



## **Peace River Area Monitoring Program**

# **JULY 2021**

## **Monthly Ambient Air Quality Monitoring Report**

**PRAMP-202107**

### **Operation and Maintenance:**

Bureau Veritas Canada

### **Data Validation and Report:**

Peace River Area Monitoring Program

August 18, 2021

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## LIST OF ACRONYMS

|                  |                                              |
|------------------|----------------------------------------------|
| AAAQOs           | Alberta Ambient Air Quality Objectives       |
| AEP              | Alberta Environment and Parks                |
| AMD              | Air Monitoring Directive                     |
| AT               | Ambient Temperature                          |
| BP               | Barometric Pressure                          |
| CH <sub>4</sub>  | Methane                                      |
| EPEA             | Environmental Protection and Enhancement Act |
| H <sub>2</sub> S | Hydrogen Sulphide                            |
| kph              | kilometers per hour                          |
| mb               | millibar                                     |
| mm               | millimeter                                   |
| NMHC             | Non-Methane Hydrocarbons                     |
| ppb              | parts per billion                            |
| ppm              | parts per million                            |
| PRAMP            | Peace River Area Monitoring Program          |
| RH               | Relative Humidity                            |
| SO <sub>2</sub>  | Sulphur Dioxide                              |
| ST               | Station Temperature                          |
| THC              | Total Hydrocarbons                           |
| TRS              | Total Reduced Sulphur                        |
| VWD              | Vector Wind Direction                        |
| VWS              | Vector Wind Speed                            |
| WD               | Wind Direction                               |
| WS               | Wind Speed                                   |
| °C               | Degrees Celsius                              |



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August 18, 2021

**RE: PRAMP – July 2021 Monthly Ambient Air Quality Monitoring Report**

Enclosed is the July 2021 Monthly Ambient Air Quality Monitoring Report for the continuous ambient air quality monitoring stations of the Peace River Area Monitoring Program (PRAMP) regional air quality monitoring network.

The representative of the Person Responsible for this monitoring program is

PRAMP Airshed  
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This report has been prepared, reviewed and submitted by Michael Bisaga & Lily Lin of the PRAMP Airshed.

## NETWORK STATION SUMMARY

### Listing of Continuous Monitoring Stations

The PRAMP continuous ambient air quality monitoring network stations are:

- 986c Station
- 842b Station
- Reno Station
- AQHI Cadotte Lake

| Station ID | Station Name      | Latitude | Longitude  |
|------------|-------------------|----------|------------|
| 1562       | 986c              | 56.36980 | -116.92500 |
| 1561       | 842b              | 56.27406 | -116.98129 |
| 1563       | Reno              | 55.86936 | -117.05739 |
| 1651       | AQHI-Cadotte Lake | 56.49022 | -116.42739 |

### Listing of Intermittent Monitoring Stations

- VOC Canister Sampling Station
  - 986c Station
  - 842b Station
  - Reno Station

### Monitoring Notes during the Month of July 2021

#### 986c Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.
- All data collected this month were compliant with the requirements outlined in the AMD 2016.
- All parameters met the 90% operational uptime requirement.
- **All parameters:** A major power failure event was recorded between July 23 hour 19 and July 26 hour 12. Data collected at hour 13 were discarded as the analyzers were recovering from the power outage. A repeat zero-span check was completed on July 26 hour 20 to confirm the analyzers' functionality. A total of sixty-eight hours of downtime were recorded due to this event.
- **All meteorological channels:** A major power failure event was recorded between July 23 hour 20 and July 26 hour 12. A total of sixty-five hours of downtime were recorded due to this event.
- **TRS:**
  - Unstable span check responses started being recorded on June 28. The drift issue was corrected during the monthly calibration. As the analyzer passed the July monthly calibration, all data were deemed to be valid.

- The span response recovered slowly after the power was restored on July 26. The span results were back within the acceptable limits on July 28. As the issue was from the zero-span system, data quality was not affected.

#### 842b Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.
- All data collected this month were compliant with the requirements outlined in the AMD 2016.
- All parameters met the 90% operational uptime requirement.
- **TRS:** The analyzer failed the daily zero-span check on July 2. A repeat zero-span check was completed on July 2 hour 6. The check result was within the acceptable limits. The analyzer was calibrated on July 4 to correct the drift issue.

#### Reno Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.
- All data collected this month were compliant with the requirements outlined in the AMD 2016.
- All parameters met the 90% operational uptime requirement, except BP (71.4%). Reference #: 382202.
- **BP:** The BP sensor malfunctioned on July 10 hour 21. On July 19 hour 17, the MetOne sensor, s/n: R12877, was removed, and the MetOne 092 sensor, s/n: K12864, was installed. Two hundred thirteen hours of downtime were recorded due to this event.
- **THC/CH4/NMHC:** The analyzer failed the daily zero-span check on July 19. A repeat zero-span check was completed at hour 12 to investigate the drift, confirming span gas depletion. The span gas bottle was replaced following by a zero-span check on July 19 hour 17. Two hours of downtime were recorded due to additional quality checks.

#### AQHI – Cadotte Lake Station

- All data collected this month were compliant with the requirements outlined in the AMD 2016.
- All parameters met the 90% operational uptime requirement, except PM2.5 (77.8%). Reference #: 380988.
- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) and /or Alberta Ambient Air Quality Guidelines (AAAQGs) where applicable, except PM2.5. Seventeen 1-hr and seven 24-hr exceedances were recorded this month. The exceedances recorded this month is believed to be the result of wildfire from north Saskatchewan, given the low wind speeds.

| Date    | Time (MST) | Average Period | AAAQOs / AAAQGs (µg/m3) | Concentration (µg/m3) | Reference # |
|---------|------------|----------------|-------------------------|-----------------------|-------------|
| July 10 | -          | 24-Hour        | 30                      | 32.3                  | 381043      |
| July 14 | 17         | 1-Hour         | 80                      | 92                    | 381256      |
| July 14 | 18         | 1-Hour         | 80                      | 140                   | 381256      |
| July 14 | 19         | 1-Hour         | 80                      | 123                   | 381256      |
| July 14 | 20         | 1-Hour         | 80                      | 102                   | 381256      |

|         |    |         |    |      |        |
|---------|----|---------|----|------|--------|
| July 14 | 21 | 1-Hour  | 80 | 91   | 381256 |
| July 14 | 22 | 1-Hour  | 80 | 88   | 381256 |
| July 14 | -  | 24-Hour | 30 | 43.6 | 381256 |
| July 17 | 16 | 1-Hour  | 80 | 110  | 381256 |
| July 17 | 17 | 1-Hour  | 80 | 154  | 381256 |
| July 17 | 18 | 1-Hour  | 80 | 134  | 381256 |
| July 17 | 19 | 1-Hour  | 80 | 92   | 381256 |
| July 17 | -  | 24-Hour | 30 | 52.2 | 381256 |
| July 18 | 1  | 1-Hour  | 80 | 86   | 381256 |
| July 18 | 2  | 1-Hour  | 80 | 89   | 381256 |
| July 18 | 3  | 1-Hour  | 80 | 94   | 381256 |
| July 18 | 4  | 1-Hour  | 80 | 95   | 381256 |
| July 18 | 5  | 1-Hour  | 80 | 92   | 381256 |
| July 18 | 6  | 1-Hour  | 80 | 91   | 381256 |
| July 18 | 7  | 1-Hour  | 80 | 86   | 381256 |
| July 18 | -  | 24-Hour | 30 | 63.3 | 381256 |
| July 19 | -  | 24-Hour | 30 | 51.5 | 381445 |
| July 20 | -  | 24-Hour | 30 | 56.3 | 381445 |
| July 21 | -  | 24-Hour | 30 | 45.8 | 381445 |

- **All parameters:** Power outage events occurred on July 16. Five of downtime for all gas parameters and four hours downtime for all meteorological channels were recorded.
- **PM2.5:** Anomalous data were recorded, commencing July 2 hour 17 due to an equipment error. The PM unit was reset remotely on July 8, and valid data started being recorded on July 9 hour 9. One hundred sixty hours of downtime were recorded due to this event.
- **SO2:** The analyzer malfunctioned on July 16 hour 16. The analyzer was restarted and restored on July 17 hour 14. A repeat zero-span checks were completed on July 17 hour 18 and July 18 hour 6 to confirm the analyzer's functionality. Twenty-four hours of downtime were recorded due to this event.
- **TRS:**
  - Due to communication issues between the datalogger and the analyzer, the analyzer was reset on July 17. A repeat zero-span check was completed at hour 13 and 14 to confirm the analyzer's functionality. Two hours of downtime were recorded due to additional quality check.
  - Hourly data collected on July 22 hour 19 to hour 21 were missing due to analyzer issue. The issue was corrected by resetting the analyzer. Three hours of downtime were recorded.

- **THC/CH<sub>4</sub>/NMHC:** The N<sub>2</sub> gas bottle was replaced on July 20 hour 16. Faulty sample injections started being observed after the N<sub>2</sub> gas bottle replacement. The issue was corrected during the monthly calibration on July 21. Data collected between July 20 hour 17 and July 21 hour 9 were discarded due to this issue. Eighteen hours of downtime were recorded due to the injection issues and maintenance activities.

#### VOCs Canister Sampling program:

- The canister sampling program collects a 1-hour sample of air when the continuously measured non-methane hydrocarbon (NMHC) concentration reaches a specified trigger point. The current trigger point is 0.3 ppm for non-methane hydrocarbons. The trigger point is based on real-time monitoring data that are averaged over a 5-minute period.
- The canister sample collection systems are in place at Station 986c, 842b, and the Reno Station; a canister sample collection system is not part of the suite of instruments currently deployed at the AQHI-Cadotte Lake Station.
- Sample analysis and analytical results were prepared and provided by InnoTech Alberta.
- There was no valid canister event in July. An NMHC canister event was recorded at the Reno site on July 19 at 18:15, at a concentration of 0.33ppm. This is considered non-valid and suspected to be triggered by vehicle exhaust.

## Revisions to Alberta's Ambient Air Quality Data Warehouse

No revisions to historical data previously submitted to the Alberta's Ambient Air Quality Data Warehouse were made this month.

## Deviations from Authorized Monitoring Methods

At the Reno station, nearby trees exceed the height allowed under section 2.3 of the wind speed and wind direction siting criteria in Chapter 3 of the AMD. This non-conformance was documented in the updated station site documents. Further actions are being considered including siting the wind sensor so that it meets AMD Chapter 3 siting requirements, or obtaining written authorization from "The Director" to deviate from AMD Siting requirements.

## Disclaimer

Baseline corrections were performed on the 1-minute data. 5-minute and hourly data were calculated based on the post-baseline correction 1-minute data set. Data verification/validation were then performed on the 5-minute and hourly data. Hourly data that are included in this report are the post-validation hourly data set.

Equipment calibration / maintenance records were provided by Bureau Veritas.



## Certification

This report was prepared and submitted by Lily Lin in accordance with Chapter 9 of the Air Monitoring Directive (AMD 2016).



Lily Lin, Technical Program Manager, PRAMP Airshed

This report was reviewed by Mike Bisaga in accordance with Chapter 9 of the Air Monitoring Directive (AMD 2016).

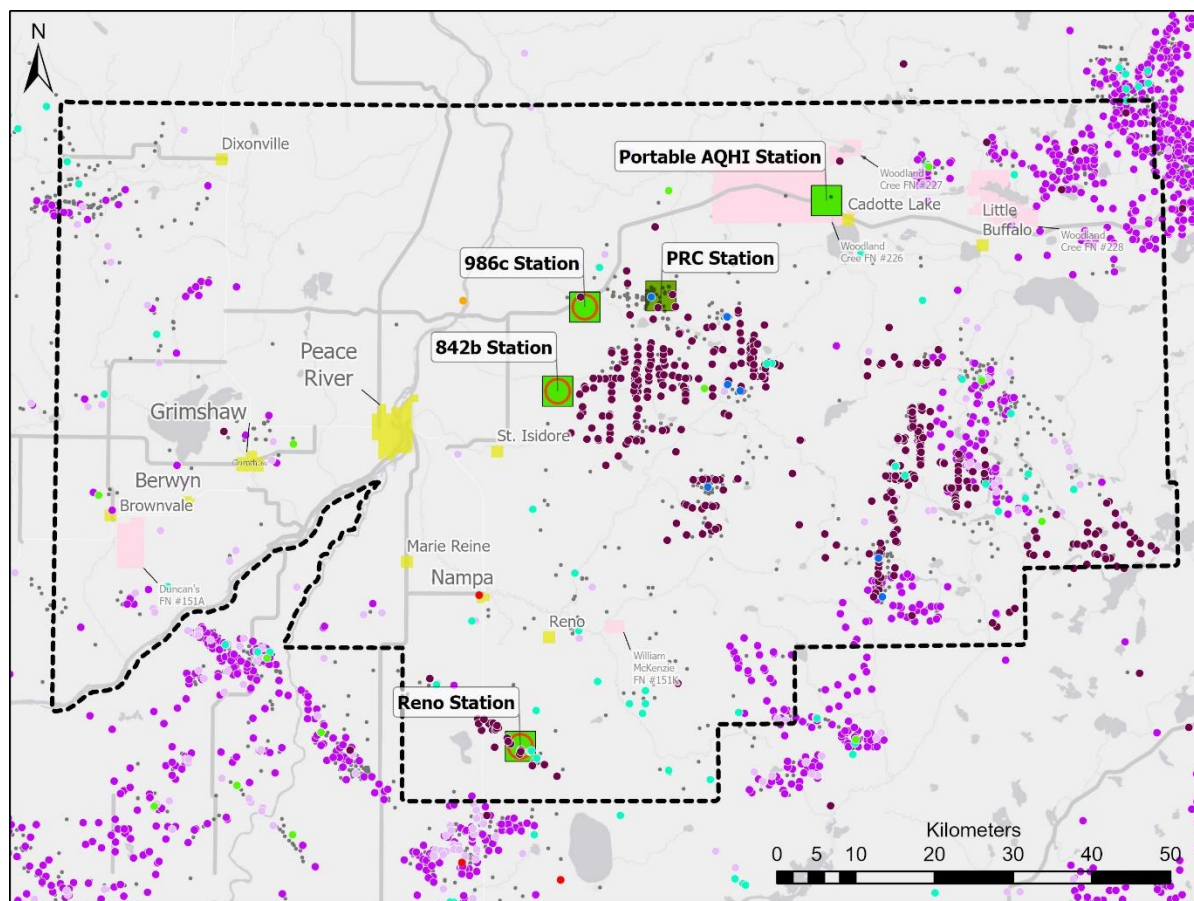
I certify that I have reviewed and verified this report and that the information is complete, accurate and representative of the monitoring results, reporting timeframe and the specified analysis, summarization and reporting requirements. I also certify that at the time of this report's submission, all air data have been electronically uploaded to Alberta's Ambient Air Quality Data Warehouse as required by the AMD. Uploading of VOC data from the canister sampling program was not required at the time of completing this report.



Michael Bisaga, Technical Program Manager, PRAMP Airshed

August 18, 2021

## Map of PRAMP Continuous Monitoring Network



# Peace River Area Monitoring Program



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## Map Legend

### Monitoring Methods

- Continuous (existing)
- Continuous (planned)
- Triggered Canister (existing)

### Industrial Facilities

- Heavy Oil/Bitumen Well or Battery
- Conventional Oil Well or Battery
- In-Situ Oil Sands Facility
- Natural Gas Well or Battery
- Gas Plant or Processing Facility
- Compressor Station or Pipeline Facility
- Pulp and Paper
- Agricultural Storage and Transfer
- Well (Not Associated with Batteries)

## CONTINUOUS NETWORK EQUIPMENT AND MONITORING RESULTS SUMMARY

## 986c Station

### Equipment Operation Summary

| Parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Make / Model      | Serial Number |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------|--|
| SO2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Thermo / 43iQTL   | 1193585646    |  |
| <ul style="list-style-type: none"> <li>A successful monthly calibration was performed on July 3.</li> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                   |                   |               |  |
| TRS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Thermo / 43iQTL   | 1191833341    |  |
| <ul style="list-style-type: none"> <li>A successful monthly calibration was performed on July 3.</li> <li>Unstable span check responses started being recorded on June 28. The drift issue was corrected during the monthly calibration on July 3. As the analyzer passed the July monthly calibration, all data were deemed to be valid.</li> <li>The span response recovered slowly after the power was restored on July 26. The span results were back within the acceptable limits on July 28. As the issue was from the zero-span system, data quality was not affected.</li> </ul> |                   |               |  |
| THC/CH4/NMHC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Thermo / 55i      | 1193585652    |  |
| <ul style="list-style-type: none"> <li>A successful monthly calibration was performed on July 3.</li> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                   |                   |               |  |
| Relative Humidity (RH)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Rotronic / HC2-S3 | 20357528      |  |
| <ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                   |               |  |
| Barometric Pressure (BP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | MetOne / 092      | Y23358        |  |
| <ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                   |               |  |
| Ambient Temperature (AT)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Rotronic / HC2-S3 | 20357528      |  |
| <ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                   |               |  |

| Parameter                                                                                                                                                                                                                                                                      | Make / Model          | Serial Number |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------|--|
| Station Temperature (ST)                                                                                                                                                                                                                                                       | Bureau Veritas Canada | N/A           |  |
| <ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                            |                       |               |  |
| Precipitation (Precip)                                                                                                                                                                                                                                                         | RM Young 52202        | TB 16325      |  |
| <ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                            |                       |               |  |
| Wind Speed/Wind Direction (WS/ WD)                                                                                                                                                                                                                                             | RM Young / 05305L     | 174795        |  |
| <ul style="list-style-type: none"> <li>Wind direction data contained in this report represents where the wind is coming from.</li> <li>The annual wind system calibration was completed on July 3, 2021.</li> <li>No operational issues were identified this month.</li> </ul> |                       |               |  |

## Monitored Data Summary for 986c Station

| Parameter           | Objectives/Guidelines |       |        | Exceedances |       |        | Monthly Avg. | Min. 1-hr | Max. 1-hr | Date/Time          | VWS (km/hr) | VWD (sector) | Max. 24-hr | Date    | Operational Uptime (%) | Valid Data (%) |
|---------------------|-----------------------|-------|--------|-------------|-------|--------|--------------|-----------|-----------|--------------------|-------------|--------------|------------|---------|------------------------|----------------|
|                     | 1-hr                  | 24-hr | 30-day | 1-hr        | 24-hr | 30-day |              |           |           |                    |             |              |            |         |                        |                |
| SO2 (ppb)           | 172                   | 48    | 11     | 0           | 0     | 0      | 0.1          | 0         | 2         | July 30 at hour 23 | 10.9        | ESE          | 0.6        | July 31 | 90.9                   | 86.1           |
| TRS (ppb)           | 10                    | 3     | -      | -           | -     | -      | 0.24         | 0.00      | 1.15      | July 4 at hour 1   | 7.8         | NNW          | 0.49       | July 31 | 90.9                   | 86.0           |
| THC (ppm)           | -                     | -     | -      | -           | -     | -      | 1.96         | 1.86      | 2.14      | July 20 at hour 4  | 5.4         | E            | 2.07       | July 20 | 90.9                   | 86.1           |
| CH4 (ppm)           | -                     | -     | -      | -           | -     | -      | 1.96         | 1.86      | 2.14      | July 20 at hour 4  | 5.4         | E            | 2.07       | July 20 | 90.9                   | 86.1           |
| NMHC (ppm)          | -                     | -     | -      | -           | -     | -      | 0.00         | 0.00      | 0.07      | July 13 at hour 20 | 8.9         | ESE          | 0.01       | July 1  | 90.9                   | 86.1           |
| RH (%)              | -                     | -     | -      | -           | -     | -      | 69.5         | 24        | 100       | July 2 at hour 2   | 3.5         | WNW          | 97.9       | July 17 | 91.3                   | 91.3           |
| BP (millibar)       | -                     | -     | -      | -           | -     | -      | 943          | 932       | 952       | July 5 at hour 6   | 10.8        | E            | 951        | July 5  | 91.3                   | 91.3           |
| Ext. Temp. (°C)     | -                     | -     | -      | -           | -     | -      | 17.8         | 6.3       | 31.5      | July 31 at hour 16 | 4.6         | ENE          | 25.3       | July 1  | 91.3                   | 91.3           |
| Stn. Temp. (°C)     | -                     | -     | -      | -           | -     | -      | 22.5         | 21.3      | 24.2      | July 3 at hour 3   | 10.1        | W            | 23.2       | July 3  | 91.3                   | 91.3           |
| Precipitation (mm)* | -                     | -     | -      | -           | -     | -      | 10.5         | 0.0       | 1.6       | July 17 at hour 4  | 18.7        | ENE          | 6.7        | July 17 | 91.3                   | 91.3           |
| WSV (km/hr)         | -                     | -     | -      | -           | -     | -      | 1.8          | 0.5       | 28.5      | July 22 at hour 12 | 28.5        | SW           | 20.0       | July 22 | 91.3                   | 91.0           |
| WVDV (sector)       | -                     | -     | -      | -           | -     | -      | 195 (SSW)    | -         | -         | -                  | -           | -            | -          | -       | 91.3                   | 91.0           |

1- Date/ Time given is the first minimum and maximum value that was recorded

\* Data represents the total (sum) for the indicated time frame

## Alberta Ambient Air Quality Objectives (AAAQOs) Exceedances at 986c Station

The measured ambient air quality was within the AAAQOs for all monitored parameters.

## 842b Station

### Equipment Operation Summary

| Parameter                                                                                                                                                                                                                                                                                                                                                   | Make / Model          | Serial Number |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------|--|
| SO2                                                                                                                                                                                                                                                                                                                                                         | Thermo / 43iQTL       | 1200736629    |  |
| <ul style="list-style-type: none"> <li>A successful monthly calibration was performed on July 4.</li> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                      |                       |               |  |
| TRS                                                                                                                                                                                                                                                                                                                                                         | Thermo 43iQTL         | 1200736630    |  |
| <ul style="list-style-type: none"> <li>A successful monthly calibration was performed on July 4.</li> <li>The analyzer failed the daily zero-span check on July 2. A repeat zero-span check was completed on July 2 hour 6. The check result was within the acceptable limits. The analyzer was calibrated on July 4 to correct the drift issue.</li> </ul> |                       |               |  |
| THC/CH4/NMHC                                                                                                                                                                                                                                                                                                                                                | Thermo / 55i          | 1501663728    |  |
| <ul style="list-style-type: none"> <li>A successful monthly calibration was performed on July 4.</li> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                      |                       |               |  |
| Relative Humidity (RH)                                                                                                                                                                                                                                                                                                                                      | Rotronic / HC2A-S3    | 20370767      |  |
| <ul style="list-style-type: none"> <li>The RH sensor was checked on July 2. The sensor passed the check requirements.</li> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                 |                       |               |  |
| Barometric Pressure (BP)                                                                                                                                                                                                                                                                                                                                    | MetOne / 092          | Y23362        |  |
| <ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                         |                       |               |  |
| Station Temperature (ST)                                                                                                                                                                                                                                                                                                                                    | Bureau Veritas Canada | N/A           |  |
| <ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                         |                       |               |  |

| Parameter                                                                                                                                                                                                                                                                      | Make / Model       | Serial Number |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------|--|
| Ambient Temperature (AT)                                                                                                                                                                                                                                                       | Rotronic / HC2A-S3 | 20370767      |  |
| <ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                            |                    |               |  |
| Precipitation (Precip)                                                                                                                                                                                                                                                         | RM Young / 52202   | TB 15878      |  |
| <ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                            |                    |               |  |
| Wind Speed/Wind Direction (WS/ WD)                                                                                                                                                                                                                                             | RM Young / 05305AQ | 174802        |  |
| <ul style="list-style-type: none"> <li>Wind direction data contained in this report represents where the wind is coming from.</li> <li>The annual wind system calibration was completed on July 4, 2021.</li> <li>No operational issues were identified this month.</li> </ul> |                    |               |  |



## Monitored Data Summary for 842b Station

| Parameter           | Objectives/Guidelines |       |        | Exceedances |       |        | Monthly Avg. | Min. 1-hr | Max. 1-hr | Date/Time          | VWS (km/hr) | VWD (sector) | Max. 24-hr | Date    | Operational Uptime (%) | Valid Data (%) |
|---------------------|-----------------------|-------|--------|-------------|-------|--------|--------------|-----------|-----------|--------------------|-------------|--------------|------------|---------|------------------------|----------------|
|                     | 1-hr                  | 24-hr | 30-day | 1-hr        | 24-hr | 30-day |              |           |           |                    |             |              |            |         |                        |                |
| SO2 (ppb)           | 172                   | 48    | 11     | 0           | 0     | 0      | 0.0          | 0         | 0         | July 1 at hour 0   | 5.2         | ESE          | 0.0        | July 1  | 100.0                  | 94.7           |
| TRS (ppb)           | 10                    | 3     | -      | -           | -     | -      | 0.35         | 0.03      | 1.54      | July 9 at hour 5   | 3.7         | SE           | 0.55       | July 9  | 99.9                   | 94.6           |
| THC (ppm)           | -                     | -     | -      | -           | -     | -      | 1.86         | 1.77      | 2.11      | July 4 at hour 2   | 0.4         | SE           | 2.00       | July 1  | 100.0                  | 95.0           |
| CH4 (ppm)           | -                     | -     | -      | -           | -     | -      | 1.85         | 1.77      | 2.11      | July 4 at hour 2   | 0.4         | SE           | 1.97       | July 20 | 100.0                  | 95.0           |
| NMHC (ppm)          | -                     | -     | -      | -           | -     | -      | 0.01         | 0.00      | 0.14      | July 31 at hour 19 | 3.1         | E            | 0.07       | July 1  | 100.0                  | 95.0           |
| RH (%)              | -                     | -     | -      | -           | -     | -      | 64.5         | 24        | 100       | July 21 at hour 4  | 3.1         | SSE          | 94.7       | July 17 | 100.0                  | 100.0          |
| BP (millibar)       | -                     | -     | -      | -           | -     | -      | 942          | 931       | 951       | July 5 at hour 6   | 4.1         | ESE          | 950        | July 5  | 100.0                  | 100.0          |
| Ext. Temp. (°C)     | -                     | -     | -      | -           | -     | -      | 17.7         | 4.7       | 31.2      | July 31 at hour 16 | 3.8         | E            | 25.8       | July 1  | 100.0                  | 100.0          |
| Stn. Temp. (°C)     | -                     | -     | -      | -           | -     | -      | 22.6         | 20.7      | 23.9      | July 3 at hour 2   | 11.3        | W            | 23.4       | July 3  | 100.0                  | 100.0          |
| Precipitation (mm)* | -                     | -     | -      | -           | -     | -      | 19.6         | 0.0       | 3.0       | July 17 at hour 3  | 8.1         | ENE          | 13.7       | July 17 | 100.0                  | 100.0          |
| WSV (km/hr)         | -                     | -     | -      | -           | -     | -      | 3.3          | 0.0       | 30.6      | July 22 at hour 16 | 30.6        | WSW          | 19.3       | July 22 | 100.0                  | 99.7           |
| WDDV (sector)       | -                     | -     | -      | -           | -     | -      | 236 (SW)     | -         | -         | -                  | -           | -            | -          | -       | 100.0                  | 99.7           |

1- Date/ Time given is the first minimum and maximum value that was recorded

\* Data represents the total (sum) for the indicated time frame

## Alberta Ambient Air Quality Objectives (AAAQOs) Exceedances at 842b Station

The measured ambient air quality was within the AAAQOs for all monitored parameters.

