10.2 | 10.0 | 1.0207 |
| 4991 | 0.00 | 0.0 | 0.0 | As found zero |
| 4991 | 69.78 | 70.9 | 78.9 | As found span |
| Average Correction Factor | | | | 1.0220 |

Calculated value of As Found Response: 81.32 ppm Percent Change of As Found: -14.7%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | 0.0 | ppm | -0.1 | ppm |
| Auto span | 65.0 | ppm | 63.5 | ppm |

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary



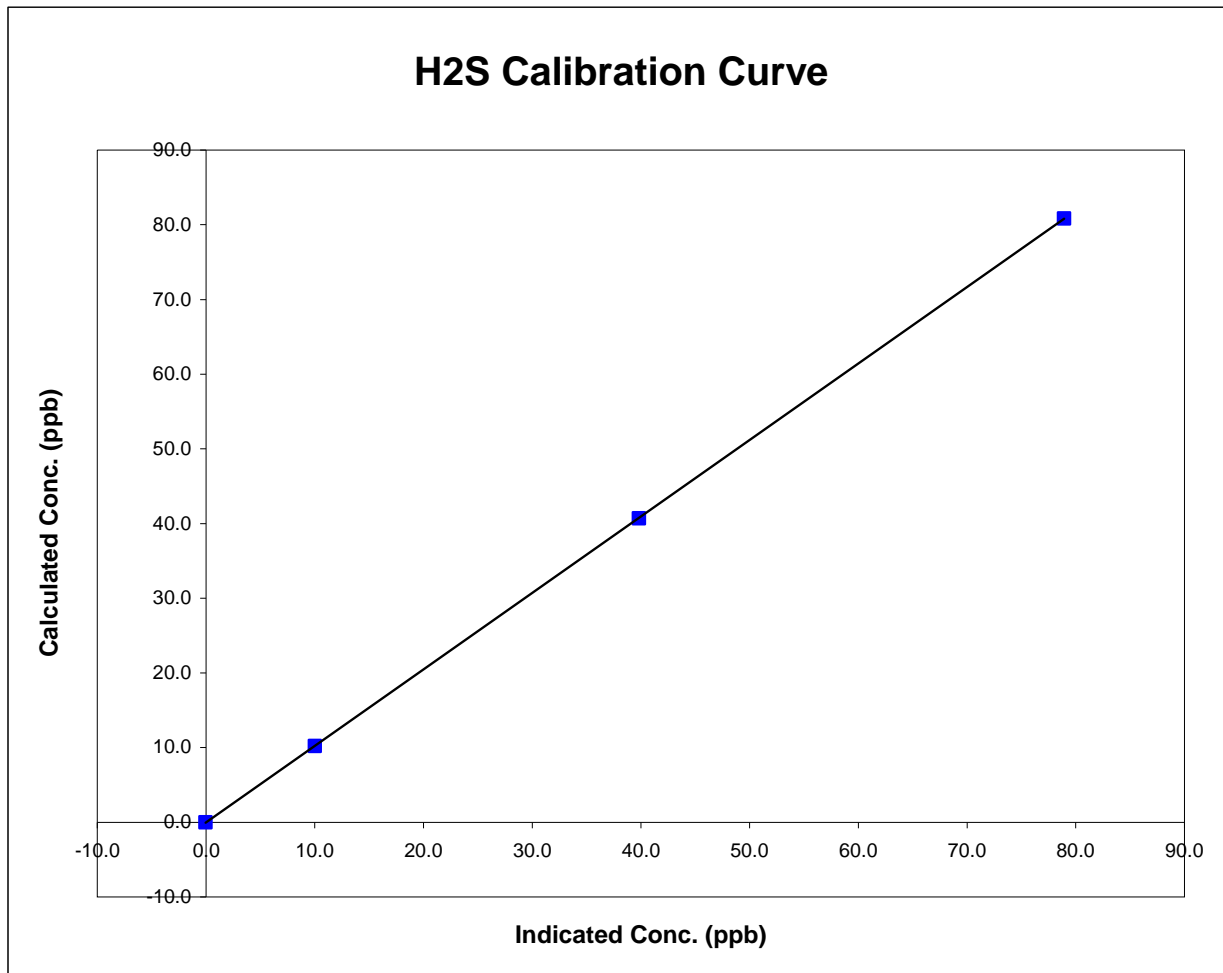
Parameter **H2S**
 Air Monitoring Network **PASZA**