## Reno Station

### Equipment Operation Summary

| Parameter                                                                                                                                                                                                                                                                                                                                                                                                                                           | Make / Model              | Serial Number          |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------|--|
| <b>SO2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>API / 100A</b>         | <b>1502</b>            |  |
| <ul style="list-style-type: none"> <li>A successful monthly calibration was performed on July 5.</li> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                                              |                           |                        |  |
| <b>TRS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Thermo / 43i-TLE</b>   | <b>1162460022</b>      |  |
| <ul style="list-style-type: none"> <li>A successful monthly calibration was performed on July 5.</li> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                                              |                           |                        |  |
| <b>THC/CH4/NMHC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Thermo / 55i</b>       | <b>1505664392</b>      |  |
| <ul style="list-style-type: none"> <li>A successful monthly calibration was performed on July 5.</li> <li>The analyzer failed the daily zero-span check on July 19. A repeat zero-span check was completed at hour 12 to investigate the drift, confirming span gas depletion. The span gas bottle was replaced following by a zero-span check on July 19 hour 17. Two hours of downtime were recorded due to additional quality checks.</li> </ul> |                           |                        |  |
| <b>Relative Humidity (RH)</b>                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>RM Young / 43172VC</b> | <b>60837897</b>        |  |
| <ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                                                                                                                 |                           |                        |  |
| <b>Barometric Pressure (BP)</b>                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>MetOne / 092</b>       | <b>R12877 / K12864</b> |  |
| <ul style="list-style-type: none"> <li>The BP sensor malfunctioned on July 10 hour 21. On July 19 hour 17, the MetOne sensor, s/n: R12877, was removed, and the MetOne 092 sensor, s/n: K12864, was installed. Two hundred thirteen hours of downtime were recorded due to this event.</li> </ul>                                                                                                                                                   |                           |                        |  |
| <b>Ambient Temperature (AT)</b>                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>RM Young / 43172VC</b> | <b>60837897</b>        |  |
| <ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                                                                                                                 |                           |                        |  |

| Parameter                                                                                                                                                                                                                                                                      | Make / Model          | Serial Number |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------|--|
| Station Temperature (ST)                                                                                                                                                                                                                                                       | Bureau Veritas Canada | N/A           |  |
| <ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                            |                       |               |  |
| Precipitation (Precip)                                                                                                                                                                                                                                                         | RM Young / 5202       | TB15877       |  |
| <ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                            |                       |               |  |
| Wind Speed/Wind Direction (WS/ WD)                                                                                                                                                                                                                                             | RM Young / 5305VK     | 149769        |  |
| <ul style="list-style-type: none"> <li>Wind direction data contained in this report represents where the wind is coming from.</li> <li>The annual wind system calibration was completed on July 5, 2021.</li> <li>No operational issues were identified this month.</li> </ul> |                       |               |  |

## Monitored Data Summary for Reno Station

| Parameter           | Objectives/Guidelines |       |        | Exceedances |       |        | Monthly Avg. | Min. 1-hr | Max. 1-hr | Date/Time          | VWS (km/hr) | VWD (sector) | Max. 24-hr | Date    | Operational Uptime (%) | Valid Data (%) |
|---------------------|-----------------------|-------|--------|-------------|-------|--------|--------------|-----------|-----------|--------------------|-------------|--------------|------------|---------|------------------------|----------------|
|                     | 1-hr                  | 24-hr | 30-day | 1-hr        | 24-hr | 30-day |              |           |           |                    |             |              |            |         |                        |                |
| SO2 (ppb)           | 172                   | 48    | 11     | 0           | 0     | 0      | 0.0          | 0         | 1         | July 6 at hour 2   | 4.2         | E            | 0.0        | July 30 | 100.0                  | 95.0           |
| TRS (ppb)           | 10                    | 3     | -      | -           | -     | -      | 0.41         | 0.00      | 5.26      | July 1 at hour 3   | 0.3         | SW           | 1.29       | July 14 | 100.0                  | 94.7           |
| THC (ppm)           | -                     | -     | -      | -           | -     | -      | 1.89         | 1.79      | 2.17      | July 9 at hour 23  | 1.4         | SW           | 1.99       | July 1  | 99.7                   | 94.7           |
| CH4 (ppm)           | -                     | -     | -      | -           | -     | -      | 1.89         | 1.79      | 2.17      | July 9 at hour 23  | 1.4         | SW           | 1.99       | July 1  | 99.7                   | 94.7           |
| NMHC (ppm)          | -                     | -     | -      | -           | -     | -      | 0.00         | 0.00      | 0.03      | July 19 at hour 18 | 1.4         | SSE          | 0.00       | July 19 | 99.7                   | 94.7           |
| RH (%)              | -                     | -     | -      | -           | -     | -      | 60.7         | 19        | 100       | July 5 at hour 3   | 1.5         | ENE          | 96.2       | July 17 | 100.0                  | 100.0          |
| BP (millibar)       | -                     | -     | -      | -           | -     | -      | 940          | 930       | 949       | July 31 at hour 4  | 1.9         | SE           | 947        | July 31 | 71.4                   | 71.4           |
| Ext. Temp. (°C)     | -                     | -     | -      | -           | -     | -      | 17.9         | 7.0       | 31.0      | July 9 at hour 17  | 4.4         | SW           | 25.7       | July 1  | 100.0                  | 100.0          |
| Stn. Temp. (°C)     | -                     | -     | -      | -           | -     | -      | 23.2         | 21.5      | 24.4      | July 5 at hour 23  | 2.8         | ENE          | 23.9       | July 17 | 100.0                  | 100.0          |
| Precipitation (mm)* | -                     | -     | -      | -           | -     | -      | 13.0         | 0.0       | 3.0       | July 17 at hour 2  | 7.3         | ENE          | 6.6        | July 17 | 100.0                  | 100.0          |
| WSV (km/hr)         | -                     | -     | -      | -           | -     | -      | 2.0          | 0.0       | 18.4      | July 22 at hour 14 | 18.4        | WSW          | 11.9       | July 23 | 100.0                  | 99.6           |
| WDV (sector)        | -                     | -     | -      | -           | -     | -      | 247 (WSW)    | -         | -         | -                  | -           | -            | -          | -       | 100.0                  | 99.6           |

1- Date/ Time given is the first minimum and maximum value that was recorded

\* Data represents the total (sum) for the indicated time frame

## Alberta Ambient Air Quality Objectives (AAAQOs) Exceedances at Reno Station

The measured ambient air quality was within the AAAQOs for all monitored parameters.

## AQHI – Cadotte Lake Station

### Equipment Operation Summary

| Parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Make / Model    | Serial Number |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------|--|
| SO2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Teledyne / T100 | 722           |  |
| <ul style="list-style-type: none"> <li>A successful monthly calibration was performed on July 22.</li> <li>The analyzer malfunctioned on July 16 hour 16. The analyzer was restarted and restored on July 17 hour 14. A repeat zero-span checks were completed on July 17 hour 18 and July 18 hour 6 to confirm the analyzer's functionality. Twenty-four hours of downtime were recorded due to this event.</li> </ul>                                                                                                                                                                         |                 |               |  |
| TRS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Teledyne T100U  | 132           |  |
| <ul style="list-style-type: none"> <li>Due to communication issues between the datalogger and the analyzer, the analyzer was reset on July 17. A repeat zero-span check was completed at hour 13 and 14 to confirm the analyzer's functionality. Two hours of downtime were recorded due to additional quality check.</li> <li>A successful monthly calibration was performed on July 22.</li> <li>Hourly data collected on July 22 hour 19 to hour 21 were missing due to analyzer issue. The issue was corrected by resetting the analyzer. Three hours of downtime were recorded.</li> </ul> |                 |               |  |
| NOx/NO/NO2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Teledyne / T200 | 837           |  |
| <ul style="list-style-type: none"> <li>A successful monthly calibration was performed on July 21.</li> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                         |                 |               |  |
| O3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Teledyne / T400 | 824           |  |
| <ul style="list-style-type: none"> <li>A successful monthly calibration was performed on July 22.</li> <li>Following a shut-down calibration on July 17, the analyzer was put offline for a scheduled maintenance to correct issues of the daily zero drift. A successful post-repair calibration was completed on July 18. Fifteen hours of downtime were recorded due to this maintenance.</li> </ul>                                                                                                                                                                                         |                 |               |  |

| Parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Make / Model          | Serial Number |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------|--|
| THC/CH4/NMHC                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Thermo / 55i          | 1191032505    |  |
| <ul style="list-style-type: none"> <li>Both the N2 gas bottle and span gas bottle were replaced on July 20 hour 16. Faulty sample injections started being observed after the N2 gas bottle replacement. The issue was corrected during the monthly calibration on July 21. Data collected between July 20 hour 17 and July 21 hour 9 were discarded due to this issue. Eighteen hours of downtime were recorded due to the injection issues and maintenance activities.</li> </ul> |                       |               |  |
| PM 2.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Teledyne / T640       | 318           |  |
| <ul style="list-style-type: none"> <li>Anomalous data were recorded, commencing July 2 hour 17 due to an equipment error. The PM unit was reset remotely on July 8, and valid data started being recorded on July 9 hour 9. One hundred sixty hours of downtime were recorded due to this event.</li> <li>A successful monthly calibration was performed on July 21.</li> </ul>                                                                                                     |                       |               |  |
| Relative Humidity (RH)                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Vaisala / HMP155      | N2910506      |  |
| <ul style="list-style-type: none"> <li>The sensor was checked on July 21. The sensor passed the check requirements.</li> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                                                           |                       |               |  |
| Barometric Pressure (BP)                                                                                                                                                                                                                                                                                                                                                                                                                                                            | MetOne / 092          | A23927        |  |
| <ul style="list-style-type: none"> <li>The sensor was checked on July 21. The sensor passed the check requirements.</li> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                                                           |                       |               |  |
| Ambient Temperature (AT)                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Vaisala / HMP155      | N2910506      |  |
| <ul style="list-style-type: none"> <li>The sensor was checked on July 21. The sensor passed the check requirements.</li> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                                                           |                       |               |  |
| Station Temperature (ST)                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Bureau Veritas Canada | N/A           |  |
| <ul style="list-style-type: none"> <li>No operational issues were identified this month.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                 |                       |               |  |

| Parameter                                                                                                                                                                                                                                                                                                                                                                                  | Make / Model     | Serial Number |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------|--|
| Wind Speed/Wind Direction (WS/ WD)                                                                                                                                                                                                                                                                                                                                                         | RM Young 05305AQ | 174801        |  |
| <ul style="list-style-type: none"> <li>• Wind direction data contained in this report represents where the wind is coming from.</li> <li>• The annual wind system calibration was completed on July 22, 2021.</li> <li>• The anemometer sensors were checked on July 21. The sensor passed the check requirements.</li> <li>• No operational issues were identified this month.</li> </ul> |                  |               |  |

## Monitored Data Summary for AQHI - Cadotte Lake Station

| Parameter       | Objectives/Guidelines |       |        | Exceedances |       |        | Monthly Avg. | Min. 1-hr | Max. 1-hr | Date/Time          | VWS (km/hr) | VWD (sector) | Max. 24-hr | Date    | Operational Uptime (%) | Valid Data (%) |
|-----------------|-----------------------|-------|--------|-------------|-------|--------|--------------|-----------|-----------|--------------------|-------------|--------------|------------|---------|------------------------|----------------|
|                 | 1-hr                  | 24-hr | 30-day | 1-hr        | 24-hr | 30-day |              |           |           |                    |             |              |            |         |                        |                |
| SO2 (ppb)       | 172                   | 48    | 11     | 0           | 0     | 0      | 0.0          | 0         | 0         | July 1 at hour 0   | 7.8         | E            | 0.0        | July 1  | 96.1                   | 90.8           |
| TRS (ppb)       | 10                    | 3     | -      | -           | -     | -      | 0.44         | 0.00      | 2.80      | July 9 at hour 7   | 0.2         | ESE          | 0.93       | July 1  | 98.7                   | 93.1           |
| NOx (ppb)       | -                     | -     | -      | -           | -     | -      | 0.6          | 0         | 6         | July 29 at hour 7  | 0.1         | SE           | 1.9        | July 29 | 99.3                   | 93.8           |
| NO (ppb)        | -                     | -     | -      | -           | -     | -      | 0.1          | 0         | 3         | July 5 at hour 5   | 0.2         | SSW          | 0.6        | July 29 | 99.3                   | 93.8           |
| NO2 (ppb)       | 159                   | -     | -      | 0           | -     | -      | 0.5          | 0         | 4         | July 9 at hour 8   | 0.9         | SE           | 1.4        | July 9  | 99.3                   | 93.8           |
| O3 (ppb)        | 76                    | -     | -      | 0           | -     | -      | 25.6         | 2         | 66        | July 14 at hour 17 | 12.6        | WSW          | 40.0       | July 14 | 99.3                   | 94.3           |
| THC (ppm)       | -                     | -     | -      | -           | -     | -      | 1.99         | 1.88      | 2.36      | July 8 at hour 6   | 0.3         | W            | 2.08       | July 1  | 96.9                   | 91.8           |
| CH4 (ppm)       | -                     | -     | -      | -           | -     | -      | 1.98         | 1.88      | 2.31      | July 8 at hour 6   | 0.3         | W            | 2.03       | July 19 | 96.9                   | 91.8           |
| NMHC (ppm)      | -                     | -     | -      | -           | -     | -      | 0.02         | 0.00      | 0.16      | July 1 at hour 14  | 10.9        | W            | 0.08       | July 1  | 96.9                   | 91.8           |
| PM2.5 (µg/m3)   | 80                    | 30    | -      | 17          | 7     | -      | 20.7         | 0.9       | 153.9     | July 17 at hour 17 | 7.1         | E            | 63.3       | July 18 | 77.8                   | 77.7           |
| RH (%)          | -                     | -     | -      | -           | -     | -      | 66.6         | 22        | 99        | July 18 at hour 1  | 4.6         | E            | 92.0       | July 18 | 99.5                   | 99.5           |
| BP (millibar)   | -                     | -     | -      | -           | -     | -      | 947          | 935       | 956       | July 5 at hour 6   | 3.7         | E            | 955        | July 18 | 99.5                   | 99.5           |
| Ext. Temp. (°C) | -                     | -     | -      | -           | -     | -      | 17.0         | 2.8       | 33.0      | July 1 at hour 13  | 3.1         | WSW          | 27.4       | July 1  | 99.5                   | 99.5           |
| Stn. Temp. (°C) | -                     | -     | -      | -           | -     | -      | 22.7         | 20.9      | 26.5      | July 1 at hour 16  | 11.8        | NW           | 23.3       | July 17 | 99.5                   | 99.5           |
| WSV (km/hr)     | -                     | -     | -      | -           | -     | -      | 1.8          | 0.0       | 25.9      | July 22 at hour 17 | 25.9        | WSW          | 17.1       | July 23 | 99.5                   | 99.1           |
| WDV (sector)    | -                     | -     | -      | -           | -     | -      | 258 (WSW)    | -         | -         | -                  | -           | -            | -          | -       | 99.5                   | 99.1           |

1- Date/ Time given is the first minimum and maximum value that was recorded



### Alberta Ambient Air Quality Objectives (AAAQOs) Exceedances at AQHI - Cadotte Lake Station

The following exceedances of AAAQOs were observed at the AQHI - Cadotte Lake Station.

| Date    | Time (MST) | Parameter | Average Period | AAAQOs   | Concentration | Wind speed | Wind Direction | Reference # |
|---------|------------|-----------|----------------|----------|---------------|------------|----------------|-------------|
| July 10 | -          | PM2.5     | 24-Hour        | 30 µg/m3 | 32.3 µg/m3    | 5.4 km/hr  | 261° (W)       | 381043      |
| July 14 | 17         | PM2.5     | 1-Hour         | 80 µg/m3 | 92 µg/m3      | 12.6 km/hr | 246° (WSW)     | 381256      |
| July 14 | 18         | PM2.5     | 1-Hour         | 80 µg/m3 | 140 µg/m3     | 12.5 km/hr | 255° (WSW)     | 381256      |
| July 14 | 19         | PM2.5     | 1-Hour         | 80 µg/m3 | 123 µg/m3     | 8.5 km/hr  | 248° (WSW)     | 381256      |
| July 14 | 20         | PM2.5     | 1-Hour         | 80 µg/m3 | 102 µg/m3     | 0.5 km/hr  | 257° (WSW)     | 381256      |
| July 14 | 21         | PM2.5     | 1-Hour         | 80 µg/m3 | 91 µg/m3      | 0.8 km/hr  | 62° (ENE)      | 381256      |
| July 14 | 22         | PM2.5     | 1-Hour         | 80 µg/m3 | 88 µg/m3      | 0.8 km/hr  | 16° (NNE)      | 381256      |
| July 14 | -          | PM2.5     | 24-Hour        | 30 µg/m3 | 43.6 µg/m3    | 2.4 km/hr  | 176° (S)       | 381256      |
| July 17 | 16         | PM2.5     | 1-Hour         | 80 µg/m3 | 110 µg/m3     | 7.3 km/hr  | 88° (E)        | 381256      |
| July 17 | 17         | PM2.5     | 1-Hour         | 80 µg/m3 | 154 µg/m3     | 7.1 km/hr  | 84° (E)        | 381256      |
| July 17 | 18         | PM2.5     | 1-Hour         | 80 µg/m3 | 134 µg/m3     | 7.9 km/hr  | 87° (E)        | 381256      |
| July 17 | 19         | PM2.5     | 1-Hour         | 80 µg/m3 | 92 µg/m3      | 6.1 km/hr  | 90° (E)        | 381256      |
| July 17 | -          | PM2.5     | 24-Hour        | 30 µg/m3 | 52.2 µg/m3    | 9.7 km/hr  | 87° (E)        | 381256      |
| July 18 | 1          | PM2.5     | 1-Hour         | 80 µg/m3 | 86 µg/m3      | 4.6 km/hr  | 91° (E)        | 381256      |
| July 18 | 2          | PM2.5     | 1-Hour         | 80 µg/m3 | 89 µg/m3      | 5.4 km/hr  | 88° (E)        | 381256      |
| July 18 | 3          | PM2.5     | 1-Hour         | 80 µg/m3 | 94 µg/m3      | 5.1 km/hr  | 87° (E)        | 381256      |
| July 18 | 4          | PM2.5     | 1-Hour         | 80 µg/m3 | 95 µg/m3      | 5.3 km/hr  | 92° (E)        | 381256      |
| July 18 | 5          | PM2.5     | 1-Hour         | 80 µg/m3 | 92 µg/m3      | 5.9 km/hr  | 94° (E)        | 381256      |
| July 18 | 6          | PM2.5     | 1-Hour         | 80 µg/m3 | 91 µg/m3      | 6.7 km/hr  | 93° (E)        | 381256      |
| July 18 | 7          | PM2.5     | 1-Hour         | 80 µg/m3 | 86 µg/m3      | 6.5 km/hr  | 94° (E)        | 381256      |
| July 18 | -          | PM2.5     | 24-Hour        | 30 µg/m3 | 63.3 µg/m3    | 5.6 km/hr  | 90° (E)        | 381256      |
| July 19 | -          | PM2.5     | 24-Hour        | 30 µg/m3 | 51.5 µg/m3    | 4.7 km/hr  | 118° (ESE)     | 381445      |
| July 20 | -          | PM2.5     | 24-Hour        | 30 µg/m3 | 56.3 µg/m3    | 4.4 km/hr  | 97° (E)        | 381445      |
| July 21 | -          | PM2.5     | 24-Hour        | 30 µg/m3 | 45.8 µg/m3    | 3.2 km/hr  | 102° (E)       | 381445      |

The exceedances of the PM2.5 objective and guideline recorded this month is believed to be the result of wildfire from north Saskatchewan, given the low wind speeds recorded at the time.

## TABLES, CHARTS, WIND ROSES AND EQUIPMENT CALIBRATION RECORDS

986c STATION



# PEACE RIVER AREA MONITORING PROGRAM

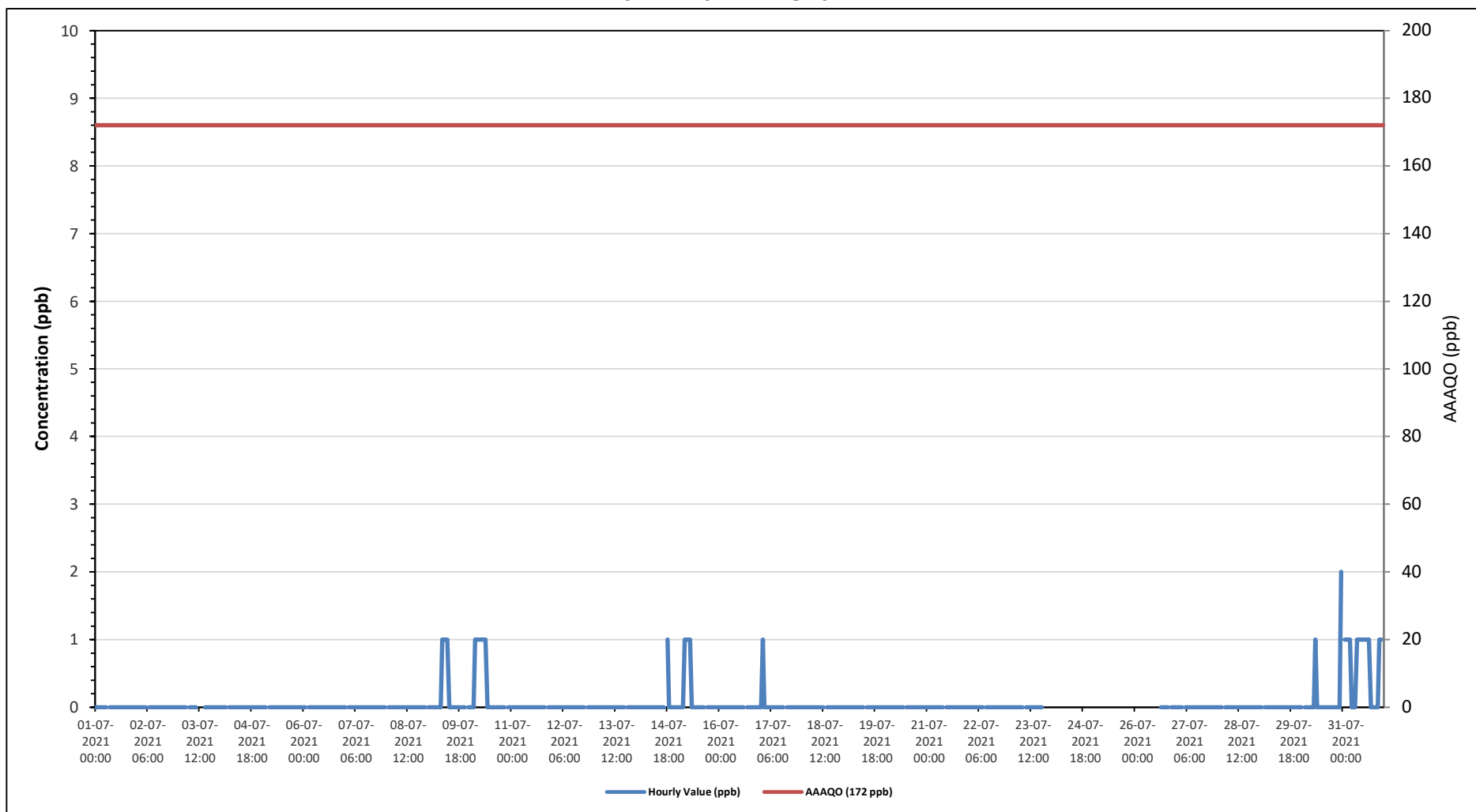
986c Station - July 2021

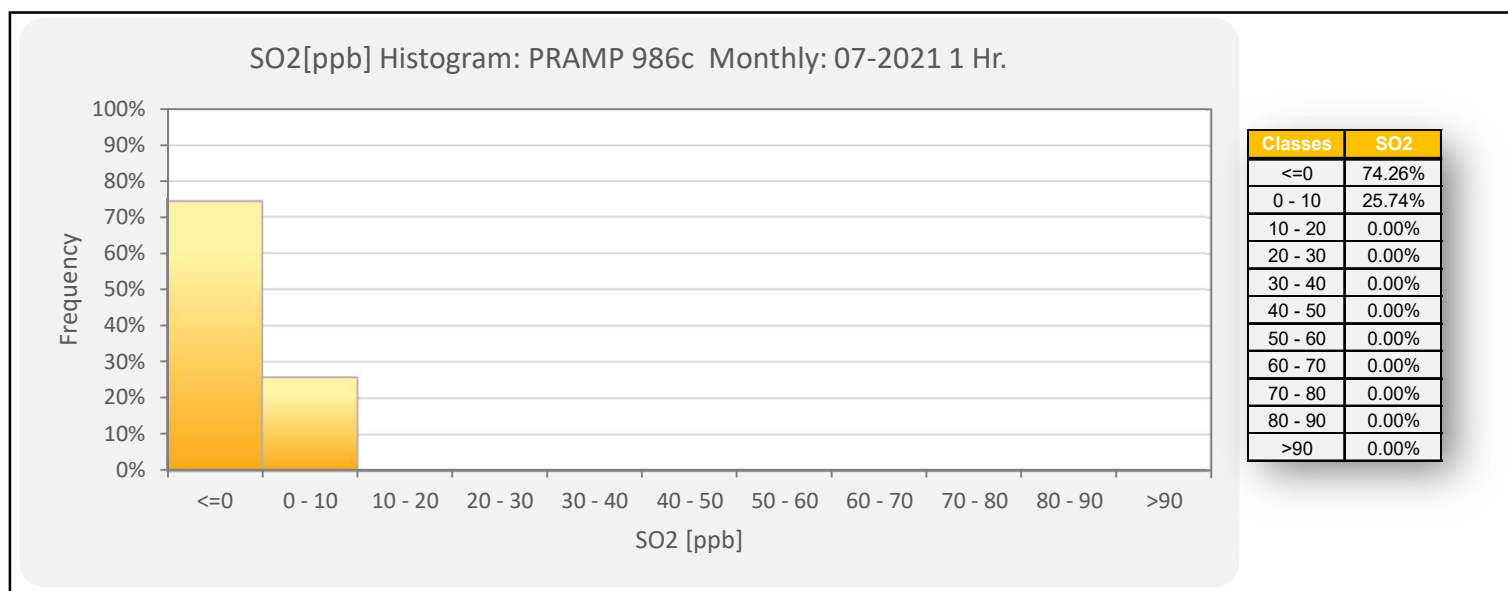
Summary of Hourly Averages

SULPHUR DIOXIDE (SO<sub>2</sub>) in ppb

| Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb           |                                                |     |     |                             |     |     |     |                                |                                                                                         |     |     |      |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|-----|-----|-----------------------------|-----|-----|-----|--------------------------------|-----------------------------------------------------------------------------------------|-----|-----|------|-----|-----|-----|--------------------|---------------------|-----|-----|-----|-----|-----|-----|---------------|---------------|---------------|-----|
| Number of 1-Hour Exceedances:                                                                           |                                                |     |     | 0                           |     |     |     | Number of 24-Hour Exceedances: |                                                                                         |     |     | 0    |     |     |     | 30-Day Exceedance: |                     |     |     | 0   |     |     |     |               |               |               |     |
| Maximum Hourly Value:                                                                                   |                                                |     |     | 2 ppb on July 30 at hour 23 |     |     |     | Hours in Service:              |                                                                                         |     |     | 744  |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |
| Maximum Daily Value:                                                                                    |                                                |     |     | 0.6 ppb on July 31          |     |     |     | Hours of Data:                 |                                                                                         |     |     | 641  |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |
| Minimum Hourly Value:                                                                                   |                                                |     |     | 0 ppb on July 1 at hour 0   |     |     |     | Hours of Missing Data:         |                                                                                         |     |     | 68   |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |
| Minimum Daily Value:                                                                                    |                                                |     |     | 0.0 ppb on July 1           |     |     |     | Hours of Calibration:          |                                                                                         |     |     | 35   |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |
| Monthly Average:                                                                                        |                                                |     |     | 0.1 ppb                     |     |     |     | Operational Uptime:            |                                                                                         |     |     | 90.9 |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |
| Day                                                                                                     | Hourly Period Starting at (MST)                |     |     |                             |     |     |     |                                |                                                                                         |     |     |      |     |     |     |                    |                     |     |     |     |     |     |     | Daily Minimum | Daily Maximum | Daily Average |     |
|                                                                                                         | 0                                              | 1   | 2   | 3                           | 4   | 5   | 6   | 7                              | 8                                                                                       | 9   | 10  | 11   | 12  | 13  | 14  | 15                 | 16                  | 17  | 18  | 19  | 20  | 21  | 22  | 23            |               |               |     |
| Jul 1                                                                                                   | 0                                              | 0   | 0   | 0                           | 0   | 0   | 0   | S                              | 0                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 2                                                                                                   | 0                                              | 0   | 0   | 0                           | 0   | 0   | S   | 0                              | 0                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 3                                                                                                   | 0                                              | 0   | 0   | 0                           | 0   | S   | 0   | 0                              | 0                                                                                       | 0   | 0   | C    | C   | C   | C   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 4                                                                                                   | 0                                              | 0   | 0   | 0                           | S   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 5                                                                                                   | 0                                              | 0   | 0   | S                           | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 6                                                                                                   | 0                                              | 0   | S   | 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 |
| Jul 7                                                                                                   | 0                                              | S   | 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 |
| Jul 8                                                                                                   | S                                              | 0   | 0   | 0                           | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | S             | 0             | 0.0 |
| Jul 9                                                                                                   | 0                                              | 0   | 0   | 0                           | 0   | 0   | 0   | 0                              | 1                                                                                       | 1   | 1   | 1    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | S   | 0             | 0             | 1             | 0.2 |
| Jul 10                                                                                                  | 0                                              | 0   | 0   | 1                           | 1   | 1   | 1   | 1                              | 1                                                                                       | 1   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | S   | 0   | 0             | 0             | 1             | 0.3 |
| Jul 11                                                                                                  | 0                                              | 0   | 0   | 0                           | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | S   | S   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 12                                                                                                  | 0                                              | 0   | 0   | 0                           | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | S   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 13                                                                                                  | 0                                              | 0   | 0   | 0                           | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | S   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 14                                                                                                  | 0                                              | 0   | 0   | 0                           | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | S   | 1   | 0   | 0   | 0   | 0   | 0             | 0             | 1             | 0.0 |
| Jul 15                                                                                                  | 0                                              | 0   | 0   | 0                           | 1   | 1   | 1   | 1                              | 0                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | S                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 1             | 0.2 |
| Jul 16                                                                                                  | 0                                              | 0   | 0   | 0                           | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | S                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 17                                                                                                  | 0                                              | 1   | 0   | 0                           | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0    | 0   | 0   | S   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 1             | 0.0 |
| Jul 18                                                                                                  | 0                                              | 0   | 0   | 0                           | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0    | S   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 19                                                                                                  | 0                                              | 0   | 0   | 0                           | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | S    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 20                                                                                                  | 0                                              | 0   | 0   | 0                           | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | S   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 21                                                                                                  | 0                                              | 0   | 0   | 0                           | 0   | 0   | 0   | 0                              | 0                                                                                       | S   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 22                                                                                                  | 0                                              | 0   | 0   | 0                           | 0   | 0   | 0   | 0                              | S                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 23                                                                                                  | 0                                              | 0   | 0   | 0                           | 0   | 0   | 0   | 0                              | S                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | P   | P   | P   | P   | P             | 0             | 0             | 0.0 |
| Jul 24                                                                                                  | P                                              | P   | P   | P                           | P   | P   | P   | P                              | P                                                                                       | P   | P   | P    | P   | P   | P   | P                  | P                   | P   | P   | P   | P   | P   | P   | P             | -             | -             | -   |
| Jul 25                                                                                                  | P                                              | P   | P   | P                           | P   | P   | P   | P                              | P                                                                                       | P   | P   | P    | P   | P   | P   | P                  | P                   | P   | P   | P   | P   | P   | P   | P             | -             | -             | -   |
| Jul 26                                                                                                  | P                                              | P   | P   | P                           | P   | P   | P   | P                              | P                                                                                       | P   | P   | P    | X   | S   | 0   | 0                  | 0                   | 0   | 0   | 0   | NRM | 0   | 0   | 0             | 0             | -             | -   |
| Jul 27                                                                                                  | 0                                              | 0   | 0   | 0                           | S   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 28                                                                                                  | 0                                              | 0   | 0   | S                           | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 29                                                                                                  | 0                                              | 0   | S   | 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 |
| Jul 30                                                                                                  | 0                                              | S   | 0   | 0                           | 0   | 0   | 0   | 0                              | 1                                                                                       | 0   | 0   | 0    | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 2             | 0             | 0.1 |
| Jul 31                                                                                                  | S                                              | 1   | 1   | 1                           | 1   | 0   | 0   | 0                              | 1                                                                                       | 1   | 1   | 1    | 1   | 1   | 1   | 1                  | 0                   | 0   | 0   | 0   | 0   | 1   | 1   | S             | 0             | 1             | 0.6 |
| Diurnal Maximum                                                                                         | 0                                              | 1   | 1   | 1                           | 1   | 1   | 1   | 1                              | 1                                                                                       | 1   | 1   | 1    | 1   | 1   | 1   | 1                  | 0                   | 0   | 1   | 0   | 0   | 1   | 1   | 2             |               |               |     |
| Diurnal Average                                                                                         | 0.0                                            | 0.1 | 0.0 | 0.1                         | 0.1 | 0.1 | 0.1 | 0.1                            | 0.1                                                                                     | 0.1 | 0.1 | 0.1  | 0.0 | 0.0 | 0.0 | 0.0                | 0.0                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1           |               |               |     |
| C                                                                                                       | Monthly Calibration                            |     |     |                             |     |     |     | S                              | Daily Zero-Span Check                                                                   |     |     |      |     |     |     | Q                  | Quality Assurance   |     |     |     |     |     |     |               |               |               |     |
| K                                                                                                       | Collection Error                               |     |     |                             |     |     |     | N                              | No Data (Machine Not in Service)                                                        |     |     |      |     |     |     | Y                  | Routine Maintenance |     |     |     |     |     |     |               |               |               |     |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |     |     |                             |     |     |     | NRM                            | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |     |     |      |     |     |     |                    | P Power Failure     |     |     |     |     |     |     |               |               |               |     |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |     |     |                             |     |     |     |                                |                                                                                         |     |     |      |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |     |     |                             |     |     |     |                                |                                                                                         |     |     |      |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |

**Timeseries Chart of Hourly Average for SO<sub>2</sub> - 986c Station**

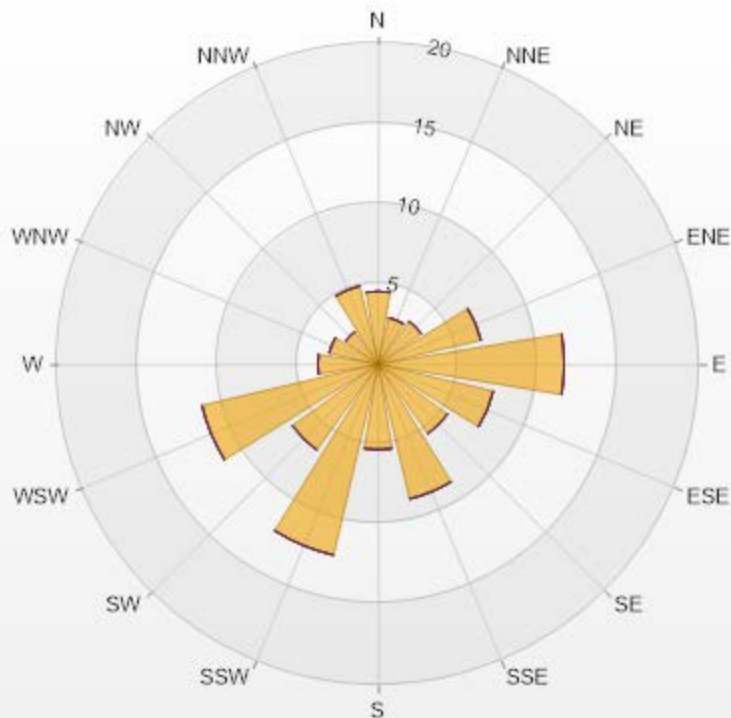




Wind: PRAMP 986c Poll.: PRAMP 986c-SO2[ppb] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.

Calm: 0.00% Valid Data: 85.89% Calm Avg: 0.00 [ppb]

| Direction | 0-10  | 10-50 | 50-100 | 100-172 | >172.0 | Total |
|-----------|-------|-------|--------|---------|--------|-------|
| N         | 4.54  | 0     | 0      | 0       | 0      | 4.54  |
| NNE       | 2.97  | 0     | 0      | 0       | 0      | 2.97  |
| NE        | 3.29  | 0     | 0      | 0       | 0      | 3.29  |
| ENE       | 6.57  | 0     | 0      | 0       | 0      | 6.57  |
| E         | 11.58 | 0     | 0      | 0       | 0      | 11.58 |
| ESE       | 7.36  | 0     | 0      | 0       | 0      | 7.36  |
| SE        | 5.32  | 0     | 0      | 0       | 0      | 5.32  |
| SSE       | 8.61  | 0     | 0      | 0       | 0      | 8.61  |
| S         | 5.32  | 0     | 0      | 0       | 0      | 5.32  |
| SSW       | 12.21 | 0     | 0      | 0       | 0      | 12.21 |
| SW        | 6.57  | 0     | 0      | 0       | 0      | 6.57  |
| WSW       | 11.27 | 0     | 0      | 0       | 0      | 11.27 |
| W         | 3.76  | 0     | 0      | 0       | 0      | 3.76  |
| WNW       | 3.13  | 0     | 0      | 0       | 0      | 3.13  |
| NW        | 2.5   | 0     | 0      | 0       | 0      | 2.5   |
| NNW       | 5.01  | 0     | 0      | 0       | 0      | 5.01  |
| Summary   | 100   | 0     | 0      | 0       | 0      | 100   |



PRAMP-202107

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% Icon Classes (ppb)