Station Information

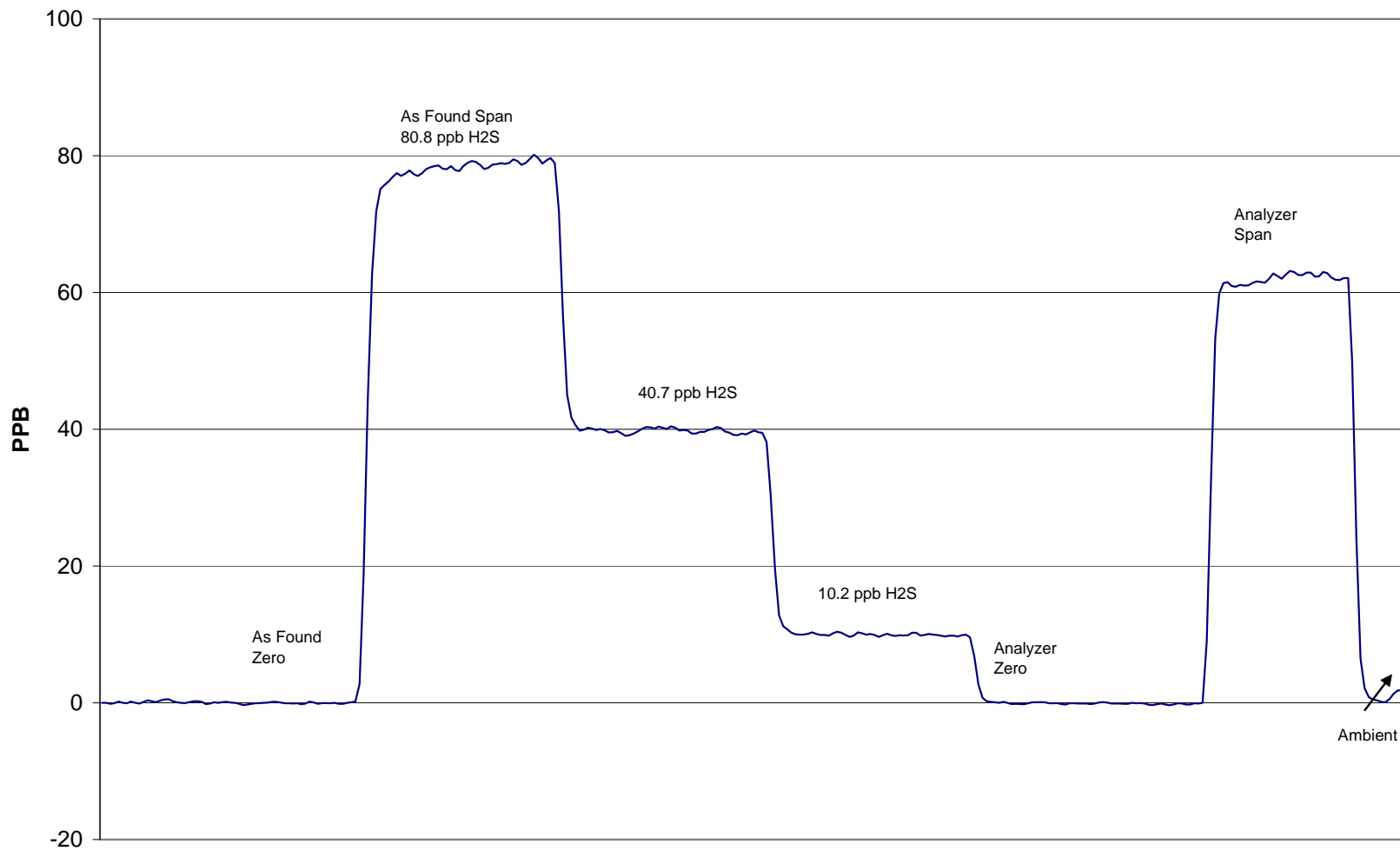
| | | | |
|---------------------|------------------|----------------------|------------------|
| Calibration Date | January 22, 2008 | Previous Calibration | December 7, 2007 |
| Station Number | 5 | Station Location | Valleyview |
| Start Time (MST) | 13:45 | End Time (MST) | 16:10 |
| Analyzer make/model | TEI Model 43A | Analyzer serial # | 43A-25575-221 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|-----------|
| 0.0 | 0.0 | N/A | | |
| 80.8 | 78.9 | 1.0243 | Correlation Coefficient | 0.999996 |
| 40.7 | 39.8 | 1.0211 | | |
| 10.2 | 10.0 | 1.0207 | Slope | 1.023808 |
| | | | | |
| | | | | |
| | | | Intercept | -0.012858 |
| | | | | |