100

0-10

0

10-50

0

50-100

0

100-172

0

>172.0





# PEACE RIVER AREA MONITORING PROGRAM

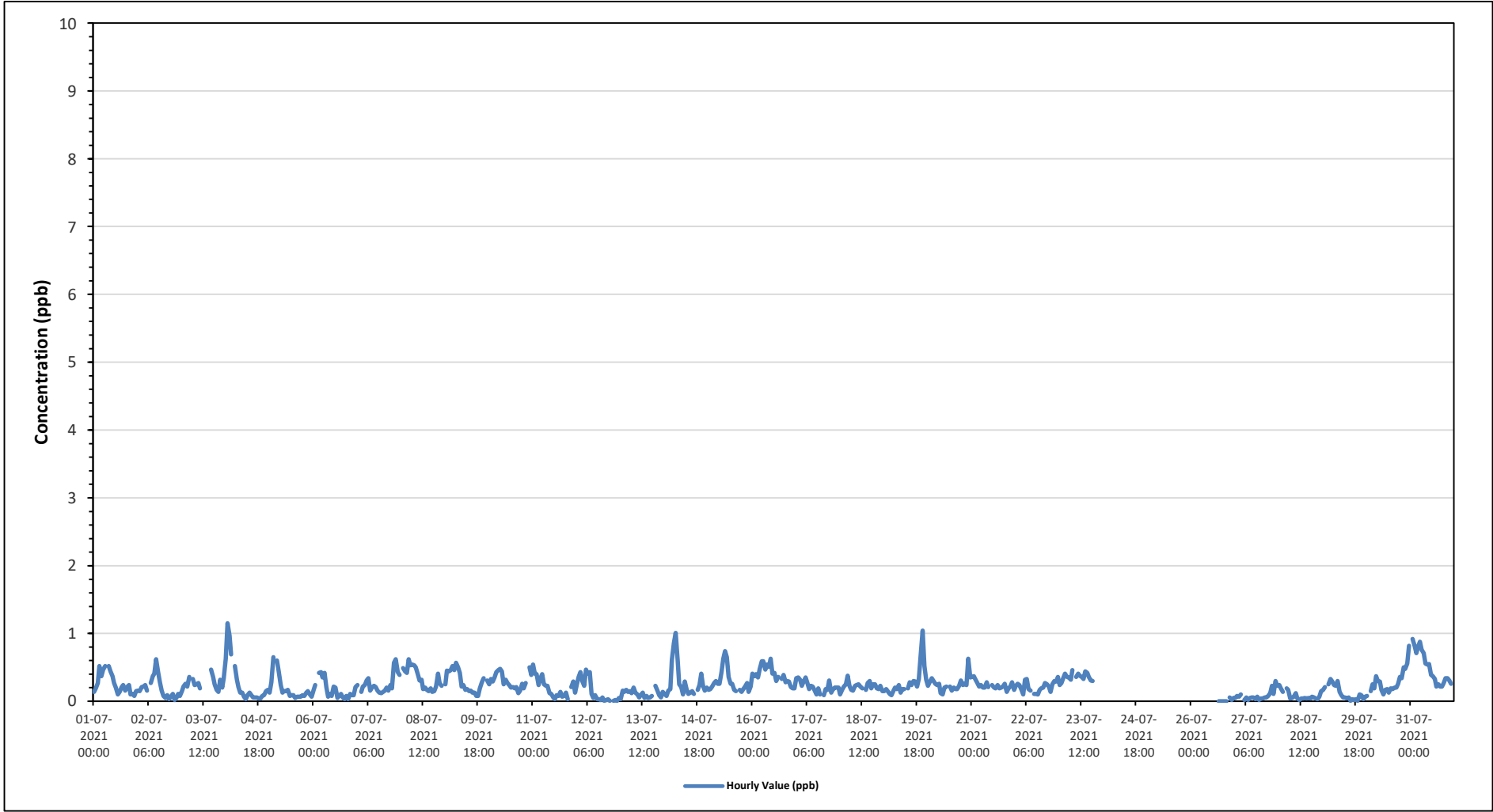
986c Station - July 2021

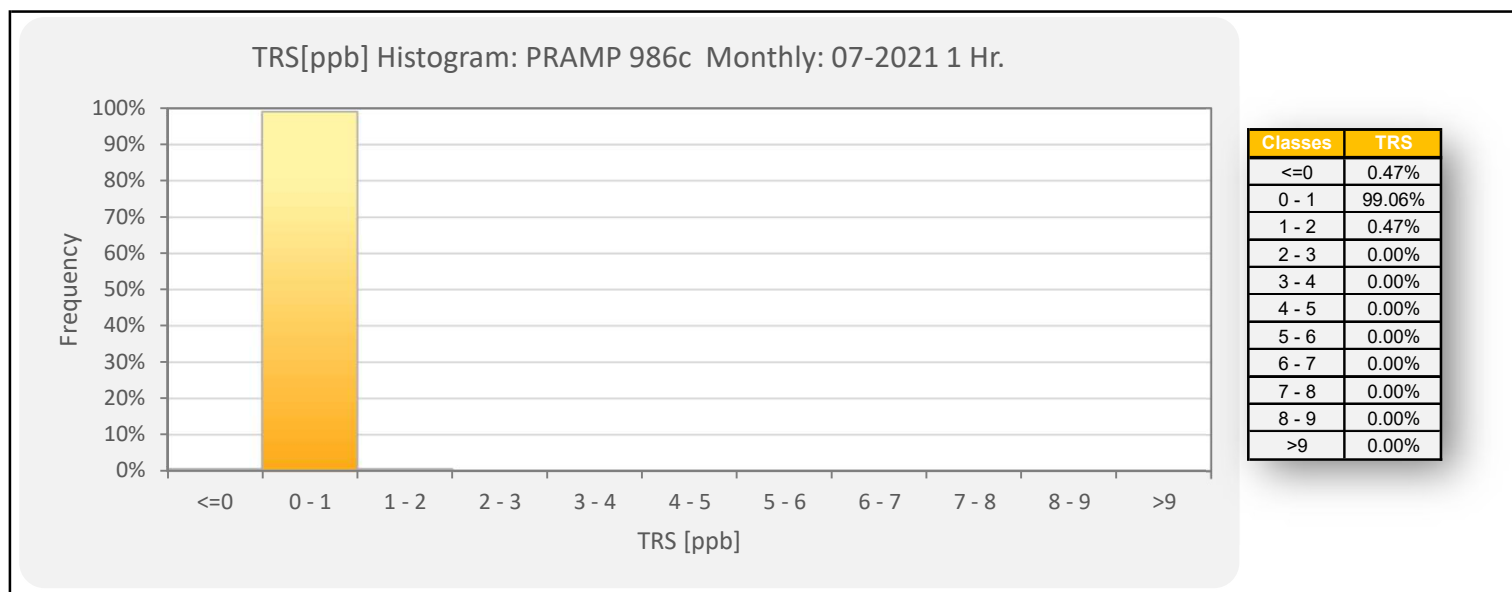
Summary of Hourly Averages

## TOTAL REDUCED SULPHUR (TRS) in ppb

| Maximum Hourly Value:                                                                                   |                                                | 1.15 | ppb  | on July 4 at hour 1   |      |      |      |      |                                                                                         |      |      |      |      |      | Hours in Service:      |      | 744                 |      |      |      |      |      |      |       |               |         |         |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|-----------------------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|------|------------------------|------|---------------------|------|------|------|------|------|------|-------|---------------|---------|---------|
| Maximum Daily Value:                                                                                    |                                                | 0.49 | ppb  | on July 31            |      |      |      |      |                                                                                         |      |      |      |      |      | Hours of Data:         |      | 640                 |      |      |      |      |      |      |       |               |         |         |
| Minimum Hourly Value:                                                                                   |                                                | 0.00 | ppb  | on July 26 at hour 15 |      |      |      |      |                                                                                         |      |      |      |      |      | Hours of Missing Data: |      | 68                  |      |      |      |      |      |      |       |               |         |         |
| Minimum Daily Value:                                                                                    |                                                | 0.08 | ppb  | on July 28            |      |      |      |      |                                                                                         |      |      |      |      |      | Hours of Calibration:  |      | 36                  |      |      |      |      |      |      |       |               |         |         |
| Monthly Average:                                                                                        |                                                | 0.24 | ppb  |                       |      |      |      |      |                                                                                         |      |      |      |      |      | Operational Uptime:    |      | 90.9                |      |      |      |      |      |      |       |               |         |         |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |                       |      |      |      |      |                                                                                         |      |      |      |      |      |                        |      |                     |      |      |      |      |      |      | Daily | Daily         | Daily   |         |
|                                                                                                         | 0                                              | 1    | 2    | 3                     | 4    | 5    | 6    | 7    | 8                                                                                       | 9    | 10   | 11   | 12   | 13   | 14                     | 15   | 16                  | 17   | 18   | 19   | 20   | 21   | 22   | 23    | Minimum       | Maximum | Average |
| Jul 1                                                                                                   | 0.14                                           | 0.19 | 0.27 | 0.52                  | 0.37 | 0.47 | 0.52 | S    | 0.52                                                                                    | 0.44 | 0.37 | 0.27 | 0.2  | 0.1  | 0.14                   | 0.21 | 0.24                | 0.16 | 0.21 | 0.24 | 0.1  | 0.11 | 0.08 | 0.15  | 0.08          | 0.52    | 0.26    |
| Jul 2                                                                                                   | 0.16                                           | 0.15 | 0.21 | 0.22                  | 0.24 | 0.16 | S    | 0.27 | 0.37                                                                                    | 0.41 | 0.62 | 0.43 | 0.28 | 0.16 | 0.08                   | 0.05 | 0.09                | 0.03 | 0.07 | 0.11 | 0.02 | 0.05 | 0.11 | 0.08  | 0.02          | 0.62    | 0.19    |
| Jul 3                                                                                                   | 0.15                                           | 0.22 | 0.26 | 0.22                  | 0.36 | S    | 0.33 | 0.24 | 0.25                                                                                    | 0.27 | 0.19 | C    | C    | C    | C                      | C    | 0.47                | 0.36 | 0.25 | 0.17 | 0.14 | 0.32 | 0.2  | 0.34  | 0.14          | 0.47    | 0.26    |
| Jul 4                                                                                                   | 0.63                                           | 1.15 | 0.97 | 0.69                  | S    | 0.52 | 0.32 | 0.21 | 0.13                                                                                    | 0.13 | 0.07 | 0.03 | 0.09 | 0.13 | 0.09                   | 0.06 | 0.06                | 0.06 | 0.04 | 0.04 | 0.08 | 0.09 | 0.15 | 0.17  | 0.03          | 1.15    | 0.26    |
| Jul 5                                                                                                   | 0.13                                           | 0.28 | 0.65 | S                     | 0.6  | 0.44 | 0.24 | 0.13 | 0.15                                                                                    | 0.15 | 0.17 | 0.08 | 0.09 | 0.09 | 0.05                   | 0.07 | 0.07                | 0.07 | 0.09 | 0.08 | 0.13 | 0.15 | 0.1  | 0.07  | 0.05          | 0.65    | 0.18    |
| Jul 6                                                                                                   | 0.17                                           | 0.24 | S    | 0.42                  | 0.43 | 0.35 | 0.42 | 0.21 | 0.07                                                                                    | 0.11 | 0.08 | 0.22 | 0.2  | 0.05 | 0.08                   | 0.11 | 0.06                | 0.03 | 0.08 | 0.03 | 0.11 | 0.09 | 0.09 | 0.21  | 0.03          | 0.43    | 0.17    |
| Jul 7                                                                                                   | 0.24                                           | S    | 0.14 | 0.22                  | 0.24 | 0.31 | 0.34 | 0.16 | 0.2                                                                                     | 0.23 | 0.21 | 0.16 | 0.13 | 0.12 | 0.14                   | 0.16 | 0.2                 | 0.16 | 0.24 | 0.19 | 0.57 | 0.62 | 0.43 | 0.39  | 0.12          | 0.62    | 0.25    |
| Jul 8                                                                                                   | S                                              | 0.49 | 0.44 | 0.42                  | 0.62 | 0.53 | 0.54 | 0.53 | 0.5                                                                                     | 0.4  | 0.31 | 0.32 | 0.18 | 0.2  | 0.17                   | 0.15 | 0.19                | 0.14 | 0.15 | 0.22 | 0.41 | 0.27 | 0.23 | S     | 0.14          | 0.62    | 0.34    |
| Jul 9                                                                                                   | 0.25                                           | 0.45 | 0.44 | 0.46                  | 0.52 | 0.46 | 0.57 | 0.5  | 0.42                                                                                    | 0.22 | 0.24 | 0.17 | 0.18 | 0.15 | 0.16                   | 0.13 | 0.13                | 0.08 | 0.08 | 0.19 | 0.28 | 0.34 | S    | 0.31  | 0.08          | 0.57    | 0.29    |
| Jul 10                                                                                                  | 0.25                                           | 0.33 | 0.29 | 0.35                  | 0.43 | 0.46 | 0.48 | 0.44 | 0.25                                                                                    | 0.32 | 0.27 | 0.24 | 0.2  | 0.21 | 0.19                   | 0.21 | 0.12                | 0.16 | 0.26 | 0.19 | 0.27 | S    | 0.5  | 0.39  | 0.12          | 0.50    | 0.30    |
| Jul 11                                                                                                  | 0.54                                           | 0.41 | 0.4  | 0.24                  | 0.33 | 0.4  | 0.25 | 0.23 | 0.23                                                                                    | 0.12 | 0.11 | 0.06 | 0.03 | 0.09 | 0.08                   | 0.14 | 0.07                | 0.08 | 0.13 | 0.03 | S    | 0.21 | 0.29 | 0.13  | 0.03          | 0.54    | 0.20    |
| Jul 12                                                                                                  | 0.25                                           | 0.36 | 0.43 | 0.29                  | 0.23 | 0.47 | 0.41 | 0.43 | 0.11                                                                                    | 0.05 | 0.09 | 0.03 | 0.03 | 0.02 | 0.06                   | 0.01 | 0.02                | 0.03 | 0.01 | S    | 0.01 | 0.02 | 0.01 | 0.05  | 0.01          | 0.47    | 0.15    |
| Jul 13                                                                                                  | 0.03                                           | 0.16 | 0.14 | 0.17                  | 0.14 | 0.15 | 0.12 | 0.2  | 0.13                                                                                    | 0.1  | 0.06 | 0.09 | 0.13 | 0.05 | 0.08                   | 0.05 | 0.06                | 0.08 | S    | 0.23 | 0.16 | 0.09 | 0.06 | 0.14  | 0.03          | 0.23    | 0.11    |
| Jul 14                                                                                                  | 0.11                                           | 0.08 | 0.16 | 0.18                  | 0.61 | 0.86 | 1.01 | 0.6  | 0.25                                                                                    | 0.21 | 0.1  | 0.29 | 0.18 | 0.11 | 0.13                   | 0.15 | 0.11                | S    | 0.17 | 0.24 | 0.41 | 0.23 | 0.16 | 0.2   | 0.08          | 1.01    | 0.28    |
| Jul 15                                                                                                  | 0.17                                           | 0.18 | 0.22 | 0.27                  | 0.3  | 0.26 | 0.26 | 0.43 | 0.63                                                                                    | 0.74 | 0.65 | 0.36 | 0.26 | 0.26 | 0.17                   | 0.15 | S                   | 0.17 | 0.14 | 0.18 | 0.22 | 0.27 | 0.14 | 0.22  | 0.14          | 0.74    | 0.29    |
| Jul 16                                                                                                  | 0.41                                           | 0.37 | 0.4  | 0.35                  | 0.48 | 0.59 | 0.59 | 0.47 | 0.54                                                                                    | 0.51 | 0.63 | 0.41 | 0.42 | 0.3  | 0.36                   | S    | 0.33                | 0.39 | 0.28 | 0.3  | 0.29 | 0.21 | 0.19 | 0.19  | 0.19          | 0.63    | 0.39    |
| Jul 17                                                                                                  | 0.34                                           | 0.35 | 0.32 | 0.23                  | 0.29 | 0.35 | 0.27 | 0.18 | 0.23                                                                                    | 0.22 | 0.16 | 0.1  | 0.19 | 0.1  | S                      | 0.09 | 0.18                | 0.17 | 0.31 | 0.13 | 0.17 | 0.2  | 0.2  | 0.2   | 0.09          | 0.35    | 0.22    |
| Jul 18                                                                                                  | 0.1                                            | 0.17 | 0.22 | 0.25                  | 0.38 | 0.23 | 0.17 | 0.16 | 0.23                                                                                    | 0.24 | 0.25 | 0.22 | 0.19 | S    | 0.17                   | 0.27 | 0.3                 | 0.19 | 0.25 | 0.25 | 0.19 | 0.18 | 0.23 | 0.15  | 0.10          | 0.38    | 0.22    |
| Jul 19                                                                                                  | 0.15                                           | 0.18 | 0.15 | 0.11                  | 0.09 | 0.15 | 0.2  | 0.18 | 0.24                                                                                    | 0.13 | 0.18 | 0.18 | S    | 0.19 | 0.28                   | 0.24 | 0.3                 | 0.29 | 0.22 | 0.33 | 0.67 | 1.04 | 0.52 | 0.32  | 0.09          | 1.04    | 0.28    |
| Jul 20                                                                                                  | 0.23                                           | 0.29 | 0.34 | 0.3                   | 0.26 | 0.24 | 0.26 | 0.12 | 0.1                                                                                     | 0.2  | 0.22 | S    | 0.22 | 0.16 | 0.2                    | 0.18 | 0.18                | 0.23 | 0.31 | 0.24 | 0.26 | 0.24 | 0.63 | 0.35  | 0.10          | 0.63    | 0.25    |
| Jul 21                                                                                                  | 0.36                                           | 0.37 | 0.32 | 0.27                  | 0.22 | 0.24 | 0.2  | 0.2  | 0.28                                                                                    | 0.21 | S    | 0.24 | 0.2  | 0.19 | 0.24                   | 0.19 | 0.2                 | 0.22 | 0.26 | 0.14 | 0.19 | 0.22 | 0.28 | 0.17  | 0.14          | 0.37    | 0.24    |
| Jul 22                                                                                                  | 0.23                                           | 0.26 | 0.24 | 0.18                  | 0.1  | 0.32 | 0.33 | 0.18 | 0.16                                                                                    | S    | 0.11 | 0.11 | 0.1  | 0.17 | 0.19                   | 0.2  | 0.27                | 0.25 | 0.22 | 0.14 | 0.25 | 0.3  | 0.29 | 0.36  | 0.10          | 0.36    | 0.22    |
| Jul 23                                                                                                  | 0.24                                           | 0.27 | 0.35 | 0.41                  | 0.36 | 0.35 | 0.32 | 0.46 | S                                                                                       | 0.36 | 0.41 | 0.38 | 0.36 | 0.33 | 0.44                   | 0.42 | 0.36                | 0.31 | 0.3  | P    | P    | P    | P    | P     | 0.24          | 0.46    | 0.36    |
| Jul 24                                                                                                  | P                                              | P    | P    | P                     | P    | P    | P    | P    | P                                                                                       | P    | P    | P    | P    | P    | P                      | P    | P                   | P    | P    | P    | P    | P    | P    | P     | -             | -       | -       |
| Jul 25                                                                                                  | P                                              | P    | P    | P                     | P    | P    | P    | P    | P                                                                                       | P    | P    | P    | P    | P    | P                      | P    | P                   | P    | P    | P    | P    | P    | P    | P     | -             | -       | -       |
| Jul 26                                                                                                  | P                                              | P    | P    | P                     | P    | P    | P    | P    | P                                                                                       | P    | P    | P    | P    | X    | S                      | 0    | 0                   | 0    | 0    | 0    | NRM  | 0.06 | 0.02 | 0.05  | 0.00          | 0.06    | -       |
| Jul 27                                                                                                  | 0.05                                           | 0.08 | 0.07 | 0.1                   | S    | 0.02 | 0.06 | 0.02 | 0.05                                                                                    | 0.06 | 0.06 | 0.03 | 0.07 | 0.02 | 0.04                   | 0.04 | 0.06                | 0.06 | 0.08 | 0.12 | 0.23 | 0.11 | 0.3  | 0.23  | 0.02          | 0.30    | 0.09    |
| Jul 28                                                                                                  | 0.24                                           | 0.19 | 0.14 | S                     | 0.19 | 0.17 | 0.04 | 0.05 | 0.07                                                                                    | 0.12 | 0.04 | 0.02 | 0.04 | 0.04 | 0.05                   | 0.04 | 0.05                | 0.04 | 0.07 | 0.06 | 0.04 | 0.03 | 0.07 | 0.15  | 0.02          | 0.24    | 0.08    |
| Jul 29                                                                                                  | 0.17                                           | 0.21 | S    | 0.25                  | 0.33 | 0.29 | 0.24 | 0.23 | 0.3                                                                                     | 0.14 | 0.09 | 0.06 | 0.06 | 0.04 | 0.06                   | 0.01 | 0.03                | 0.02 | 0.03 | 0.01 | 0.1  | 0.09 | 0.03 | 0.07  | 0.01          | 0.33    | 0.12    |
| Jul 30                                                                                                  | 0.08                                           | S    | 0.15 | 0.25                  | 0.19 | 0.37 | 0.3  | 0.29 | 0.17                                                                                    | 0.1  | 0.17 | 0.18 | 0.13 | 0.19 | 0.18                   | 0.2  | 0.2                 | 0.26 | 0.36 | 0.34 | 0.5  | 0.48 | 0.56 | 0.82  | 0.08          | 0.82    | 0.28    |
| Jul 31                                                                                                  | S                                              | 0.92 | 0.82 | 0.71                  | 0.81 | 0.88 | 0.76 | 0.71 | 0.56                                                                                    | 0.54 | 0.55 | 0.39 | 0.37 | 0.33 | 0.22                   | 0.25 | 0.22                | 0.22 | 0.27 | 0.34 | 0.34 | 0.31 | 0.26 | S     | 0.22          | 0.92    | 0.49    |
| Diurnal Maximum                                                                                         | 0.63                                           | 1.15 | 0.97 | 0.71                  | 0.81 | 0.88 | 1.01 | 0.71 | 0.63                                                                                    | 0.74 | 0.65 | 0.43 | 0.42 | 0.33 | 0.44                   | 0.42 | 0.47                | 0.39 | 0.36 | 0.34 | 0.67 | 1.04 | 0.63 | 0.82  |               |         |         |
| Diurnal Average                                                                                         | 0.22                                           | 0.32 | 0.33 | 0.31                  | 0.35 | 0.37 | 0.35 | 0.29 | 0.26                                                                                    | 0.25 | 0.24 | 0.20 | 0.17 | 0.15 | 0.16                   | 0.14 | 0.16                | 0.15 | 0.17 | 0.17 | 0.24 | 0.23 | 0.23 | 0.23  |               |         |         |
| C                                                                                                       | Monthly Calibration                            |      |      |                       |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |      |                        | Q    | Quality Assurance   |      |      |      |      |      |      |       |               |         |         |
| K                                                                                                       | Collection Error                               |      |      |                       |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |      |                        | Y    | Routine Maintenance |      |      |      |      |      |      | P     | Power Failure |         |         |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |                       |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |      |                        |      |                     |      |      |      |      |      |      |       |               |         |         |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |                       |      |      |      |      |                                                                                         |      |      |      |      |      |                        |      |                     |      |      |      |      |      |      |       |               |         |         |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |                       |      |      |      |      |                                                                                         |      |      |      |      |      |                        |      |                     |      |      |      |      |      |      |       |               |         |         |

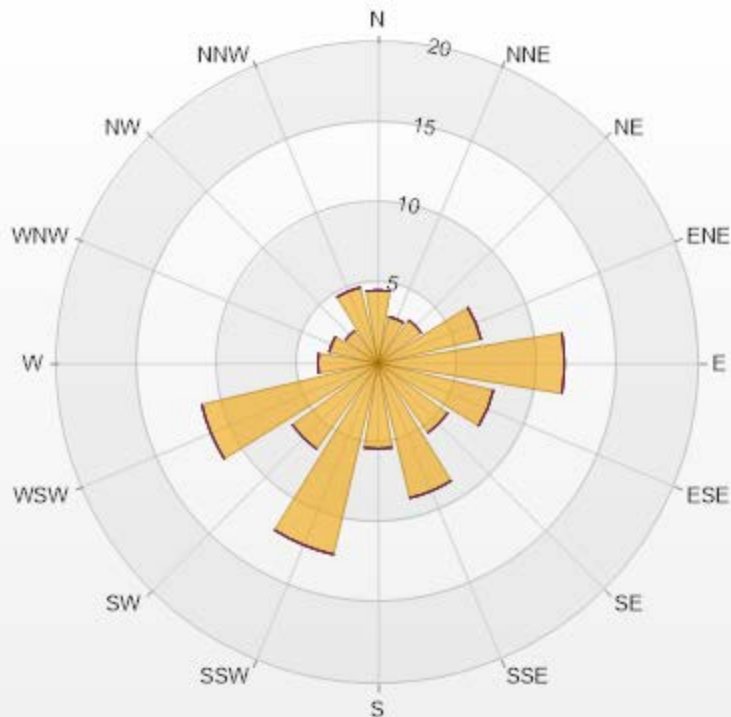
*Timeseries Chart of Hourly Average for TRS - 986c Station*





Wind: PRAMP 986c Poll.: PRAMP 986c-TRS[ppb] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 85.75% Calm Avg: 0.00 [ppb]

| Direction | 0-2   | 2-5 | 5-10 | 10-50 | >50.0 | Total |
|-----------|-------|-----|------|-------|-------|-------|
| N         | 4.55  | 0   | 0    | 0     | 0     | 4.55  |
| NNE       | 2.98  | 0   | 0    | 0     | 0     | 2.98  |
| NE        | 3.29  | 0   | 0    | 0     | 0     | 3.29  |
| ENE       | 6.58  | 0   | 0    | 0     | 0     | 6.58  |
| E         | 11.6  | 0   | 0    | 0     | 0     | 11.6  |
| ESE       | 7.37  | 0   | 0    | 0     | 0     | 7.37  |
| SE        | 5.33  | 0   | 0    | 0     | 0     | 5.33  |
| SSE       | 8.62  | 0   | 0    | 0     | 0     | 8.62  |
| S         | 5.33  | 0   | 0    | 0     | 0     | 5.33  |
| SSW       | 12.23 | 0   | 0    | 0     | 0     | 12.23 |
| SW        | 6.58  | 0   | 0    | 0     | 0     | 6.58  |
| WSW       | 11.29 | 0   | 0    | 0     | 0     | 11.29 |
| W         | 3.76  | 0   | 0    | 0     | 0     | 3.76  |
| WNW       | 3.13  | 0   | 0    | 0     | 0     | 3.13  |
| NW        | 2.51  | 0   | 0    | 0     | 0     | 2.51  |
| NNW       | 4.86  | 0   | 0    | 0     | 0     | 4.86  |
| Summary   | 100   | 0   | 0    | 0     | 0     | 100   |



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% Icon Classes (ppb)