Valleyview H2S Calibration



January 22, 2008

Calibration ReportParameter **H2S**Air Monitoring Network **PASZA****Station Information**

| | | | |
|-----------------------|----------------------------------|----------------------------------|----------------------------------|
| Calibration Date | January 23, 2008 | Previous Calibration | January 22, 2008 |
| Station Number | 5 | Station Location | Valleyview |
| Reason: | <input type="checkbox"/> Routine | <input type="checkbox"/> Install | <input type="checkbox"/> Removal |
| | | | <input type="checkbox"/> Other: |
| Start Time (MST) | 11:30 | End Time (MST) | 14:10 |
| Barometric Pressure | 27.52 inches Hg | Station Temperature | 23.0 Deg C |
| Calibrator | EnviroNics 6100 | Serial Number | 3474 |
| Cal Gas Concentration | 5.14 ppm | Cal Gas Expiry Date | 11/29/2006 |
| Gas Cert Reference | LL 74274 | | |
| DACS make | Focus AP1000 | DACS serial No. | 1 |
| DACS voltage range | 0 - 10 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 | 1.023808 | Calculated slope | 1.014495 |
| Calculated intercept | -0.012858 | Calculated intercept | 0.088348 |
| Analyzer make | TEI Model 43A | Analyzer serial # | 43A-25575-221 |

| | before | | after | |
|---------------------|---------|-------|---------|-------|
| Concentration range | 0 - 100 | ppb | 0 - 100 | ppb |
| Back Ground | 4.7 | ppb | 4.8 | ppb |
| Coefficient | 1.026 | | 1.026 | |
| Lamp Voltage | 802 | v | 805 | v |
| Chamber Temp | 45 | c | 44.8 | c |
| Perm Oven Temp | 44.98 | c | 44.95 | c |
| Pressure | 649 | mm Hg | 640 | mm Hg |
| Sample Flow | 433 | ccm | 427 | ccm |
| Lamp Intensity | 91.0 | % | 90.0 | % |

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) |
|---------------------------------|-------------------------------|-------------------------------------|------------------------------------|---------------------------|
| 4991 | 0.00 | 0.0 | -0.1 | N/A |
| 4991 | 79.75 | 80.8 | 79.6 | 1.0156 |
| | | | | |
| | | | | |
| 4991 | 0.00 | 0.0 | -0.1 | As found zero |
| 4991 | 69.78 | 70.9 | 79.6 | As found span |
| Average Correction Factor | | | | 1.0156 |

Calculated value of As Found Response: 81.57 ppm Percent Change of As Found: -15.1%

| | before calibration | | after calibration | |
|-----------|--------------------|-----|-------------------|-----|
| Auto zero | -0.1 | ppm | 0.3 | ppm |
| Auto span | 63.5 | ppm | 65.1 | ppm |