100 0-2

0 2-5

0 5-10

0 10-50

0 >50.0



# PEACE RIVER AREA MONITORING PROGRAM

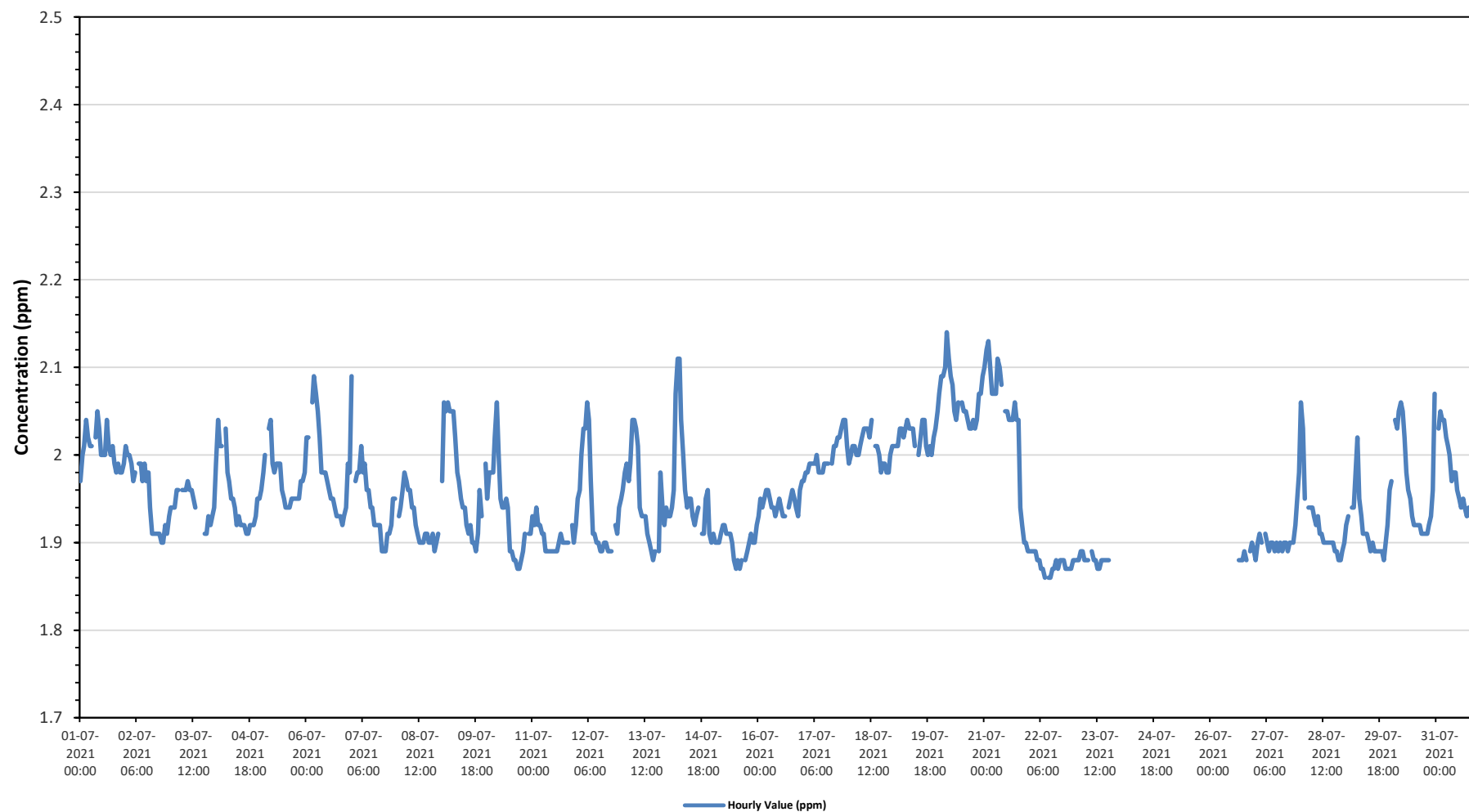
986c Station - July 2021

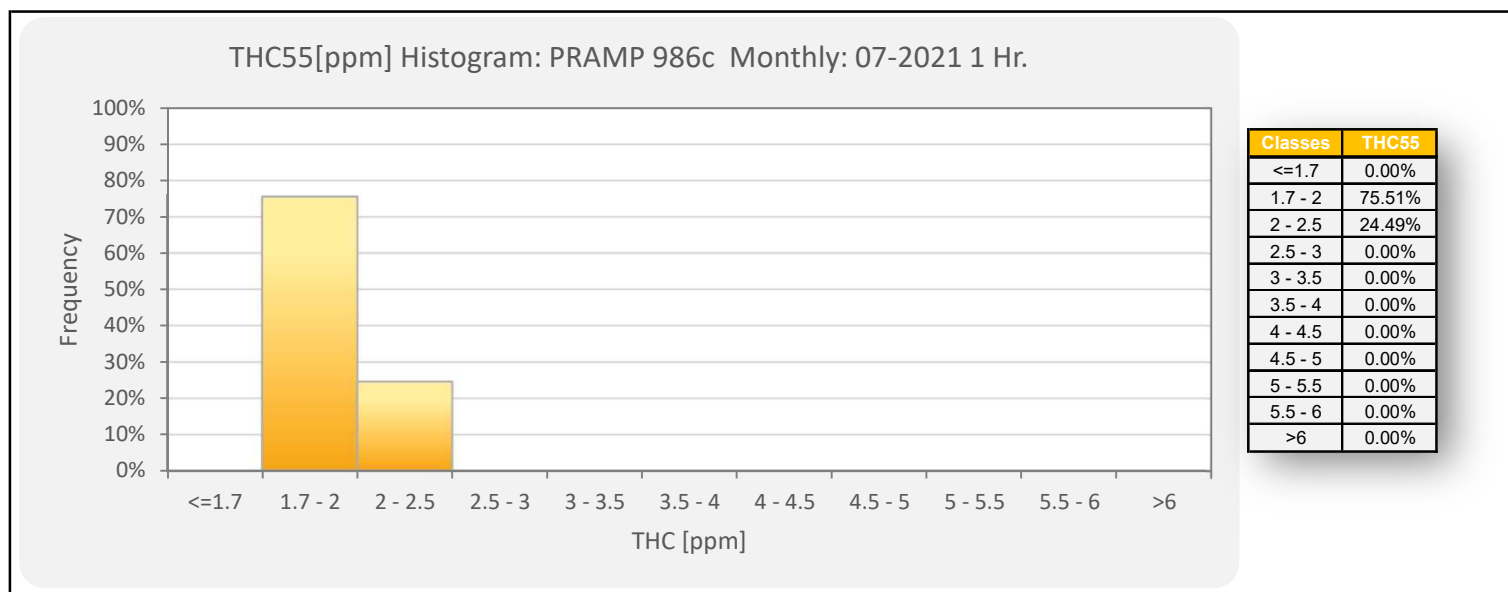
Summary of Hourly Averages

## TOTAL HYDROCARBONS (THC) in ppm

| Maximum Hourly Value: 2.14 ppm on July 20 at hour 4                                                     |                                                |      |      |      |      |      |      |      |                                                                                         | Hours in Service: 744     |      |      |      |      |      |      |                     |      |      |      |      |      |      |       |               |         |         |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|---------------------------|------|------|------|------|------|------|---------------------|------|------|------|------|------|------|-------|---------------|---------|---------|
| Maximum Daily Value: 2.07 ppm on July 20                                                                |                                                |      |      |      |      |      |      |      |                                                                                         | Hours of Data: 641        |      |      |      |      |      |      |                     |      |      |      |      |      |      |       |               |         |         |
| Minimum Hourly Value: 1.86 ppm on July 22 at hour 8                                                     |                                                |      |      |      |      |      |      |      |                                                                                         | Hours of Missing Data: 68 |      |      |      |      |      |      |                     |      |      |      |      |      |      |       |               |         |         |
| Minimum Daily Value: 1.88 ppm on July 22                                                                |                                                |      |      |      |      |      |      |      |                                                                                         | Hours of Calibration: 35  |      |      |      |      |      |      |                     |      |      |      |      |      |      |       |               |         |         |
| Monthly Average: 1.96 ppm                                                                               |                                                |      |      |      |      |      |      |      |                                                                                         | Operational Uptime: 90.9  |      |      |      |      |      |      |                     |      |      |      |      |      |      |       |               |         |         |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |      |      |      |      |                                                                                         |                           |      |      |      |      |      |      |                     |      |      |      |      |      |      | Daily | Daily         | Daily   |         |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8                                                                                       | 9                         | 10   | 11   | 12   | 13   | 14   | 15   | 16                  | 17   | 18   | 19   | 20   | 21   | 22   | 23    | Minimum       | Maximum | Average |
| Jul 1                                                                                                   | 1.97                                           | 2.00 | 2.01 | 2.04 | 2.02 | 2.01 | 2.01 | S    | 2.02                                                                                    | 2.05                      | 2.03 | 2.00 | 2.00 | 2.00 | 2.04 | 2.01 | 2.00                | 2.01 | 1.99 | 1.98 | 1.99 | 1.98 | 1.98 | 1.99  | 1.97          | 2.05    | 2.01    |
| Jul 2                                                                                                   | 2.01                                           | 2.00 | 2.00 | 1.99 | 1.97 | 1.98 | S    | 1.99 | 1.99                                                                                    | 1.97                      | 1.99 | 1.97 | 1.98 | 1.94 | 1.91 | 1.91 | 1.91                | 1.91 | 1.91 | 1.90 | 1.90 | 1.92 | 1.91 | 1.93  | 1.90          | 2.01    | 1.95    |
| Jul 3                                                                                                   | 1.94                                           | 1.94 | 1.94 | 1.96 | 1.96 | S    | 1.96 | 1.96 | 1.96                                                                                    | 1.97                      | 1.96 | 1.96 | 1.95 | 1.94 | C    | C    | C                   | C    | 1.91 | 1.91 | 1.93 | 1.92 | 1.93 | 1.94  | 1.91          | 1.97    | 1.94    |
| Jul 4                                                                                                   | 1.99                                           | 2.04 | 2.01 | 2.01 | S    | 2.03 | 1.98 | 1.97 | 1.95                                                                                    | 1.95                      | 1.94 | 1.92 | 1.93 | 1.92 | 1.92 | 1.92 | 1.91                | 1.91 | 1.92 | 1.92 | 1.92 | 1.93 | 1.95 | 1.95  | 1.91          | 2.04    | 1.95    |
| Jul 5                                                                                                   | 1.96                                           | 1.98 | 2.00 | S    | 2.03 | 2.04 | 1.99 | 1.98 | 1.99                                                                                    | 1.99                      | 1.99 | 1.96 | 1.95 | 1.94 | 1.94 | 1.94 | 1.95                | 1.95 | 1.95 | 1.95 | 1.95 | 1.97 | 1.97 | 1.98  | 1.94          | 2.04    | 1.97    |
| Jul 6                                                                                                   | 2.02                                           | 2.02 | S    | 2.06 | 2.09 | 2.07 | 2.05 | 2.02 | 1.98                                                                                    | 1.98                      | 1.98 | 1.97 | 1.96 | 1.95 | 1.95 | 1.94 | 1.93                | 1.93 | 1.93 | 1.92 | 1.93 | 1.94 | 1.99 | 1.98  | 1.92          | 2.09    | 1.98    |
| Jul 7                                                                                                   | 2.09                                           | S    | 1.97 | 1.98 | 1.98 | 2.01 | 1.98 | 1.99 | 1.96                                                                                    | 1.96                      | 1.94 | 1.94 | 1.92 | 1.92 | 1.92 | 1.92 | 1.89                | 1.89 | 1.89 | 1.91 | 1.91 | 1.92 | 1.95 | 1.95  | 1.89          | 2.09    | 1.95    |
| Jul 8                                                                                                   | S                                              | 1.93 | 1.94 | 1.96 | 1.98 | 1.97 | 1.96 | 1.96 | 1.94                                                                                    | 1.94                      | 1.92 | 1.91 | 1.90 | 1.90 | 1.90 | 1.91 | 1.91                | 1.90 | 1.90 | 1.91 | 1.89 | 1.90 | 1.91 | S     | 1.89          | 1.98    | 1.92    |
| Jul 9                                                                                                   | 1.97                                           | 2.06 | 2.05 | 2.06 | 2.05 | 2.05 | 2.05 | 2.02 | 1.98                                                                                    | 1.97                      | 1.95 | 1.94 | 1.94 | 1.92 | 1.91 | 1.92 | 1.90                | 1.90 | 1.89 | 1.91 | 1.96 | 1.93 | S    | 1.99  | 1.89          | 2.06    | 1.97    |
| Jul 10                                                                                                  | 1.95                                           | 1.98 | 1.98 | 1.98 | 2.02 | 2.06 | 2.00 | 1.95 | 1.94                                                                                    | 1.94                      | 1.95 | 1.94 | 1.89 | 1.89 | 1.88 | 1.88 | 1.87                | 1.87 | 1.88 | 1.89 | 1.91 | S    | 1.91 | 1.91  | 1.87          | 2.06    | 1.93    |
| Jul 11                                                                                                  | 1.93                                           | 1.92 | 1.94 | 1.92 | 1.92 | 1.91 | 1.91 | 1.89 | 1.89                                                                                    | 1.89                      | 1.89 | 1.89 | 1.89 | 1.89 | 1.90 | 1.91 | 1.90                | 1.90 | 1.90 | 1.90 | S    | 1.92 | 1.90 | 1.92  | 1.89          | 1.94    | 1.91    |
| Jul 12                                                                                                  | 1.95                                           | 1.96 | 2.00 | 2.03 | 2.03 | 2.06 | 2.04 | 1.97 | 1.91                                                                                    | 1.91                      | 1.90 | 1.90 | 1.89 | 1.89 | 1.90 | 1.90 | 1.89                | 1.89 | 1.89 | S    | 1.92 | 1.91 | 1.94 | 1.95  | 1.89          | 2.06    | 1.94    |
| Jul 13                                                                                                  | 1.96                                           | 1.98 | 1.99 | 1.97 | 1.99 | 2.04 | 2.04 | 2.03 | 2.01                                                                                    | 1.94                      | 1.93 | 1.93 | 1.93 | 1.91 | 1.90 | 1.89 | 1.88                | 1.89 | S    | 1.89 | 1.98 | 1.94 | 1.92 | 1.94  | 1.88          | 2.04    | 1.95    |
| Jul 14                                                                                                  | 1.93                                           | 1.93 | 1.94 | 1.96 | 2.07 | 2.11 | 2.11 | 2.04 | 2.00                                                                                    | 1.96                      | 1.94 | 1.95 | 1.95 | 1.93 | 1.92 | 1.93 | 1.94                | S    | 1.91 | 1.91 | 1.95 | 1.96 | 1.91 | 1.90  | 1.90          | 2.11    | 1.96    |
| Jul 15                                                                                                  | 1.91                                           | 1.90 | 1.90 | 1.90 | 1.91 | 1.92 | 1.92 | 1.91 | 1.91                                                                                    | 1.91                      | 1.90 | 1.88 | 1.87 | 1.88 | 1.87 | 1.88 | S                   | 1.88 | 1.89 | 1.90 | 1.91 | 1.90 | 1.90 | 1.92  | 1.87          | 1.92    | 1.90    |
| Jul 16                                                                                                  | 1.93                                           | 1.95 | 1.94 | 1.95 | 1.96 | 1.96 | 1.95 | 1.94 | 1.94                                                                                    | 1.93                      | 1.94 | 1.95 | 1.94 | 1.93 | 1.93 | S    | 1.94                | 1.95 | 1.96 | 1.95 | 1.94 | 1.93 | 1.96 | 1.97  | 1.93          | 1.97    | 1.95    |
| Jul 17                                                                                                  | 1.97                                           | 1.98 | 1.98 | 1.99 | 1.99 | 1.99 | 1.99 | 2.00 | 1.98                                                                                    | 1.98                      | 1.98 | 1.99 | 1.99 | 1.99 | S    | 1.99 | 2.01                | 2.01 | 2.02 | 2.02 | 2.03 | 2.04 | 2.04 | 2.01  | 1.97          | 2.04    | 2.00    |
| Jul 18                                                                                                  | 1.99                                           | 2.00 | 2.01 | 2.01 | 2.00 | 2.00 | 2.01 | 2.02 | 2.03                                                                                    | 2.03                      | 2.03 | 2.02 | 2.04 | S    | 2.01 | 2.01 | 2.00                | 1.98 | 1.99 | 1.99 | 1.98 | 1.98 | 2.00 | 2.01  | 1.98          | 2.04    | 2.01    |
| Jul 19                                                                                                  | 2.01                                           | 2.01 | 2.01 | 2.03 | 2.03 | 2.02 | 2.03 | 2.04 | 2.03                                                                                    | 2.03                      | 2.03 | 2.01 | S    | 2.00 | 2.02 | 2.04 | 2.04                | 2.01 | 2.00 | 2.01 | 2.00 | 2.02 | 2.03 | 2.05  | 2.00          | 2.05    | 2.02    |
| Jul 20                                                                                                  | 2.07                                           | 2.09 | 2.09 | 2.10 | 2.14 | 2.11 | 2.09 | 2.08 | 2.05                                                                                    | 2.04                      | 2.06 | S    | 2.06 | 2.05 | 2.05 | 2.04 | 2.03                | 2.03 | 2.04 | 2.03 | 2.04 | 2.07 | 2.07 | 2.09  | 2.03          | 2.14    | 2.07    |
| Jul 21                                                                                                  | 2.10                                           | 2.12 | 2.13 | 2.10 | 2.07 | 2.07 | 2.07 | 2.11 | 2.10                                                                                    | 2.08                      | S    | 2.05 | 2.05 | 2.04 | 2.04 | 2.04 | 2.06                | 2.04 | 2.04 | 1.94 | 1.92 | 1.90 | 1.90 | 1.89  | 1.89          | 2.13    | 2.04    |
| Jul 22                                                                                                  | 1.89                                           | 1.89 | 1.89 | 1.89 | 1.88 | 1.88 | 1.87 | 1.87 | 1.86                                                                                    | S                         | 1.86 | 1.86 | 1.87 | 1.87 | 1.88 | 1.87 | 1.88                | 1.88 | 1.88 | 1.87 | 1.87 | 1.87 | 1.87 | 1.88  | 1.86          | 1.89    | 1.88    |
| Jul 23                                                                                                  | 1.88                                           | 1.88 | 1.88 | 1.89 | 1.89 | 1.88 | 1.88 | 1.88 | S                                                                                       | 1.89                      | 1.88 | 1.88 | 1.88 | 1.87 | 1.88 | 1.88 | 1.88                | 1.88 | 1.88 | P    | P    | P    | P    | P     | 1.87          | 1.89    | 1.88    |
| Jul 24                                                                                                  | P                                              | P    | P    | P    | P    | P    | P    | P    | P                                                                                       | P                         | P    | P    | P    | P    | P    | P    | P                   | P    | P    | P    | P    | P    | P    | P     | -             | -       | -       |
| Jul 25                                                                                                  | P                                              | P    | P    | P    | P    | P    | P    | P    | P                                                                                       | P                         | P    | P    | P    | P    | P    | P    | P                   | P    | P    | P    | P    | P    | P    | P     | -             | -       | -       |
| Jul 26                                                                                                  | P                                              | P    | P    | P    | P    | P    | P    | P    | P                                                                                       | P                         | P    | P    | X    | S    | 1.88 | 1.88 | 1.88                | 1.88 | 1.89 | 1.88 | NRM  | 1.89 | 1.90 | 1.89  | 1.88          | 1.90    | -       |
| Jul 27                                                                                                  | 1.88                                           | 1.90 | 1.91 | 1.90 | S    | 1.91 | 1.90 | 1.89 | 1.90                                                                                    | 1.90                      | 1.89 | 1.90 | 1.89 | 1.90 | 1.89 | 1.90 | 1.90                | 1.90 | 1.89 | 1.89 | 1.90 | 1.92 | 1.95 | 1.98  | 1.88          | 1.98    | 1.90    |
| Jul 28                                                                                                  | 2.06                                           | 2.03 | 1.95 | S    | 1.94 | 1.94 | 1.94 | 1.93 | 1.92                                                                                    | 1.93                      | 1.91 | 1.91 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90                | 1.90 | 1.89 | 1.89 | 1.88 | 1.88 | 1.89 | 1.90  | 1.88          | 2.06    | 1.92    |
| Jul 29                                                                                                  | 1.92                                           | 1.93 | S    | 1.94 | 1.94 | 1.98 | 2.02 | 1.95 | 1.93                                                                                    | 1.91                      | 1.91 | 1.91 | 1.90 | 1.89 | 1.90 | 1.89 | 1.89                | 1.89 | 1.89 | 1.88 | 1.88 | 1.90 | 1.92 | 1.96  | 1.88          | 2.02    | 1.92    |
| Jul 30                                                                                                  | 1.97                                           | S    | 2.04 | 2.03 | 2.05 | 2.06 | 2.05 | 2.02 | 1.98                                                                                    | 1.96                      | 1.95 | 1.93 | 1.92 | 1.92 | 1.92 | 1.92 | 1.91                | 1.91 | 1.91 | 1.91 | 1.92 | 1.93 | 1.96 | 2.07  | 1.91          | 2.07    | 1.97    |
| Jul 31                                                                                                  | S                                              | 2.03 | 2.05 | 2.04 | 2.04 | 2.02 | 2.01 | 2.00 | 1.97                                                                                    | 1.98                      | 1.98 | 1.96 | 1.95 | 1.94 | 1.95 | 1.94 | 1.93                | 1.94 | 1.93 | 1.96 | 2.01 | 2.02 | 2.02 | S     | 1.93          | 2.05    | 1.99    |
| Diurnal Maximum                                                                                         | 2.10                                           | 2.12 | 2.13 | 2.10 | 2.14 | 2.11 | 2.11 | 2.11 | 2.10                                                                                    | 2.08                      | 2.06 | 2.05 | 2.06 | 2.05 | 2.05 | 2.04 | 2.06                | 2.04 | 2.04 | 2.03 | 2.04 | 2.07 | 2.07 | 2.09  |               |         |         |
| Diurnal Average                                                                                         | 1.97                                           | 1.98 | 1.98 | 1.99 | 2.00 | 2.00 | 1.99 | 1.98 | 1.97                                                                                    | 1.96                      | 1.95 | 1.94 | 1.94 | 1.93 | 1.93 | 1.93 | 1.93                | 1.93 | 1.93 | 1.93 | 1.94 | 1.94 | 1.95 | 1.96  |               |         |         |
| C                                                                                                       | Monthly Calibration                            |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |                           |      |      |      |      |      | Q    | Quality Assurance   |      |      |      |      |      |      |       |               |         |         |
| K                                                                                                       | Collection Error                               |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |                           |      |      |      |      |      | Y    | Routine Maintenance |      |      |      |      |      |      | P     | Power Failure |         |         |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |                           |      |      |      |      |      |      |                     |      |      |      |      |      |      |       |               |         |         |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |                           |      |      |      |      |      |      |                     |      |      |      |      |      |      |       |               |         |         |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |                           |      |      |      |      |      |      |                     |      |      |      |      |      |      |       |               |         |         |

***Timeseries Chart of Hourly Average for THC - 986c Station***

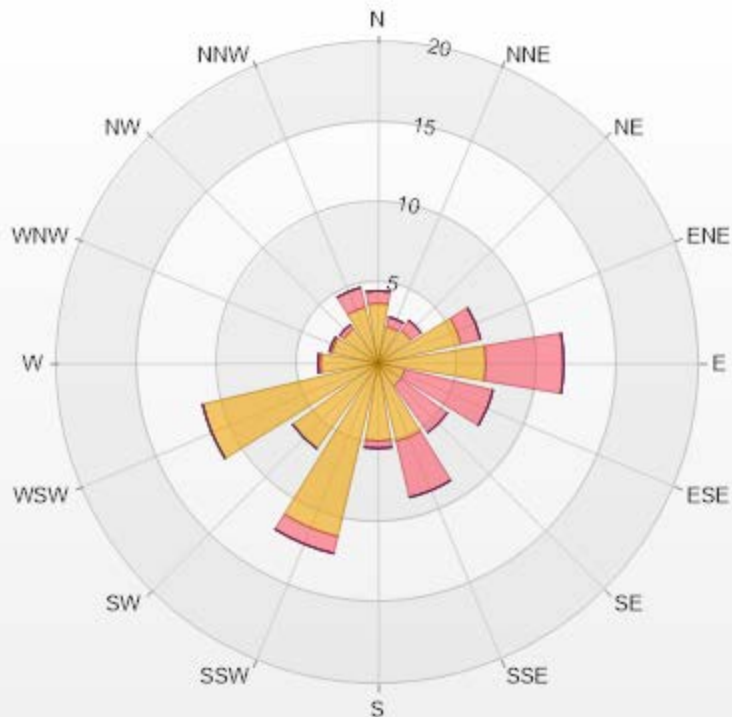






Wind: PRAMP 986c Poll.: PRAMP 986c-THC55[ppm] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 86.16% Calm Avg: 0.00 [ppm]

| Direction | 0-2   | 2-5   | 5-10 | 10-40 | >40.0 | Total |
|-----------|-------|-------|------|-------|-------|-------|
| N         | 3.74  | 0.78  | 0    | 0     | 0     | 4.52  |
| NNE       | 2.34  | 0.62  | 0    | 0     | 0     | 2.96  |
| NE        | 2.5   | 0.78  | 0    | 0     | 0     | 3.28  |
| ENE       | 5.3   | 1.25  | 0    | 0     | 0     | 6.55  |
| E         | 6.71  | 4.84  | 0    | 0     | 0     | 11.55 |
| ESE       | 1.72  | 5.62  | 0    | 0     | 0     | 7.34  |
| SE        | 1.72  | 3.59  | 0    | 0     | 0     | 5.31  |
| SSE       | 4.99  | 3.59  | 0    | 0     | 0     | 8.58  |
| S         | 4.84  | 0.47  | 0    | 0     | 0     | 5.31  |
| SSW       | 11.08 | 1.09  | 0    | 0     | 0     | 12.17 |
| SW        | 6.55  | 0     | 0    | 0     | 0     | 6.55  |
| WSW       | 11.23 | 0     | 0    | 0     | 0     | 11.23 |
| W         | 3.59  | 0.16  | 0    | 0     | 0     | 3.75  |
| WNW       | 2.96  | 0.16  | 0    | 0     | 0     | 3.12  |
| NW        | 2.65  | 0.31  | 0    | 0     | 0     | 2.96  |
| NNW       | 3.59  | 1.25  | 0    | 0     | 0     | 4.84  |
| Summary   | 75.51 | 24.51 | 0    | 0     | 0     | 100   |



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% Icon Classes (ppm)

76

0-2

25

2-5

0

5-10

0

10-40

0

>40.0



# PEACE RIVER AREA MONITORING PROGRAM

986c Station - July 2021

Summary of Hourly Averages

METHANE (CH4) in ppm

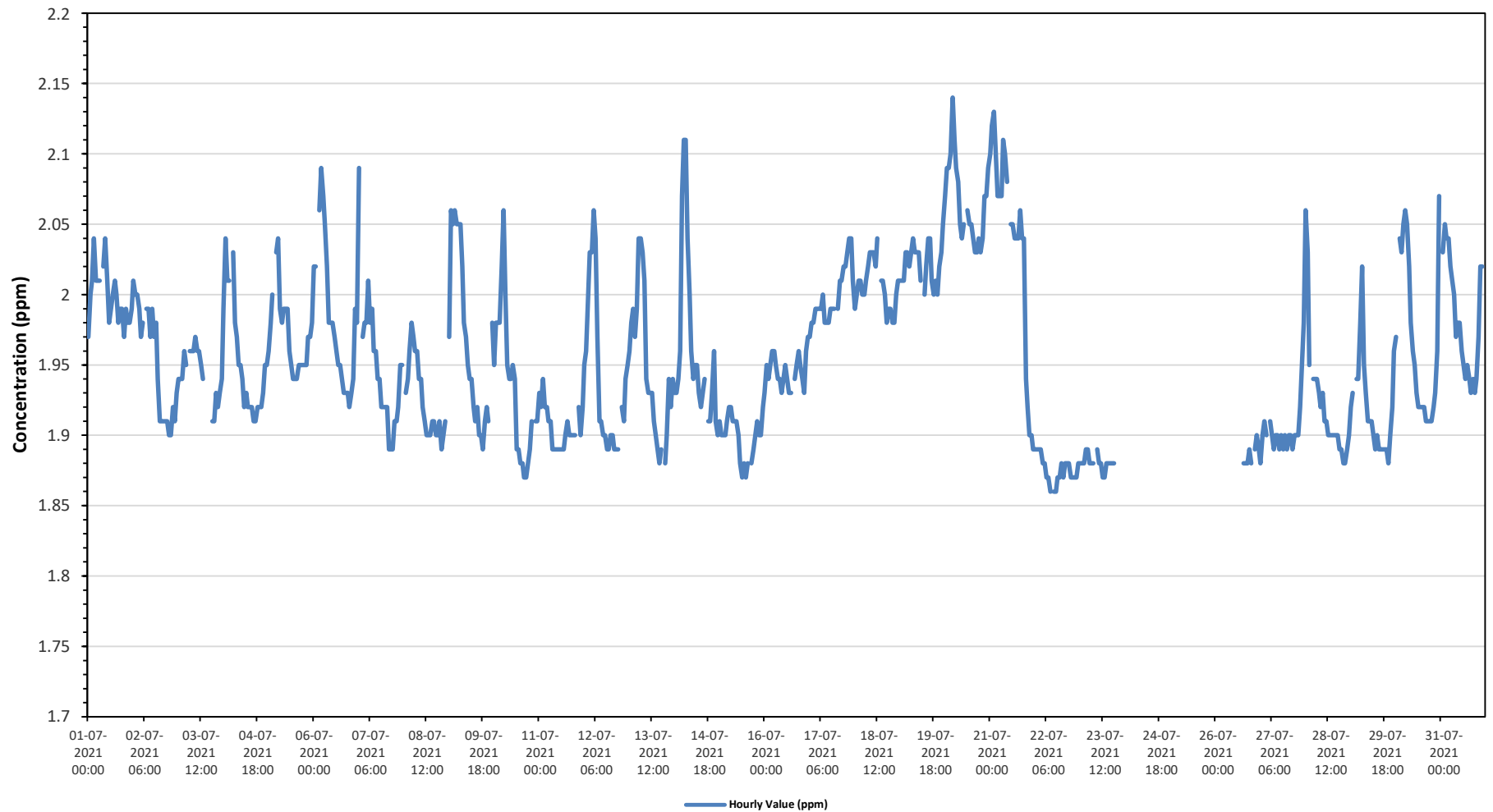
|                       |          |                      |                        |      |
|-----------------------|----------|----------------------|------------------------|------|
| Maximum Hourly Value: | 2.14 ppm | on July 20 at hour 4 | Hours in Service:      | 744  |
| Maximum Daily Value:  | 2.07 ppm | on July 20           | Hours of Data:         | 641  |
| Minimum Hourly Value: | 1.86 ppm | on July 22 at hour 8 | Hours of Missing Data: | 68   |
| Minimum Daily Value:  | 1.88 ppm | on July 22           | Hours of Calibration:  | 35   |
| Monthly Average:      | 1.96 ppm |                      | Operational Uptime:    | 90.9 |

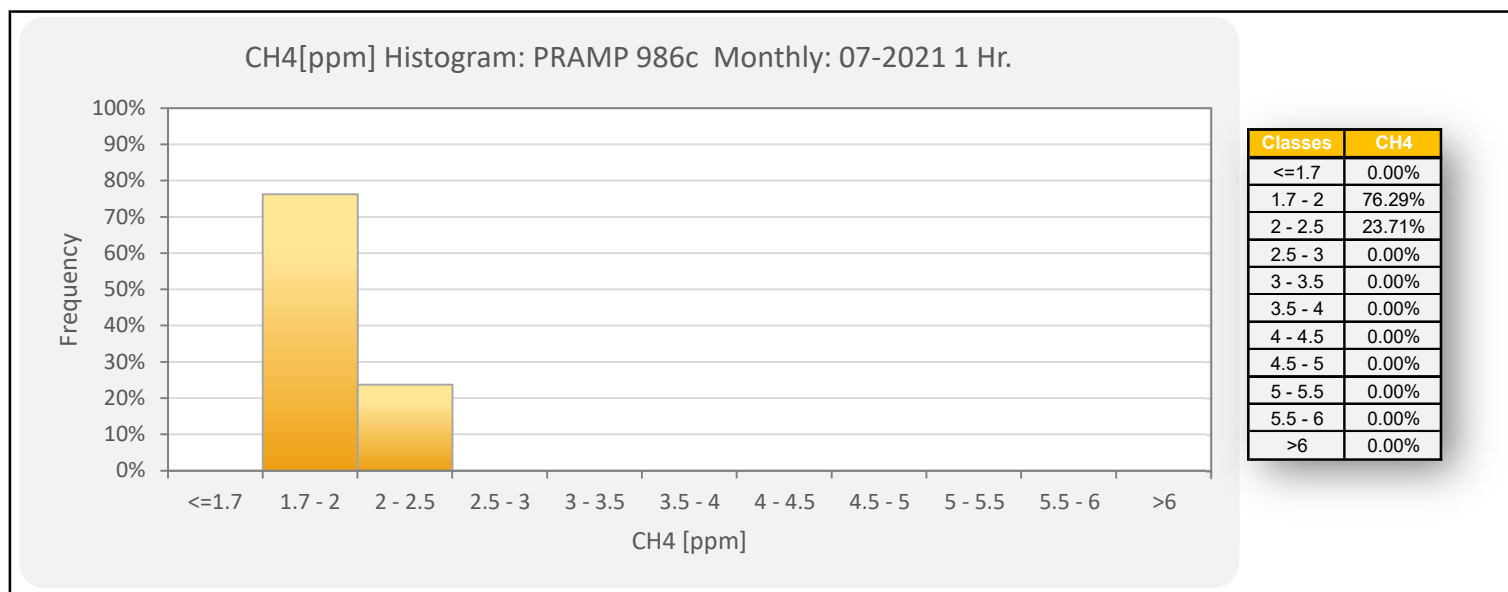
| Day             | Hourly Period Starting at (MST) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | Daily Minimum | Daily Maximum | Daily Average |      |
|-----------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|---------------|---------------|------|
|                 | 0                               | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23            |               |               |      |
| Jul 1           | 1.97                            | 2.00 | 2.01 | 2.04 | 2.01 | 2.01 | 2.01 | S    | 2.02 | 2.04 | 2.01 | 1.98 | 1.99 | 2.00 | 2.01 | 2.00 | 1.98 | 1.99 | 1.99 | 1.97 | 1.99 | 1.98 | 1.98 | 1.99          | 1.97          | 2.04          | 2.00 |
| Jul 2           | 2.01                            | 2.00 | 2.00 | 1.99 | 1.97 | 1.98 | S    | 1.99 | 1.99 | 1.97 | 1.99 | 1.97 | 1.98 | 1.94 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.90 | 1.90 | 1.92 | 1.91 | 1.93          | 1.90          | 2.01          | 1.95 |
| Jul 3           | 1.94                            | 1.94 | 1.94 | 1.96 | 1.95 | S    | 1.96 | 1.96 | 1.96 | 1.97 | 1.96 | 1.96 | 1.95 | 1.94 | C    | C    | C    | C    | 1.91 | 1.91 | 1.93 | 1.92 | 1.93 | 1.94          | 1.91          | 1.97          | 1.94 |
| Jul 4           | 1.99                            | 2.04 | 2.01 | 2.01 | S    | 2.03 | 1.98 | 1.97 | 1.95 | 1.95 | 1.94 | 1.92 | 1.93 | 1.92 | 1.92 | 1.92 | 1.91 | 1.91 | 1.92 | 1.92 | 1.92 | 1.93 | 1.95 | 1.95          | 1.91          | 2.04          | 1.95 |
| Jul 5           | 1.96                            | 1.98 | 2.00 | S    | 2.03 | 2.04 | 1.99 | 1.98 | 1.99 | 1.99 | 1.99 | 1.96 | 1.95 | 1.94 | 1.94 | 1.94 | 1.95 | 1.95 | 1.95 | 1.95 | 1.95 | 1.97 | 1.97 | 1.98          | 1.94          | 2.04          | 1.97 |
| Jul 6           | 2.02                            | 2.02 | S    | 2.06 | 2.09 | 2.07 | 2.05 | 2.02 | 1.98 | 1.98 | 1.98 | 1.97 | 1.96 | 1.95 | 1.95 | 1.94 | 1.93 | 1.93 | 1.93 | 1.92 | 1.93 | 1.94 | 1.99 | 1.98          | 1.92          | 2.09          | 1.98 |
| Jul 7           | 2.09                            | S    | 1.97 | 1.98 | 1.98 | 2.01 | 1.98 | 1.99 | 1.96 | 1.96 | 1.94 | 1.94 | 1.92 | 1.92 | 1.92 | 1.92 | 1.89 | 1.89 | 1.89 | 1.91 | 1.91 | 1.92 | 1.95 | 1.95          | 1.89          | 2.09          | 1.95 |
| Jul 8           | S                               | 1.93 | 1.94 | 1.96 | 1.98 | 1.97 | 1.96 | 1.96 | 1.94 | 1.94 | 1.92 | 1.91 | 1.90 | 1.90 | 1.90 | 1.91 | 1.91 | 1.90 | 1.90 | 1.91 | 1.89 | 1.90 | 1.91 | S             | 1.89          | 1.98          | 1.92 |
| Jul 9           | 1.97                            | 2.06 | 2.05 | 2.06 | 2.05 | 2.05 | 2.05 | 2.02 | 1.98 | 1.97 | 1.95 | 1.94 | 1.94 | 1.92 | 1.91 | 1.92 | 1.90 | 1.90 | 1.89 | 1.91 | 1.92 | 1.91 | S    | 1.98          | 1.89          | 2.06          | 1.97 |
| Jul 10          | 1.95                            | 1.98 | 1.98 | 1.98 | 2.02 | 2.06 | 2.00 | 1.95 | 1.94 | 1.94 | 1.95 | 1.94 | 1.89 | 1.89 | 1.88 | 1.88 | 1.87 | 1.87 | 1.88 | 1.89 | 1.91 | S    | 1.91 | 1.91          | 1.87          | 2.06          | 1.93 |
| Jul 11          | 1.93                            | 1.92 | 1.94 | 1.92 | 1.92 | 1.91 | 1.91 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.90 | 1.91 | 1.90 | 1.90 | 1.90 | 1.90 | S    | 1.92 | 1.90 | 1.92          | 1.89          | 1.94          | 1.91 |
| Jul 12          | 1.95                            | 1.96 | 2.00 | 2.03 | 2.03 | 2.06 | 2.04 | 1.97 | 1.91 | 1.91 | 1.90 | 1.90 | 1.89 | 1.89 | 1.90 | 1.90 | 1.89 | 1.89 | 1.89 | S    | 1.92 | 1.91 | 1.94 | 1.95          | 1.89          | 2.06          | 1.94 |
| Jul 13          | 1.96                            | 1.98 | 1.99 | 1.97 | 1.99 | 2.04 | 2.04 | 2.03 | 2.01 | 1.94 | 1.93 | 1.93 | 1.93 | 1.91 | 1.90 | 1.89 | 1.88 | 1.89 | S    | 1.88 | 1.90 | 1.94 | 1.92 | 1.94          | 1.88          | 2.04          | 1.95 |
| Jul 14          | 1.93                            | 1.93 | 1.94 | 1.96 | 2.07 | 2.11 | 2.11 | 2.04 | 2.00 | 1.96 | 1.94 | 1.95 | 1.95 | 1.93 | 1.92 | 1.93 | 1.94 | S    | 1.91 | 1.91 | 1.93 | 1.96 | 1.91 | 1.90          | 1.90          | 2.11          | 1.96 |
| Jul 15          | 1.91                            | 1.90 | 1.90 | 1.90 | 1.91 | 1.92 | 1.92 | 1.91 | 1.91 | 1.91 | 1.90 | 1.88 | 1.87 | 1.88 | 1.87 | 1.88 | S    | 1.88 | 1.89 | 1.90 | 1.91 | 1.90 | 1.90 | 1.92          | 1.87          | 1.92          | 1.90 |
| Jul 16          | 1.93                            | 1.95 | 1.94 | 1.95 | 1.96 | 1.96 | 1.95 | 1.94 | 1.94 | 1.93 | 1.94 | 1.95 | 1.94 | 1.93 | 1.93 | S    | 1.94 | 1.95 | 1.96 | 1.95 | 1.94 | 1.93 | 1.96 | 1.97          | 1.93          | 1.97          | 1.95 |
| Jul 17          | 1.97                            | 1.98 | 1.98 | 1.99 | 1.99 | 1.99 | 1.99 | 2.00 | 1.98 | 1.98 | 1.98 | 1.99 | 1.99 | 1.99 | S    | 1.99 | 2.01 | 2.01 | 2.02 | 2.02 | 2.03 | 2.04 | 2.04 | 2.01          | 1.97          | 2.04          | 2.00 |
| Jul 18          | 1.99                            | 2.00 | 2.01 | 2.01 | 2.00 | 2.00 | 2.01 | 2.02 | 2.03 | 2.03 | 2.03 | 2.02 | 2.04 | S    | 2.01 | 2.01 | 2.00 | 1.98 | 1.99 | 1.99 | 1.98 | 1.98 | 2.00 | 2.01          | 1.98          | 2.04          | 2.01 |
| Jul 19          | 2.01                            | 2.01 | 2.01 | 2.03 | 2.03 | 2.02 | 2.03 | 2.04 | 2.03 | 2.03 | 2.03 | 2.01 | S    | 2.00 | 2.02 | 2.04 | 2.04 | 2.01 | 2.00 | 2.01 | 2.00 | 2.02 | 2.03 | 2.05          | 2.00          | 2.05          | 2.02 |
| Jul 20          | 2.07                            | 2.09 | 2.09 | 2.10 | 2.14 | 2.11 | 2.09 | 2.08 | 2.05 | 2.04 | 2.05 | S    | 2.06 | 2.05 | 2.05 | 2.04 | 2.03 | 2.03 | 2.04 | 2.03 | 2.04 | 2.07 | 2.07 | 2.09          | 2.03          | 2.14          | 2.07 |
| Jul 21          | 2.10                            | 2.12 | 2.13 | 2.10 | 2.07 | 2.07 | 2.07 | 2.11 | 2.10 | 2.08 | S    | 2.05 | 2.05 | 2.04 | 2.04 | 2.04 | 2.06 | 2.04 | 2.04 | 1.94 | 1.92 | 1.90 | 1.90 | 1.89          | 1.89          | 2.13          | 2.04 |
| Jul 22          | 1.89                            | 1.89 | 1.89 | 1.89 | 1.88 | 1.88 | 1.87 | 1.87 | 1.86 | S    | 1.86 | 1.86 | 1.87 | 1.87 | 1.88 | 1.87 | 1.88 | 1.88 | 1.88 | 1.87 | 1.87 | 1.87 | 1.87 | 1.88          | 1.86          | 1.89          | 1.88 |
| Jul 23          | 1.88                            | 1.88 | 1.88 | 1.89 | 1.89 | 1.88 | 1.88 | 1.88 | S    | 1.89 | 1.88 | 1.88 | 1.87 | 1.87 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | P    | P    | P    | P    | P             | 1.87          | 1.89          | 1.88 |
| Jul 24          | P                               | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P             | -             | -             | -    |
| Jul 25          | P                               | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P             | -             | -             | -    |
| Jul 26          | P                               | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | X    | S    | 1.88 | 1.88 | 1.88 | 1.89 | 1.88 | NRM  | 1.89 | 1.90 | 1.89          | 1.88          | 1.90          | -    |
| Jul 27          | 1.88                            | 1.90 | 1.91 | 1.90 | S    | 1.91 | 1.90 | 1.89 | 1.90 | 1.90 | 1.89 | 1.90 | 1.89 | 1.90 | 1.89 | 1.90 | 1.90 | 1.89 | 1.90 | 1.90 | 1.90 | 1.92 | 1.95 | 1.98          | 1.88          | 1.98          | 1.90 |
| Jul 28          | 2.06                            | 2.03 | 1.95 | S    | 1.94 | 1.94 | 1.94 | 1.93 | 1.92 | 1.93 | 1.91 | 1.91 | 1.90 | 1.90 | 1.90 | 1.90 | 1.90 | 1.89 | 1.89 | 1.88 | 1.88 | 1.89 | 1.90 | 1.88          | 2.06          | 1.92          |      |
| Jul 29          | 1.92                            | 1.93 | S    | 1.94 | 1.94 | 1.98 | 2.02 | 1.95 | 1.93 | 1.91 | 1.91 | 1.91 | 1.90 | 1.89 | 1.90 | 1.89 | 1.89 | 1.89 | 1.89 | 1.88 | 1.88 | 1.90 | 1.92 | 1.96          | 1.88          | 2.02          | 1.92 |
| Jul 30          | 1.97                            | S    | 2.04 | 2.03 | 2.05 | 2.06 | 2.05 | 2.02 | 1.98 | 1.96 | 1.95 | 1.93 | 1.92 | 1.92 | 1.92 | 1.92 | 1.91 | 1.91 | 1.91 | 1.91 | 1.92 | 1.93 | 1.96 | 2.07          | 1.91          | 2.07          | 1.97 |
| Jul 31          | S                               | 2.03 | 2.05 | 2.04 | 2.04 | 2.02 | 2.01 | 2.00 | 1.97 | 1.98 | 1.98 | 1.96 | 1.95 | 1.94 | 1.95 | 1.94 | 1.93 | 1.94 | 1.93 | 1.94 | 1.97 | 2.02 | 2.02 | S             | 1.93          | 2.05          | 1.98 |
| Diurnal Maximum | 2.10                            | 2.12 | 2.13 | 2.10 | 2.14 | 2.11 | 2.11 | 2.11 | 2.10 | 2.08 | 2.05 | 2.05 | 2.06 | 2.05 | 2.05 | 2.04 | 2.06 | 2.04 | 2.04 | 2.03 | 2.04 | 2.07 | 2.07 | 2.09          |               |               |      |
| Diurnal Average | 1.97                            | 1.98 | 1.98 | 1.99 | 2.00 | 2.00 | 1.99 | 1.98 | 1.97 | 1.96 | 1.95 | 1.94 | 1.94 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.94 | 1.95 | 1.96          |               |               |      |

|          |                                                |            |                                                                                         |          |                     |
|----------|------------------------------------------------|------------|-----------------------------------------------------------------------------------------|----------|---------------------|
| <b>C</b> | Monthly Calibration                            | <b>S</b>   | Daily Zero-Span Check                                                                   | <b>Q</b> | Quality Assurance   |
| <b>K</b> | Collection Error                               | <b>N</b>   | No Data (Machine Not in Service)                                                        | <b>Y</b> | Routine Maintenance |
| <b>X</b> | InValid Data (Equipment Malfunction /Recovery) | <b>NRM</b> | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) | <b>P</b> | Power Failure       |

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.  
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

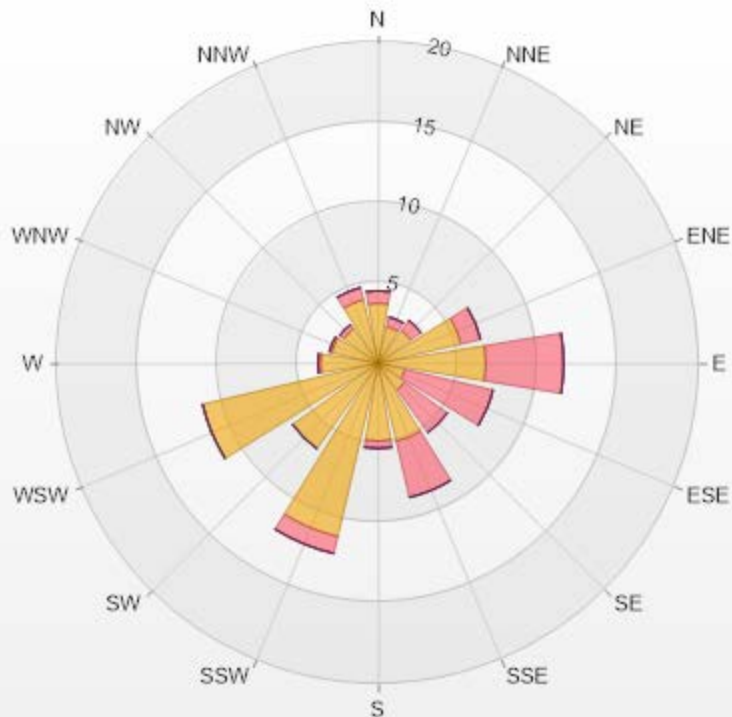
***Timeseries Chart of Hourly Average for CH4 - 986c Station***





Wind: PRAMP 986c Poll.: PRAMP 986c-CH4[ppm] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 86.16% Calm Avg: 0.00 [ppm]

| Direction | 0-2   | 2-5   | 5-10 | 10-20 | >20.0 | Total |
|-----------|-------|-------|------|-------|-------|-------|
| N         | 3.74  | 0.78  | 0    | 0     | 0     | 4.52  |
| NNE       | 2.34  | 0.62  | 0    | 0     | 0     | 2.96  |
| NE        | 2.5   | 0.78  | 0    | 0     | 0     | 3.28  |
| ENE       | 5.3   | 1.25  | 0    | 0     | 0     | 6.55  |
| E         | 6.71  | 4.84  | 0    | 0     | 0     | 11.55 |
| ESE       | 1.72  | 5.62  | 0    | 0     | 0     | 7.34  |
| SE        | 2.03  | 3.28  | 0    | 0     | 0     | 5.31  |
| SSE       | 4.99  | 3.59  | 0    | 0     | 0     | 8.58  |
| S         | 4.84  | 0.47  | 0    | 0     | 0     | 5.31  |
| SSW       | 11.08 | 1.09  | 0    | 0     | 0     | 12.17 |
| SW        | 6.55  | 0     | 0    | 0     | 0     | 6.55  |
| WSW       | 11.23 | 0     | 0    | 0     | 0     | 11.23 |
| W         | 3.59  | 0.16  | 0    | 0     | 0     | 3.75  |
| WNW       | 2.96  | 0.16  | 0    | 0     | 0     | 3.12  |
| NW        | 2.65  | 0.31  | 0    | 0     | 0     | 2.96  |
| NNW       | 4.06  | 0.78  | 0    | 0     | 0     | 4.84  |
| Summary   | 76.29 | 23.73 | 0    | 0     | 0     | 100   |



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% Icon Classes (ppm)

76

0-2

24

2-5

0

5-10

0

10-20

0

>20.0



# PEACE RIVER AREA MONITORING PROGRAM

986c Station - July 2021

## Summary of Hourly Averages

### NON-METHANE HYDROCARBONS (NMHC) in ppm

|                       |                                |                        |      |
|-----------------------|--------------------------------|------------------------|------|
| Maximum Hourly Value: | 0.07 ppm on July 13 at hour 20 | Hours in Service:      | 744  |
| Maximum Daily Value:  | 0.01 ppm on July 1             | Hours of Data:         | 641  |
| Minimum Hourly Value: | 0.00 ppm on July 1 at hour 0   | Hours of Missing Data: | 68   |
| Minimum Daily Value:  | 0.00 ppm on July 2             | Hours of Calibration:  | 35   |
| Monthly Average:      | 0.00 ppm                       | Operational Uptime:    | 90.9 |

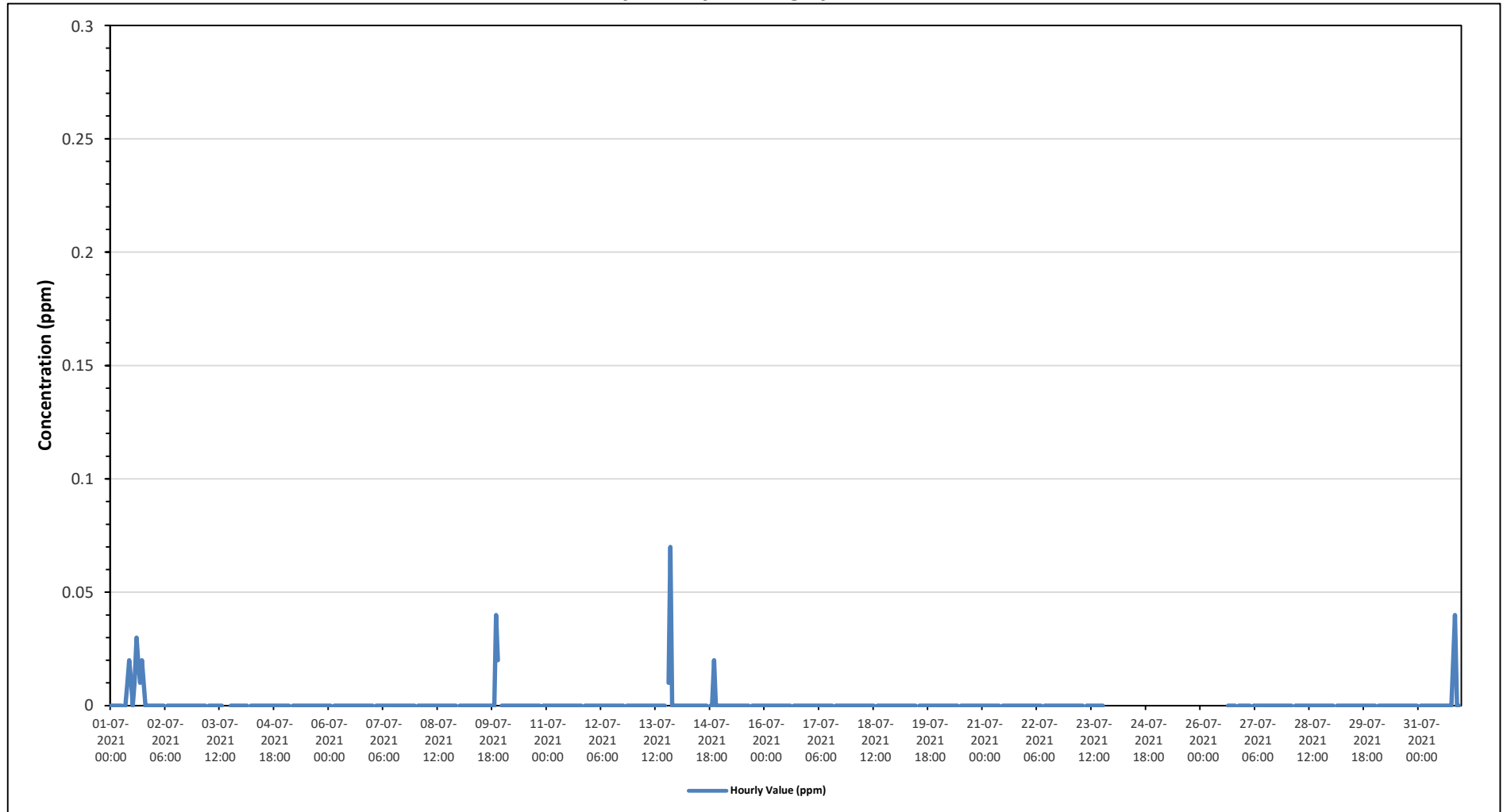
| Summary Average: |                                 | 0.00 ppm |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |               | Operational Upset: |               | 0.00 |      |      |      |      |
|------------------|---------------------------------|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|--------------------|---------------|------|------|------|------|------|
| Day              | Hourly Period Starting at (MST) |          |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | Daily Minimum | Daily Maximum      | Daily Average |      |      |      |      |      |
| Jul 1            | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | S    | 0.00 | 0.01 | 0.02 | 0.01 | 0.00 | 0.01 | 0.03 | 0.02 | 0.01 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.03 | 0.01 |      |
| Jul 2            | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 3            | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | C    | C    | C    | C    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 4            | 0.00                            | 0.00     | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 5            | 0.00                            | 0.00     | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 6            | 0.00                            | 0.00     | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 7            | 0.00                            | S        | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 8            | S                               | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | S             | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 9            | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.02 | S             | 0.00               | 0.00          | 0.04 | 0.00 | 0.00 |      |      |
| Jul 10           | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S             | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 11           | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 12           | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 13           | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.01 | 0.07 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.07 | 0.00 |      |
| Jul 14           | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.02 | 0.00 |      |
| Jul 15           | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 16           | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 17           | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 18           | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 19           | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 20           | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 21           | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 22           | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 23           | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | P    | P    | P    | P             | P                  | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 24           | P                               | P        | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P             | P                  | P             | -    | -    | -    | -    |      |
| Jul 25           | P                               | P        | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P             | P                  | P             | -    | -    | -    | -    |      |
| Jul 26           | P                               | P        | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | P    | X    | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | NRM  | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 27           | 0.00                            | 0.00     | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 28           | 0.00                            | 0.00     | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 29           | 0.00                            | 0.00     | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 30           | 0.00                            | S        | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 |      |
| Jul 31           | S                               | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.04 | 0.00 | 0.00 | S             | 0.00               | 0.04          | 0.00 | 0.00 | 0.00 |      |      |
| Diurnal Maximum  | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.02 | 0.01 | 0.00 | 0.01 | 0.03 | 0.02 | 0.01 | 0.02 | 0.01 | 0.02 | 0.07 | 0.02 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Diurnal Average  | 0.00                            | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00          | 0.00               | 0.00          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

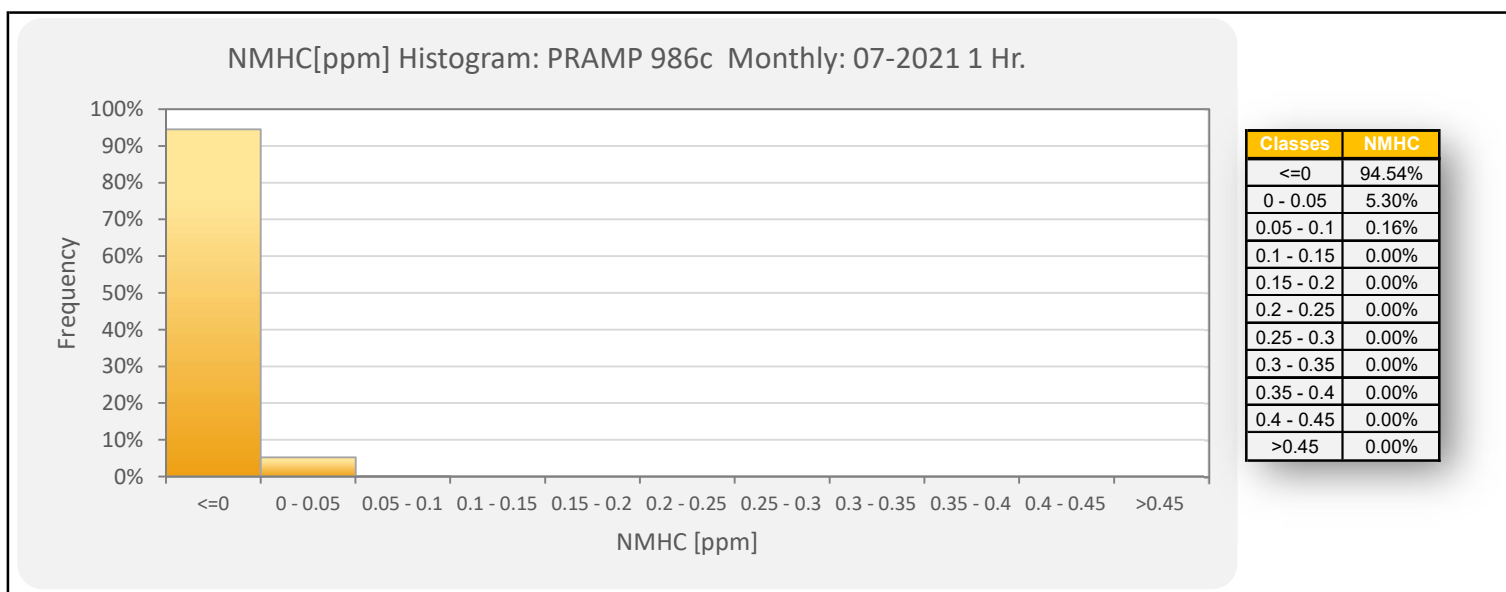
|          |                                               |            |                                                                                         |          |                     |
|----------|-----------------------------------------------|------------|-----------------------------------------------------------------------------------------|----------|---------------------|
| <b>C</b> | Monthly Calibration                           | <b>S</b>   | Daily Zero-Span Check                                                                   | <b>Q</b> | Quality Assurance   |
| <b>K</b> | Collection Error                              | <b>N</b>   | No Data (Machine Not in Service)                                                        | <b>Y</b> | Routine Maintenance |
| <b>X</b> | InValid Data (Equipment Malfunction/Recovery) | <b>NRM</b> | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) | <b>P</b> | Power Failure       |

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.  
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



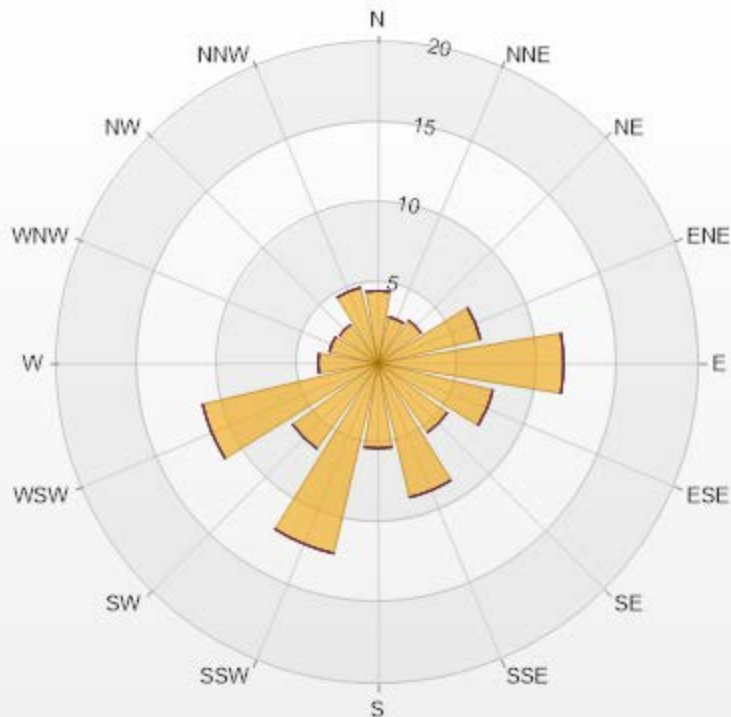
***Timeseries Chart of Hourly Average for NMHC - 986c Station***