Notes: Rack Install As Found

Calibration Performed By: Conor Whiteley

Calibration Summary



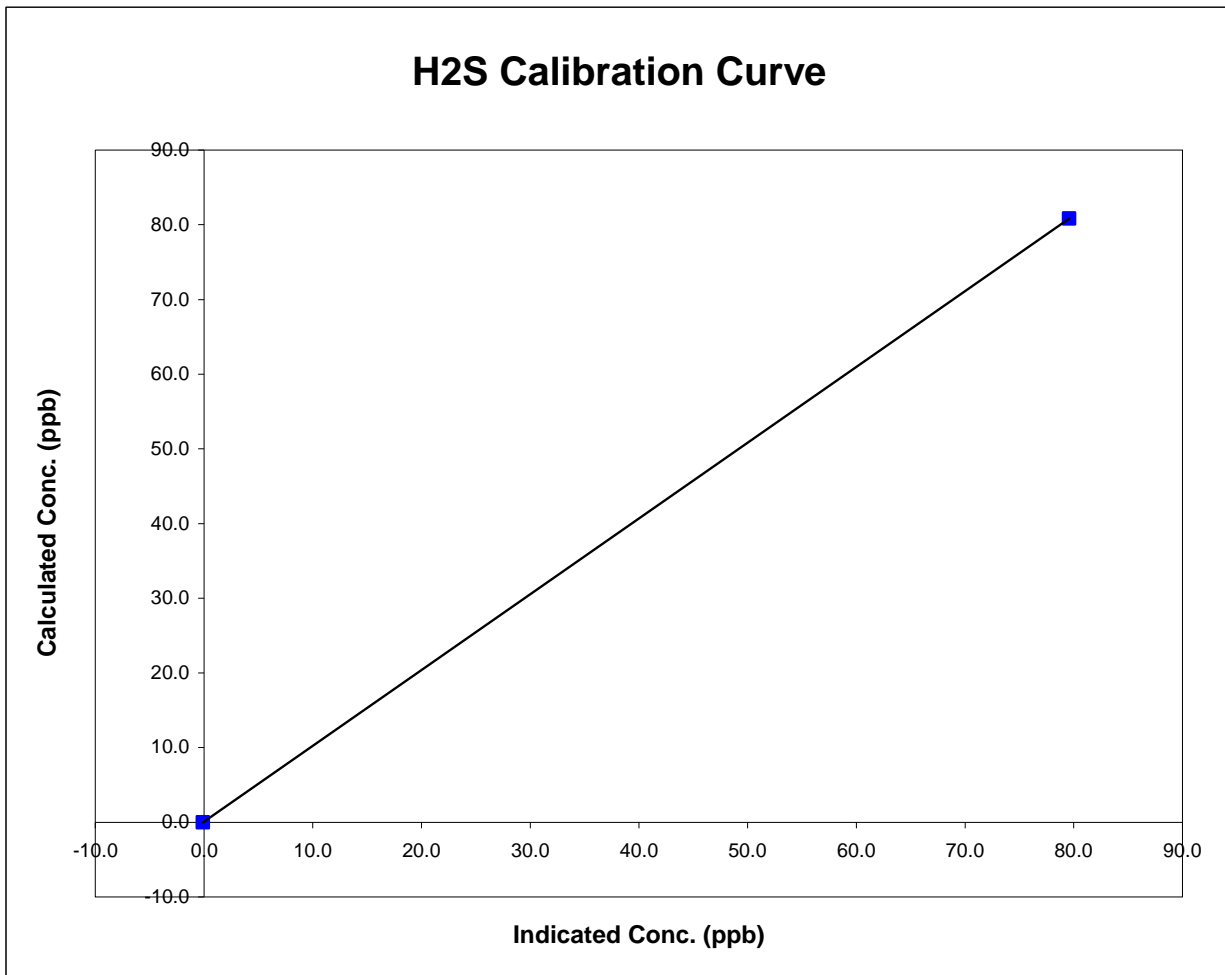
Parameter **H2S**
 Air Monitoring Network **PASZA**