Wind: PRAMP 986c Poll.: PRAMP 986c-NMHC[ppm] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 86.16% Calm Avg: 0.00 [ppm]

| Direction | 0-0.1 | 0.1-0.3 | 0.3-0.9 | 0.9-2 | >2.0 | Total |
|-----------|-------|---------|---------|-------|------|-------|
| N         | 4.52  | 0       | 0       | 0     | 0    | 4.52  |
| NNE       | 2.96  | 0       | 0       | 0     | 0    | 2.96  |
| NE        | 3.28  | 0       | 0       | 0     | 0    | 3.28  |
| ENE       | 6.55  | 0       | 0       | 0     | 0    | 6.55  |
| E         | 11.54 | 0       | 0       | 0     | 0    | 11.54 |
| ESE       | 7.33  | 0       | 0       | 0     | 0    | 7.33  |
| SE        | 5.3   | 0       | 0       | 0     | 0    | 5.3   |
| SSE       | 8.58  | 0       | 0       | 0     | 0    | 8.58  |
| S         | 5.3   | 0       | 0       | 0     | 0    | 5.3   |
| SSW       | 12.17 | 0       | 0       | 0     | 0    | 12.17 |
| SW        | 6.55  | 0       | 0       | 0     | 0    | 6.55  |
| WSW       | 11.23 | 0       | 0       | 0     | 0    | 11.23 |
| W         | 3.74  | 0       | 0       | 0     | 0    | 3.74  |
| WNW       | 3.12  | 0       | 0       | 0     | 0    | 3.12  |
| NW        | 2.96  | 0       | 0       | 0     | 0    | 2.96  |
| NNW       | 4.84  | 0       | 0       | 0     | 0    | 4.84  |
| Summary   | 100   | 0       | 0       | 0     | 0    | 100   |



PRAMP-202107

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% Icon Classes (ppm)

100 0-0.1

0 0.1-0.3

0 0.3-0.9

0 0.9-2

0 >2.0



# PEACE RIVER AREA MONITORING PROGRAM

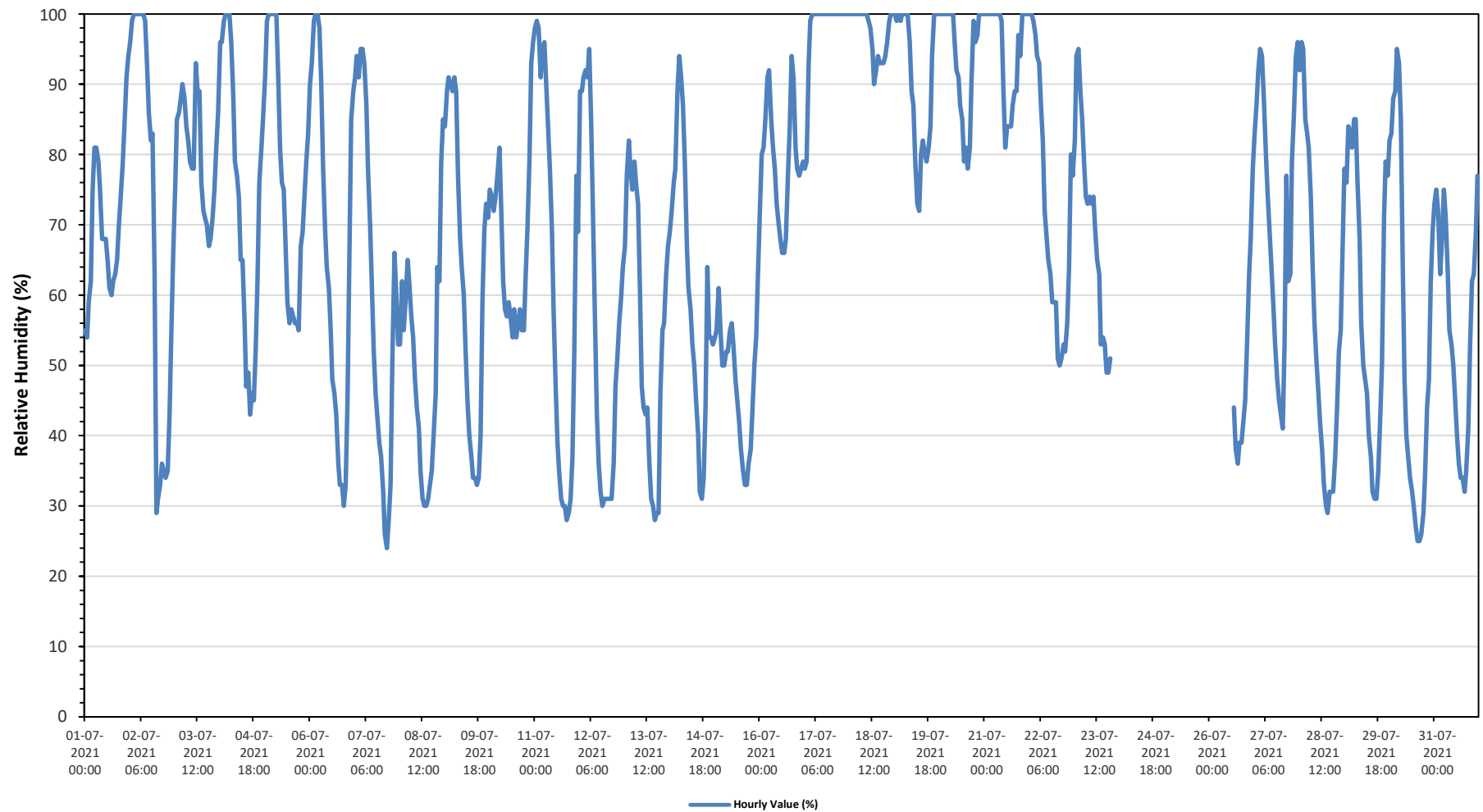
986c Station - July 2021

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

| Maximum Hourly Value:                                                                                   |                                                |      | 100  | %    | on July 2 at hour 2  |      |      |      |      |                                                                                         |      |      |      |      | Hours in Service:      |      |      | 744  |                     |      |      |      |      |       |         |         |         |               |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|----------------------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|------------------------|------|------|------|---------------------|------|------|------|------|-------|---------|---------|---------|---------------|--|
| Maximum Daily Value:                                                                                    |                                                |      | 97.9 | %    | on July 17           |      |      |      |      |                                                                                         |      |      |      |      | Hours of Data:         |      |      | 679  |                     |      |      |      |      |       |         |         |         |               |  |
| Minimum Hourly Value:                                                                                   |                                                |      | 24   | %    | on July 7 at hour 17 |      |      |      |      |                                                                                         |      |      |      |      | Hours of Missing Data: |      |      | 65   |                     |      |      |      |      |       |         |         |         |               |  |
| Minimum Daily Value:                                                                                    |                                                |      | 47.9 | %    | on July 15           |      |      |      |      |                                                                                         |      |      |      |      | Hours of Calibration:  |      |      | 0    |                     |      |      |      |      |       |         |         |         |               |  |
| Monthly Average:                                                                                        |                                                |      | 69.5 | %    |                      |      |      |      |      |                                                                                         |      |      |      |      | Operational Uptime:    |      |      | 91.3 |                     |      |      |      |      |       |         |         |         |               |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |                      |      |      |      |      |                                                                                         |      |      |      |      |                        |      |      |      |                     |      |      |      |      | Daily | Daily   | Daily   |         |               |  |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4                    | 5    | 6    | 7    | 8    | 9                                                                                       | 10   | 11   | 12   | 13   | 14                     | 15   | 16   | 17   | 18                  | 19   | 20   | 21   | 22   | 23    | Minimum | Maximum | Average |               |  |
| Jul 1                                                                                                   | 55                                             | 54   | 59   | 62   | 75                   | 81   | 81   | 79   | 75   | 68                                                                                      | 68   | 68   | 65   | 61   | 60                     | 62   | 63   | 65   | 70                  | 74   | 79   | 84   | 91   | 94    | 54      | 94      | 70.5    |               |  |
| Jul 2                                                                                                   | 96                                             | 99   | 100  | 100  | 100                  | 100  | 100  | 100  | 99   | 93                                                                                      | 86   | 82   | 83   | 63   | 29                     | 31   | 33   | 36   | 35                  | 34   | 35   | 43   | 55   | 66    | 29      | 100     | 70.8    |               |  |
| Jul 3                                                                                                   | 76                                             | 85   | 86   | 88   | 90                   | 88   | 84   | 82   | 79   | 78                                                                                      | 78   | 93   | 89   | 89   | 76                     | 72   | 71   | 70   | 67                  | 68   | 71   | 75   | 81   | 86    | 67      | 93      | 80.1    |               |  |
| Jul 4                                                                                                   | 96                                             | 96   | 99   | 100  | 100                  | 100  | 96   | 88   | 79   | 77                                                                                      | 74   | 65   | 65   | 56   | 47                     | 49   | 43   | 46   | 45                  | 52   | 62   | 76   | 81   | 85    | 43      | 100     | 74.0    |               |  |
| Jul 5                                                                                                   | 91                                             | 99   | 100  | 100  | 100                  | 100  | 100  | 91   | 81   | 76                                                                                      | 75   | 66   | 59   | 56   | 58                     | 57   | 56   | 56   | 55                  | 67   | 69   | 74   | 79   | 83    | 55      | 100     | 77.0    |               |  |
| Jul 6                                                                                                   | 90                                             | 93   | 99   | 100  | 100                  | 98   | 90   | 78   | 69   | 64                                                                                      | 61   | 55   | 48   | 46   | 43                     | 36   | 33   | 33   | 30                  | 33   | 45   | 68   | 85   | 89    | 30      | 100     | 66.1    |               |  |
| Jul 7                                                                                                   | 91                                             | 94   | 91   | 95   | 95                   | 93   | 87   | 78   | 70   | 61                                                                                      | 52   | 46   | 42   | 39   | 37                     | 32   | 26   | 24   | 28                  | 33   | 51   | 66   | 60   | 53    | 24      | 95      | 60.2    |               |  |
| Jul 8                                                                                                   | 53                                             | 62   | 55   | 59   | 65                   | 62   | 57   | 54   | 48   | 44                                                                                      | 41   | 35   | 31   | 30   | 30                     | 31   | 33   | 35   | 40                  | 46   | 64   | 62   | 79   | 85    | 30      | 85      | 50.0    |               |  |
| Jul 9                                                                                                   | 84                                             | 89   | 91   | 90   | 89                   | 91   | 89   | 77   | 68   | 64                                                                                      | 60   | 52   | 45   | 40   | 37                     | 34   | 34   | 33   | 34                  | 40   | 59   | 69   | 73   | 71    | 33      | 91      | 63.0    |               |  |
| Jul 10                                                                                                  | 75                                             | 74   | 72   | 74   | 77                   | 81   | 73   | 62   | 58   | 57                                                                                      | 59   | 57   | 54   | 58   | 54                     | 56   | 58   | 55   | 55                  | 62   | 70   | 79   | 93   | 96    | 54      | 96      | 67.0    |               |  |
| Jul 11                                                                                                  | 98                                             | 99   | 98   | 91   | 95                   | 96   | 90   | 84   | 78   | 69                                                                                      | 58   | 47   | 39   | 35   | 31                     | 30   | 30   | 28   | 29                  | 31   | 37   | 52   | 77   | 69    | 28      | 99      | 62.1    |               |  |
| Jul 12                                                                                                  | 89                                             | 89   | 91   | 92   | 91                   | 95   | 85   | 70   | 58   | 43                                                                                      | 36   | 32   | 30   | 31   | 31                     | 31   | 31   | 31   | 36                  | 47   | 51   | 56   | 60   | 64    | 30      | 95      | 57.1    |               |  |
| Jul 13                                                                                                  | 67                                             | 77   | 82   | 78   | 75                   | 79   | 76   | 73   | 61   | 47                                                                                      | 44   | 43   | 44   | 36   | 31                     | 30   | 28   | 29   | 29                  | 46   | 55   | 56   | 63   | 67    | 28      | 82      | 54.8    |               |  |
| Jul 14                                                                                                  | 69                                             | 72   | 76   | 78   | 89                   | 94   | 91   | 87   | 79   | 67                                                                                      | 61   | 58   | 53   | 50   | 45                     | 40   | 32   | 31   | 34                  | 44   | 64   | 54   | 54   | 53    | 31      | 94      | 61.5    |               |  |
| Jul 15                                                                                                  | 54                                             | 55   | 61   | 55   | 50                   | 50   | 52   | 52   | 55   | 56                                                                                      | 53   | 48   | 45   | 42   | 38                     | 35   | 33   | 33   | 36                  | 38   | 43   | 50   | 54   | 62    | 33      | 62      | 47.9    |               |  |
| Jul 16                                                                                                  | 72                                             | 80   | 81   | 85   | 91                   | 92   | 85   | 81   | 78   | 73                                                                                      | 70   | 68   | 66   | 66   | 68                     | 77   | 84   | 94   | 91                  | 81   | 78   | 77   | 78   | 79    | 66      | 94      | 79.0    |               |  |
| Jul 17                                                                                                  | 78                                             | 79   | 93   | 99   | 100                  | 100  | 100  | 100  | 100  | 100                                                                                     | 100  | 100  | 100  | 100  | 100                    | 100  | 100  | 100  | 100                 | 100  | 100  | 100  | 100  | 100   | 78      | 100     | 97.9    |               |  |
| Jul 18                                                                                                  | 100                                            | 100  | 100  | 100  | 100                  | 100  | 100  | 100  | 100  | 100                                                                                     | 99   | 98   | 95   | 90   | 92                     | 94   | 93   | 93   | 93                  | 94   | 96   | 99   | 100  | 100   | 90      | 100     | 97.3    |               |  |
| Jul 19                                                                                                  | 100                                            | 99   | 100  | 99   | 100                  | 100  | 100  | 100  | 96   | 89                                                                                      | 87   | 79   | 73   | 72   | 80                     | 82   | 80   | 79   | 81                  | 84   | 94   | 100  | 100  | 100   | 72      | 100     | 90.6    |               |  |
| Jul 20                                                                                                  | 100                                            | 100  | 100  | 100  | 100                  | 100  | 100  | 100  | 96   | 92                                                                                      | 91   | 87   | 85   | 79   | 81                     | 78   | 81   | 90   | 99                  | 96   | 97   | 100  | 100  | 100   | 78      | 100     | 93.8    |               |  |
| Jul 21                                                                                                  | 100                                            | 100  | 100  | 100  | 100                  | 100  | 100  | 100  | 100  | 99                                                                                      | 89   | 81   | 84   | 84   | 84                     | 87   | 89   | 89   | 97                  | 94   | 100  | 100  | 100  | 100   | 81      | 100     | 94.9    |               |  |
| Jul 22                                                                                                  | 100                                            | 100  | 99   | 97   | 94                   | 93   | 87   | 82   | 72   | 68                                                                                      | 65   | 63   | 59   | 59   | 59                     | 51   | 50   | 51   | 53                  | 52   | 56   | 64   | 80   | 77    | 50      | 100     | 72.1    |               |  |
| Jul 23                                                                                                  | 82                                             | 94   | 95   | 89   | 85                   | 79   | 74   | 73   | 74   | 73                                                                                      | 74   | 69   | 65   | 63   | 53                     | 54   | 53   | 49   | 49                  | 51   | P    | P    | P    | P     | 49      | 95      | 69.9    |               |  |
| Jul 24                                                                                                  | P                                              | P    | P    | P    | P                    | P    | P    | P    | P    | P                                                                                       | P    | P    | P    | P    | P                      | P    | P    | P    | P                   | P    | P    | P    | P    | P     | -       | -       | -       |               |  |
| Jul 25                                                                                                  | P                                              | P    | P    | P    | P                    | P    | P    | P    | P    | P                                                                                       | P    | P    | P    | P    | P                      | P    | P    | P    | P                   | P    | P    | P    | P    | P     | -       | -       | -       |               |  |
| Jul 26                                                                                                  | P                                              | P    | P    | P    | P                    | P    | P    | P    | P    | P                                                                                       | P    | P    | P    | P    | 44                     | 38   | 36   | 39   | 39                  | 42   | 45   | 53   | 63   | 68    | 36      | 78      | -       |               |  |
| Jul 27                                                                                                  | 83                                             | 87   | 92   | 95   | 94                   | 88   | 80   | 74   | 69   | 64                                                                                      | 58   | 53   | 48   | 45   | 43                     | 41   | 53   | 77   | 62                  | 63   | 79   | 86   | 94   | 96    | 41      | 96      | 71.8    |               |  |
| Jul 28                                                                                                  | 92                                             | 96   | 95   | 85   | 83                   | 81   | 74   | 64   | 56   | 51                                                                                      | 46   | 42   | 38   | 33   | 30                     | 29   | 32   | 32   | 32                  | 37   | 44   | 52   | 55   | 68    | 29      | 96      | 56.1    |               |  |
| Jul 29                                                                                                  | 78                                             | 76   | 84   | 83   | 81                   | 85   | 85   | 76   | 68   | 56                                                                                      | 50   | 48   | 46   | 40   | 37                     | 32   | 31   | 31   | 35                  | 42   | 50   | 71   | 79   | 77    | 31      | 85      | 60.0    |               |  |
| Jul 30                                                                                                  | 82                                             | 83   | 88   | 89   | 95                   | 93   | 85   | 65   | 48   | 40                                                                                      | 37   | 34   | 32   | 30   | 27                     | 25   | 25   | 26   | 29                  | 34   | 44   | 48   | 62   | 69    | 25      | 95      | 53.8    |               |  |
| Jul 31                                                                                                  | 73                                             | 75   | 72   | 63   | 68                   | 75   | 71   | 63   | 55   | 53                                                                                      | 50   | 45   | 40   | 36   | 34                     | 34   | 32   | 35   | 41                  | 53   | 62   | 63   | 69   | 77    | 32      | 77      | 55.8    |               |  |
| Diurnal Maximum                                                                                         | 100                                            | 100  | 100  | 100  | 100                  | 100  | 100  | 100  | 100  | 100                                                                                     | 100  | 100  | 100  | 100  | 100                    | 100  | 100  | 100  | 100                 | 100  | 100  | 100  | 100  | 100   | 100     | 100     | 100     |               |  |
| Diurnal Average                                                                                         | 83.0                                           | 85.9 | 87.8 | 87.4 | 88.6                 | 89.1 | 85.4 | 79.8 | 73.9 | 68.6                                                                                    | 65.1 | 61.2 | 58.0 | 54.2 | 50.8                   | 49.9 | 49.9 | 51.4 | 52.7                | 56.6 | 64.6 | 71.0 | 77.5 | 80.1  |         |         |         |               |  |
| C                                                                                                       | Monthly Calibration                            |      |      |      |                      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |                        |      |      | Q    | Quality Assurance   |      |      |      |      |       |         |         |         |               |  |
| K                                                                                                       | Collection Error                               |      |      |      |                      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |                        |      |      | Y    | Routine Maintenance |      |      |      |      |       |         |         | P       | Power Failure |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |                      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |                        |      |      |      |                     |      |      |      |      |       |         |         |         |               |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |                      |      |      |      |      |                                                                                         |      |      |      |      |                        |      |      |      |                     |      |      |      |      |       |         |         |         |               |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |                      |      |      |      |      |                                                                                         |      |      |      |      |                        |      |      |      |                     |      |      |      |      |       |         |         |         |               |  |