Station Information

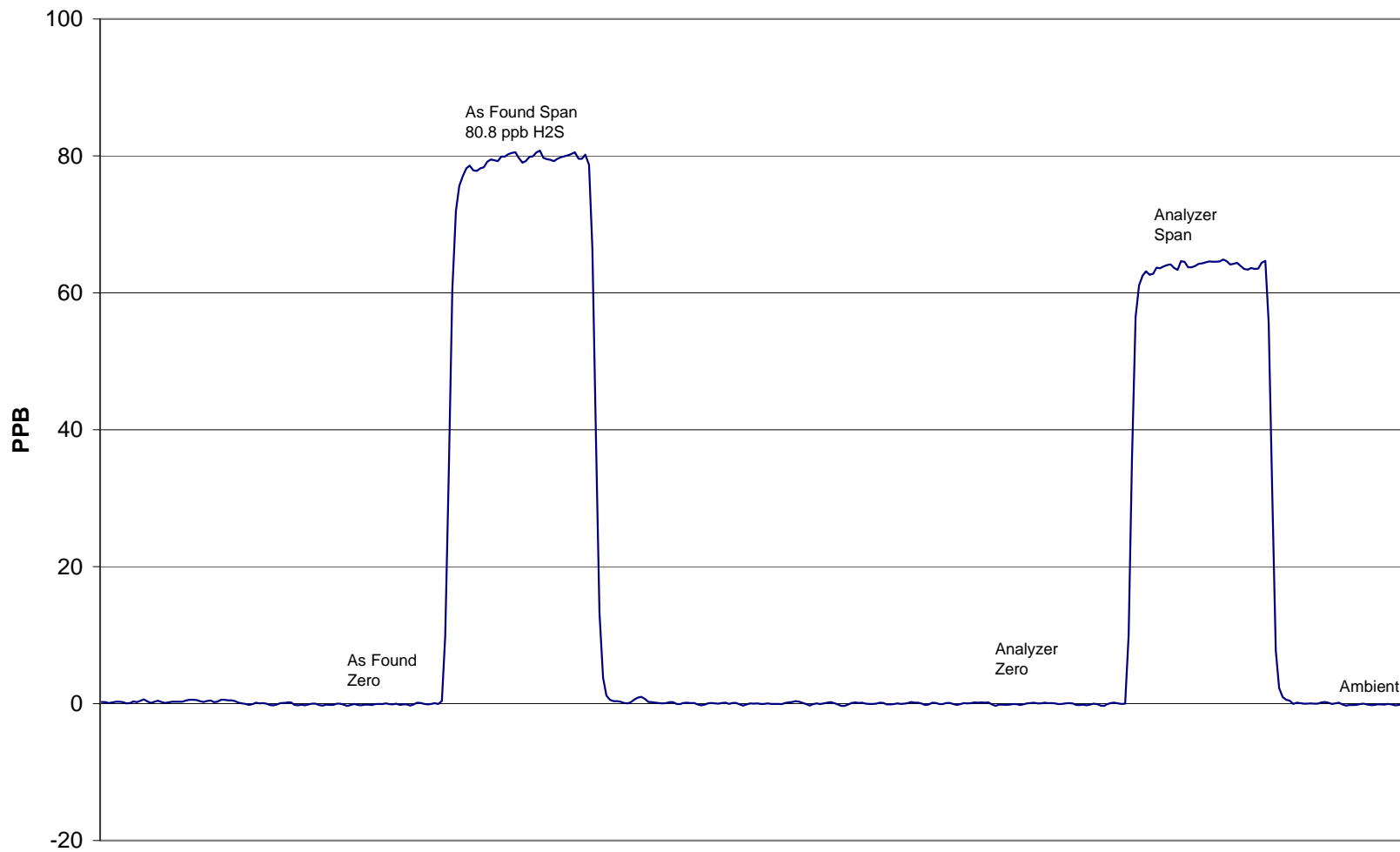
| | | | |
|---------------------|------------------|----------------------|------------------|
| Calibration Date | January 23, 2008 | Previous Calibration | January 22, 2008 |
| Station Number | 5 | Station Location | Valleyview |
| Start Time (MST) | 11:30 | End Time (MST) | 14:10 |
| Analyzer make/model | TEI Model 43A | Analyzer serial # | 43A-25575-221 |

Calibration Data

| Calculated concentration (ppb) (Cc) | Indicated concentration (ppb) (Ic) | Correction factor (Cc/Ic) | Statistical Evaluation | |
|-------------------------------------|------------------------------------|---------------------------|-------------------------|----------|
| 0.0 | -0.1 | N/A | | |
| 80.8 | 79.6 | 1.0156 | Correlation Coefficient | 1.000000 |
| | | | Slope | 1.014495 |
| | | | Intercept | 0.088348 |



Valleyview H2S Calibration



January 23, 2008