***Timeseries Chart of Hourly Average for RH - 986c Station***





# PEACE RIVER AREA MONITORING PROGRAM

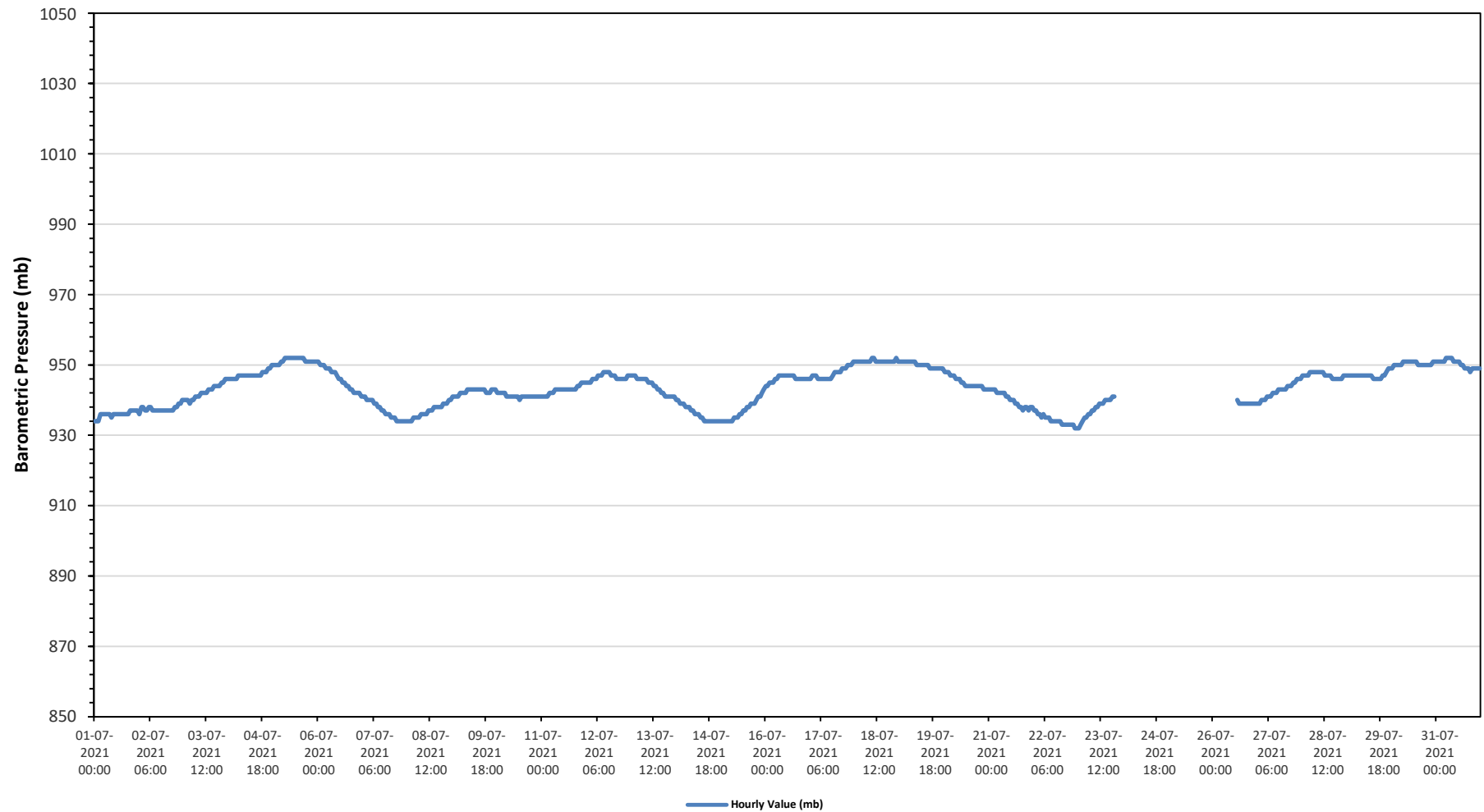
986c Station - July 2021

Summary of Hourly Averages

## BAROMETRIC PRESSURE (BP) in millibar

| Maximum Hourly Value:                                                                                   |                                                |     |     | 952 | mb  | on July 5 at hour 6   |     |     |                                                                                         |     |     |     |     |     |     | Hours in Service:      |                     |     |     | 744  |     |     |     |       |               |         |         |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|-----|-----|-----|-----|-----------------------|-----|-----|-----------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|------------------------|---------------------|-----|-----|------|-----|-----|-----|-------|---------------|---------|---------|--|
| Maximum Daily Value:                                                                                    |                                                |     |     | 951 | mb  | on July 5             |     |     |                                                                                         |     |     |     |     |     |     | Hours of Data:         |                     |     |     | 679  |     |     |     |       |               |         |         |  |
| Minimum Hourly Value:                                                                                   |                                                |     |     | 932 | mb  | on July 22 at hour 22 |     |     |                                                                                         |     |     |     |     |     |     | Hours of Missing Data: |                     |     |     | 65   |     |     |     |       |               |         |         |  |
| Minimum Daily Value:                                                                                    |                                                |     |     | 934 | mb  | on July 22            |     |     |                                                                                         |     |     |     |     |     |     | Hours of Calibration:  |                     |     |     | 0    |     |     |     |       |               |         |         |  |
| Monthly Average:                                                                                        |                                                |     |     | 943 | mb  |                       |     |     |                                                                                         |     |     |     |     |     |     | Operational Uptime:    |                     |     |     | 91.3 |     |     |     |       |               |         |         |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |     |     |     |     |                       |     |     |                                                                                         |     |     |     |     |     |     |                        |                     |     |     |      |     |     |     | Daily | Daily         | Daily   |         |  |
|                                                                                                         | 0                                              | 1   | 2   | 3   | 4   | 5                     | 6   | 7   | 8                                                                                       | 9   | 10  | 11  | 12  | 13  | 14  | 15                     | 16                  | 17  | 18  | 19   | 20  | 21  | 22  | 23    | Minimum       | Maximum | Average |  |
| Jul 1                                                                                                   | 934                                            | 934 | 934 | 936 | 936 | 936                   | 936 | 936 | 936                                                                                     | 935 | 936 | 936 | 936 | 936 | 936 | 936                    | 936                 | 936 | 936 | 937  | 937 | 937 | 937 | 937   | 934           | 937     | 935.9   |  |
| Jul 2                                                                                                   | 936                                            | 938 | 938 | 937 | 937 | 938                   | 938 | 937 | 937                                                                                     | 937 | 937 | 937 | 937 | 937 | 937 | 937                    | 937                 | 937 | 937 | 938  | 938 | 939 | 939 | 940   | 936           | 940     | 937.5   |  |
| Jul 3                                                                                                   | 940                                            | 940 | 940 | 939 | 940 | 940                   | 941 | 941 | 941                                                                                     | 942 | 942 | 942 | 942 | 943 | 943 | 943                    | 944                 | 944 | 944 | 945  | 945 | 946 | 946 | 939   | 946           | 942.4   |         |  |
| Jul 4                                                                                                   | 946                                            | 946 | 946 | 946 | 946 | 947                   | 947 | 947 | 947                                                                                     | 947 | 947 | 947 | 947 | 947 | 947 | 947                    | 947                 | 947 | 948 | 948  | 948 | 949 | 949 | 950   | 946           | 950     | 947.2   |  |
| Jul 5                                                                                                   | 950                                            | 950 | 950 | 950 | 951 | 951                   | 952 | 952 | 952                                                                                     | 952 | 952 | 952 | 952 | 952 | 952 | 952                    | 952                 | 951 | 951 | 951  | 951 | 951 | 951 | 951   | 950           | 952     | 951.3   |  |
| Jul 6                                                                                                   | 951                                            | 950 | 950 | 950 | 949 | 949                   | 949 | 948 | 948                                                                                     | 948 | 947 | 946 | 946 | 945 | 945 | 944                    | 944                 | 943 | 943 | 942  | 942 | 942 | 942 | 941   | 941           | 951     | 946.0   |  |
| Jul 7                                                                                                   | 941                                            | 941 | 940 | 940 | 940 | 940                   | 939 | 939 | 938                                                                                     | 938 | 937 | 937 | 936 | 936 | 936 | 935                    | 935                 | 935 | 934 | 934  | 934 | 934 | 934 | 934   | 934           | 941     | 937.0   |  |
| Jul 8                                                                                                   | 934                                            | 934 | 934 | 935 | 935 | 935                   | 935 | 936 | 936                                                                                     | 936 | 936 | 937 | 937 | 937 | 938 | 938                    | 938                 | 938 | 938 | 939  | 939 | 939 | 940 | 940   | 934           | 940     | 936.8   |  |
| Jul 9                                                                                                   | 941                                            | 941 | 941 | 941 | 942 | 942                   | 942 | 942 | 943                                                                                     | 943 | 943 | 943 | 943 | 943 | 943 | 943                    | 943                 | 943 | 942 | 942  | 942 | 943 | 943 | 943   | 941           | 943     | 942.4   |  |
| Jul 10                                                                                                  | 942                                            | 942 | 942 | 942 | 942 | 941                   | 941 | 941 | 941                                                                                     | 941 | 941 | 941 | 940 | 941 | 941 | 941                    | 941                 | 941 | 941 | 941  | 941 | 941 | 941 | 941   | 940           | 942     | 941.2   |  |
| Jul 11                                                                                                  | 941                                            | 941 | 941 | 941 | 942 | 942                   | 942 | 943 | 943                                                                                     | 943 | 943 | 943 | 943 | 943 | 943 | 943                    | 943                 | 943 | 943 | 944  | 944 | 945 | 945 | 945   | 941           | 945     | 942.9   |  |
| Jul 12                                                                                                  | 945                                            | 945 | 945 | 946 | 946 | 946                   | 947 | 947 | 947                                                                                     | 948 | 948 | 948 | 948 | 947 | 947 | 947                    | 946                 | 946 | 946 | 946  | 946 | 946 | 947 | 947   | 945           | 948     | 946.5   |  |
| Jul 13                                                                                                  | 947                                            | 947 | 947 | 946 | 946 | 946                   | 946 | 946 | 946                                                                                     | 945 | 945 | 945 | 944 | 944 | 943 | 943                    | 942                 | 942 | 941 | 941  | 941 | 941 | 941 | 941   | 941           | 947     | 944.0   |  |
| Jul 14                                                                                                  | 940                                            | 940 | 939 | 939 | 939 | 938                   | 938 | 938 | 937                                                                                     | 937 | 936 | 936 | 936 | 935 | 935 | 934                    | 934                 | 934 | 934 | 934  | 934 | 934 | 934 | 934   | 934           | 940     | 936.2   |  |
| Jul 15                                                                                                  | 934                                            | 934 | 934 | 934 | 934 | 934                   | 934 | 935 | 935                                                                                     | 935 | 936 | 936 | 937 | 937 | 938 | 938                    | 939                 | 939 | 939 | 940  | 941 | 941 | 942 | 943   | 934           | 943     | 937.0   |  |
| Jul 16                                                                                                  | 944                                            | 944 | 945 | 945 | 945 | 946                   | 946 | 947 | 947                                                                                     | 947 | 947 | 947 | 947 | 947 | 947 | 947                    | 946                 | 946 | 946 | 946  | 946 | 946 | 946 | 946   | 944           | 947     | 946.1   |  |
| Jul 17                                                                                                  | 946                                            | 947 | 947 | 947 | 946 | 946                   | 946 | 946 | 946                                                                                     | 946 | 946 | 946 | 947 | 948 | 948 | 948                    | 948                 | 949 | 949 | 949  | 950 | 950 | 950 | 951   | 946           | 951     | 947.6   |  |
| Jul 18                                                                                                  | 951                                            | 951 | 951 | 951 | 951 | 951                   | 951 | 951 | 951                                                                                     | 951 | 952 | 952 | 951 | 951 | 951 | 951                    | 951                 | 951 | 951 | 951  | 951 | 951 | 951 | 951   | 951           | 952     | 951.1   |  |
| Jul 19                                                                                                  | 951                                            | 951 | 951 | 951 | 951 | 951                   | 951 | 951 | 951                                                                                     | 951 | 950 | 950 | 950 | 950 | 950 | 950                    | 950                 | 949 | 949 | 949  | 949 | 949 | 949 | 949   | 949           | 951     | 950.0   |  |
| Jul 20                                                                                                  | 948                                            | 948 | 948 | 947 | 947 | 947                   | 946 | 946 | 946                                                                                     | 945 | 945 | 944 | 944 | 944 | 944 | 944                    | 944                 | 944 | 944 | 944  | 944 | 944 | 943 | 943   | 943           | 948     | 945.1   |  |
| Jul 21                                                                                                  | 943                                            | 943 | 943 | 943 | 942 | 942                   | 942 | 942 | 942                                                                                     | 941 | 941 | 940 | 940 | 940 | 939 | 939                    | 938                 | 938 | 937 | 938  | 938 | 937 | 938 | 938   | 937           | 943     | 940.2   |  |
| Jul 22                                                                                                  | 937                                            | 937 | 936 | 936 | 935 | 936                   | 935 | 935 | 935                                                                                     | 935 | 934 | 934 | 934 | 934 | 934 | 933                    | 933                 | 933 | 933 | 933  | 933 | 933 | 932 | 932   | 932           | 937     | 934.2   |  |
| Jul 23                                                                                                  | 932                                            | 933 | 934 | 935 | 935 | 936                   | 936 | 937 | 937                                                                                     | 938 | 938 | 939 | 939 | 939 | 940 | 940                    | 940                 | 940 | 941 | 941  | P   | P   | P   | P     | 932           | 941     | 937.5   |  |
| Jul 24                                                                                                  | P                                              | P   | P   | P   | P   | P                     | P   | P   | P                                                                                       | P   | P   | P   | P   | P   | P   | P                      | P                   | P   | P   | P    | P   | P   | P   | P     | -             | -       | -       |  |
| Jul 25                                                                                                  | P                                              | P   | P   | P   | P   | P                     | P   | P   | P                                                                                       | P   | P   | P   | P   | P   | P   | P                      | P                   | P   | P   | P    | P   | P   | P   | P     | -             | -       | -       |  |
| Jul 26                                                                                                  | P                                              | P   | P   | P   | P   | P                     | P   | P   | P                                                                                       | P   | P   | P   | P   | 940 | 939 | 939                    | 939                 | 939 | 939 | 939  | 939 | 939 | 939 | 939   | 939           | 940     | -       |  |
| Jul 27                                                                                                  | 939                                            | 939 | 940 | 940 | 940 | 941                   | 941 | 941 | 942                                                                                     | 942 | 942 | 943 | 943 | 943 | 943 | 943                    | 944                 | 944 | 944 | 945  | 945 | 946 | 946 | 946   | 939           | 946     | 942.6   |  |
| Jul 28                                                                                                  | 947                                            | 947 | 947 | 947 | 948 | 948                   | 948 | 948 | 948                                                                                     | 948 | 948 | 948 | 947 | 947 | 947 | 947                    | 946                 | 946 | 946 | 946  | 946 | 947 | 947 | 946   | 948           | 947.1   |         |  |
| Jul 29                                                                                                  | 947                                            | 947 | 947 | 947 | 947 | 947                   | 947 | 947 | 947                                                                                     | 947 | 947 | 947 | 947 | 947 | 946 | 946                    | 946                 | 946 | 947 | 947  | 948 | 949 | 949 | 946   | 949           | 947.0   |         |  |
| Jul 30                                                                                                  | 949                                            | 950 | 950 | 950 | 950 | 951                   | 951 | 951 | 951                                                                                     | 951 | 951 | 951 | 951 | 951 | 950 | 950                    | 950                 | 950 | 950 | 950  | 950 | 951 | 951 | 949   | 951           | 950.4   |         |  |
| Jul 31                                                                                                  | 951                                            | 951 | 951 | 951 | 951 | 952                   | 952 | 952 | 952                                                                                     | 951 | 951 | 951 | 951 | 950 | 950 | 949                    | 949                 | 949 | 948 | 949  | 949 | 949 | 949 | 949   | 948           | 952     | 950.3   |  |
| Diurnal Maximum                                                                                         | 951                                            | 951 | 951 | 951 | 951 | 952                   | 952 | 952 | 952                                                                                     | 952 | 952 | 952 | 952 | 952 | 952 | 952                    | 952                 | 951 | 951 | 951  | 951 | 951 | 951 | 951   | 951           | 951     | 951     |  |
| Diurnal Average                                                                                         | 943                                            | 943 | 943 | 943 | 943 | 944                   | 944 | 944 | 944                                                                                     | 944 | 944 | 943 | 943 | 943 | 943 | 943                    | 943                 | 943 | 943 | 943  | 943 | 943 | 944 | 944   | 944           | 944     | 944     |  |
| C                                                                                                       | Monthly Calibration                            |     |     |     |     |                       |     | S   | Daily Zero-Span Check                                                                   |     |     |     |     |     |     | Q                      | Quality Assurance   |     |     |      |     |     |     |       |               |         |         |  |
| K                                                                                                       | Collection Error                               |     |     |     |     |                       |     | N   | No Data (Machine Not in Service)                                                        |     |     |     |     |     |     | Y                      | Routine Maintenance |     |     |      |     |     |     | P     | Power Failure |         |         |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |     |     |     |     |                       |     | NRM | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |     |     |     |     |     |     |                        |                     |     |     |      |     |     |     |       |               |         |         |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |     |     |     |     |                       |     |     |                                                                                         |     |     |     |     |     |     |                        |                     |     |     |      |     |     |     |       |               |         |         |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |     |     |     |     |                       |     |     |                                                                                         |     |     |     |     |     |     |                        |                     |     |     |      |     |     |     |       |               |         |         |  |

***Timeseries Chart of Hourly Average for BP - 986c Station***







# PEACE RIVER AREA MONITORING PROGRAM

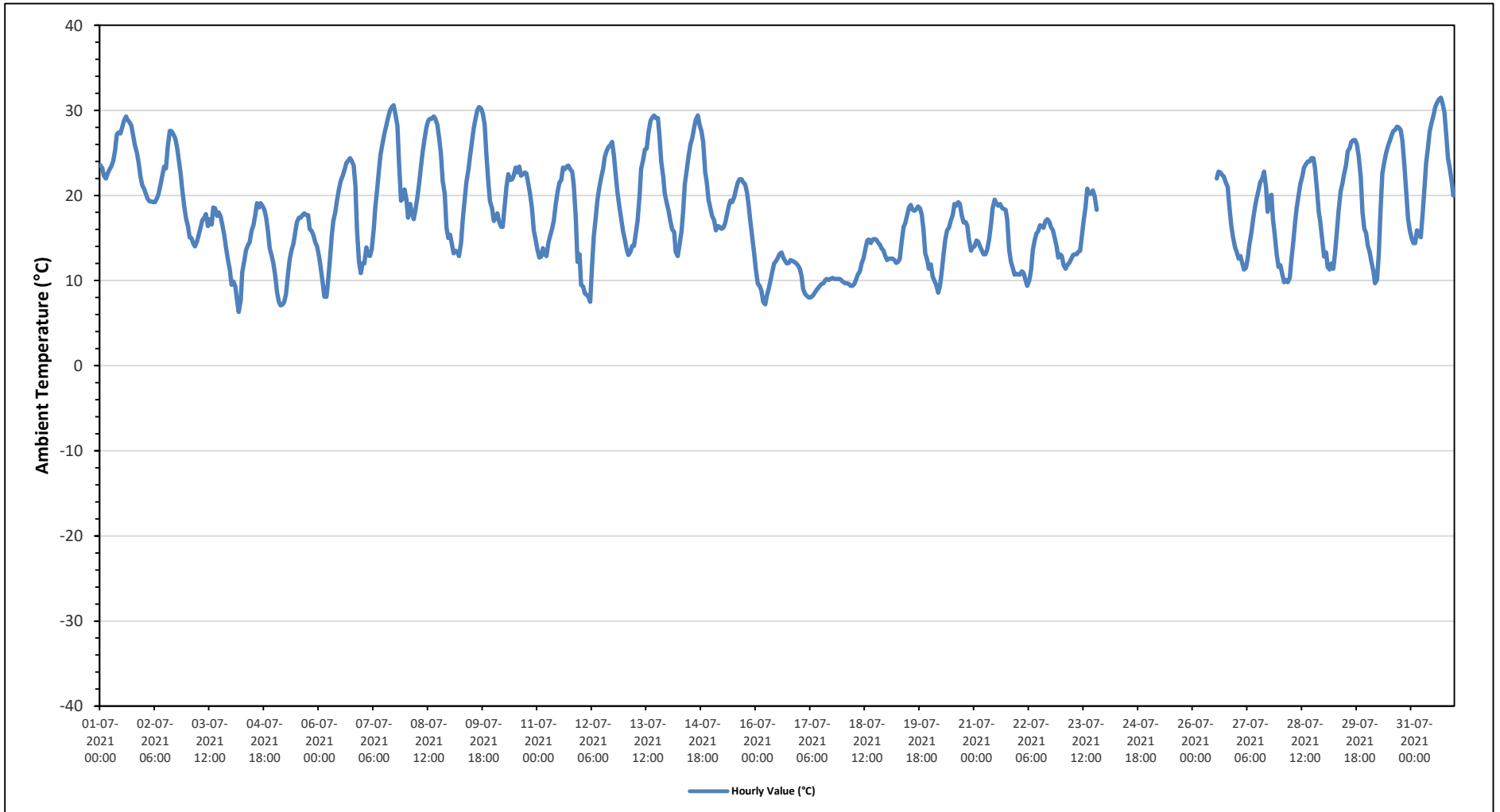
986c Station - July 2021

Summary of Hourly Averages

## AMBIENT TEMPERATURE (AT) in Degree Celsius

| Maximum Hourly Value:                                                                                   |                                                |      |      | 31.5 | °C   | on July 31 at hour 16 |      |      |      | Hours in Service:                                                                       |      |      |      | 744  |      |      |      |      |                     |      |      |      |      |       |         |         |         |               |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|------|-----------------------|------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|------|------|------|------|---------------------|------|------|------|------|-------|---------|---------|---------|---------------|--|
| Maximum Daily Value:                                                                                    |                                                |      |      | 25.3 | °C   | on July 1             |      |      |      | Hours of Data:                                                                          |      |      |      | 679  |      |      |      |      |                     |      |      |      |      |       |         |         |         |               |  |
| Minimum Hourly Value:                                                                                   |                                                |      |      | 6.3  | °C   | on July 4 at hour 4   |      |      |      | Hours of Missing Data:                                                                  |      |      |      | 65   |      |      |      |      |                     |      |      |      |      |       |         |         |         |               |  |
| Minimum Daily Value:                                                                                    |                                                |      |      | 9.5  | °C   | on July 17            |      |      |      | Hours of Calibration:                                                                   |      |      |      | 0    |      |      |      |      |                     |      |      |      |      |       |         |         |         |               |  |
| Monthly Average:                                                                                        |                                                |      |      | 17.8 | °C   |                       |      |      |      | Operational Uptime:                                                                     |      |      |      | 91.3 |      |      |      |      |                     |      |      |      |      |       |         |         |         |               |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |      |                       |      |      |      |                                                                                         |      |      |      |      |      |      |      |      |                     |      |      |      |      | Daily | Daily   | Daily   |         |               |  |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4    | 5                     | 6    | 7    | 8    | 9                                                                                       | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18                  | 19   | 20   | 21   | 22   | 23    | Minimum | Maximum | Average |               |  |
| Jul 1                                                                                                   | 23.6                                           | 23.2 | 22.3 | 22   | 22.6 | 23.1                  | 23.4 | 24.1 | 25.3 | 27.2                                                                                    | 27.4 | 27.3 | 28   | 28.8 | 29.3 | 28.9 | 28.6 | 28.2 | 26.9                | 25.9 | 25   | 23.8 | 22.2 | 21.2  | 21.2    | 29.3    | 25.3    |               |  |
| Jul 2                                                                                                   | 20.8                                           | 20.2 | 19.6 | 19.3 | 19.3 | 19.2                  | 19.2 | 19.7 | 20.2 | 21.3                                                                                    | 22.4 | 23.4 | 23.2 | 25.7 | 27.6 | 27.6 | 27.2 | 26.8 | 25.8                | 24.3 | 22.5 | 20.7 | 18.7 | 17.3  | 17.3    | 27.6    | 22.2    |               |  |
| Jul 3                                                                                                   | 16.3                                           | 15.1 | 15   | 14.3 | 14   | 14.6                  | 15.4 | 16.2 | 17.1 | 17.4                                                                                    | 17.8 | 16.4 | 17.2 | 16.6 | 18.6 | 18.5 | 17.6 | 18   | 17.5                | 16.5 | 15.4 | 13.9 | 12.4 | 11.3  | 11.3    | 18.6    | 16.0    |               |  |
| Jul 4                                                                                                   | 9.5                                            | 9.9  | 9.3  | 7.8  | 6.3  | 7.7                   | 11   | 12.3 | 13.6 | 14.2                                                                                    | 14.5 | 15.9 | 16.5 | 17.7 | 19.1 | 18.6 | 19.1 | 18.8 | 18.3                | 17.4 | 15.8 | 13.8 | 12.9 | 12.1  | 6.3     | 19.1    | 13.8    |               |  |
| Jul 5                                                                                                   | 10.5                                           | 8.6  | 7.5  | 7.1  | 7.2  | 7.5                   | 8.4  | 10.8 | 12.6 | 13.6                                                                                    | 14.3 | 15.8 | 16.9 | 17.4 | 17.4 | 17.7 | 17.9 | 17.7 | 17.7                | 16.1 | 15.8 | 15.3 | 14.5 | 14    | 7.1     | 17.9    | 13.4    |               |  |
| Jul 6                                                                                                   | 12.8                                           | 11.6 | 9.8  | 8.1  | 8.1  | 9.8                   | 12.6 | 15.3 | 17   | 18.1                                                                                    | 19.5 | 20.7 | 21.7 | 22.3 | 23   | 23.8 | 24.1 | 24.4 | 24.1                | 23.5 | 21.1 | 16   | 12.2 | 10.9  | 8.1     | 24.4    | 17.1    |               |  |
| Jul 7                                                                                                   | 12                                             | 12   | 13.9 | 13   | 12.9 | 13.7                  | 16.1 | 18.6 | 20.9 | 23.2                                                                                    | 24.9 | 26.2 | 27.3 | 28.3 | 29.1 | 30   | 30.4 | 30.6 | 29.6                | 28.2 | 24.1 | 19.4 | 19.6 | 20.7  | 12.0    | 30.6    | 21.9    |               |  |
| Jul 8                                                                                                   | 19.6                                           | 17.4 | 19   | 18.1 | 17.2 | 18.3                  | 19.7 | 21.3 | 23.5 | 25.3                                                                                    | 26.7 | 28   | 28.8 | 29   | 29   | 29.3 | 29   | 28.3 | 26.8                | 24.9 | 21.7 | 20.2 | 16.2 | 15    | 15.0    | 29.3    | 23.0    |               |  |
| Jul 9                                                                                                   | 15.4                                           | 14.3 | 13.2 | 13.5 | 13.4 | 12.9                  | 14.4 | 17.2 | 19.7 | 21.5                                                                                    | 23   | 24.7 | 26.3 | 27.9 | 29   | 30   | 30.4 | 30.2 | 29.6                | 28.3 | 24.7 | 21.3 | 19.3 | 18.5  | 12.9    | 30.4    | 21.6    |               |  |
| Jul 10                                                                                                  | 17                                             | 17.4 | 17.9 | 16.9 | 16.3 | 16.3                  | 18.9 | 21.1 | 22.5 | 21.8                                                                                    | 21.9 | 22.3 | 23.3 | 22.7 | 23.4 | 22.3 | 22.5 | 22.7 | 22.6                | 21.3 | 20.1 | 18.5 | 15.9 | 14.7  | 14.7    | 23.4    | 20.0    |               |  |
| Jul 11                                                                                                  | 13.7                                           | 12.7 | 12.8 | 13.8 | 13.1 | 12.9                  | 14.5 | 15.2 | 16.1 | 17.1                                                                                    | 18.9 | 20.3 | 21.5 | 21.8 | 23.3 | 23.1 | 23.4 | 23.5 | 23.1                | 22.8 | 21.3 | 17.5 | 12.2 | 13.1  | 12.2    | 23.5    | 17.8    |               |  |
| Jul 12                                                                                                  | 9.5                                            | 9.3  | 8.5  | 8.3  | 8.1  | 7.5                   | 11.7 | 15.2 | 17.5 | 19.4                                                                                    | 21   | 22.1 | 23.2 | 24.5 | 25.3 | 25.7 | 25.9 | 26.3 | 24.7                | 22.5 | 20.4 | 18.6 | 17.2 | 15.8  | 7.5     | 26.3    | 17.8    |               |  |
| Jul 13                                                                                                  | 14.8                                           | 13.6 | 13   | 13.4 | 14.1 | 14.1                  | 15.5 | 17   | 20   | 23.1                                                                                    | 24.2 | 25.4 | 25.5 | 27.4 | 28.8 | 29.1 | 29.4 | 29.1 | 29.1                | 27.1 | 24   | 22.2 | 20.2 | 19.1  | 13.0    | 29.4    | 21.6    |               |  |
| Jul 14                                                                                                  | 18.2                                           | 17   | 16   | 15.7 | 13.4 | 12.9                  | 14.2 | 15.8 | 18   | 21.4                                                                                    | 23.1 | 24.5 | 26   | 26.7 | 27.9 | 28.9 | 29.4 | 28.3 | 27.6                | 26.3 | 22.7 | 21.6 | 19.5 | 18.4  | 12.9    | 29.4    | 21.4    |               |  |
| Jul 15                                                                                                  | 17.6                                           | 17.1 | 15.9 | 16.4 | 16.3 | 16.1                  | 16.2 | 16.7 | 17.7 | 18.8                                                                                    | 19.4 | 19.2 | 19.8 | 20.7 | 21.5 | 21.9 | 21.9 | 21.6 | 21.3                | 20.4 | 18.8 | 16.8 | 14.8 | 13.3  | 13.3    | 21.9    | 18.3    |               |  |
| Jul 16                                                                                                  | 11.3                                           | 9.6  | 9.4  | 8.8  | 7.5  | 7.2                   | 8.2  | 9.1  | 10.1 | 11.1                                                                                    | 12   | 12.3 | 12.7 | 13.1 | 13.3 | 12.7 | 12.3 | 12   | 12.1                | 12.4 | 12.3 | 12.2 | 12   | 11.8  | 7.2     | 13.3    | 11.1    |               |  |
| Jul 17                                                                                                  | 11.4                                           | 10.5 | 9    | 8.4  | 8.2  | 8                     | 8    | 8.2  | 8.5  | 8.8                                                                                     | 9.1  | 9.4  | 9.6  | 9.7  | 10.1 | 10.2 | 10.1 | 10.2 | 10.3                | 10.2 | 10.2 | 10.2 | 10.2 | 10    | 8.0     | 11.4    | 9.5     |               |  |
| Jul 18                                                                                                  | 9.8                                            | 9.7  | 9.7  | 9.6  | 9.4  | 9.4                   | 9.6  | 10.2 | 10.7 | 11.1                                                                                    | 12   | 12.6 | 13.6 | 14.7 | 14.8 | 14.4 | 14.8 | 14.9 | 14.8                | 14.5 | 14.2 | 13.8 | 13.5 | 12.9  | 9.4     | 14.9    | 12.3    |               |  |
| Jul 19                                                                                                  | 12.4                                           | 12.6 | 12.6 | 12.6 | 12.4 | 12.1                  | 12.2 | 12.6 | 14.5 | 16.3                                                                                    | 16.7 | 17.7 | 18.6 | 18.9 | 18.3 | 18.2 | 18.4 | 18.7 | 18.5                | 17.8 | 16   | 13.2 | 12.4 | 11.4  | 11.4    | 18.9    | 15.2    |               |  |
| Jul 20                                                                                                  | 11.9                                           | 10.5 | 9.9  | 9.5  | 8.6  | 9.4                   | 11.1 | 13.1 | 14.9 | 15.9                                                                                    | 16.2 | 17.1 | 17.7 | 19   | 18.8 | 19.2 | 19   | 17.6 | 16.8                | 16.9 | 16.5 | 14.8 | 13.5 | 13.9  | 8.6     | 19.2    | 14.7    |               |  |
| Jul 21                                                                                                  | 14                                             | 14.7 | 14.6 | 14   | 13.5 | 13.1                  | 13.1 | 13.7 | 14.8 | 16.5                                                                                    | 18.5 | 19.5 | 19.1 | 18.8 | 19   | 18.6 | 18.4 | 18.3 | 17.2                | 13.6 | 12.2 | 11.5 | 10.7 | 10.8  | 10.7    | 19.5    | 15.3    |               |  |
| Jul 22                                                                                                  | 10.7                                           | 10.7 | 11.1 | 10.9 | 10.1 | 9.4                   | 10   | 11.2 | 13.6 | 14.7                                                                                    | 15.5 | 15.8 | 16.5 | 16.4 | 16.2 | 17   | 17.2 | 16.9 | 16.3                | 15.9 | 15   | 14.1 | 12.7 | 13.1  | 9.4     | 17.2    | 13.8    |               |  |
| Jul 23                                                                                                  | 12.9                                           | 11.8 | 11.4 | 11.8 | 12.1 | 12.5                  | 13   | 13.1 | 13.1 | 13.4                                                                                    | 13.5 | 15.3 | 17.1 | 18.6 | 20.8 | 20.2 | 20.2 | 20.6 | 19.9                | 18.3 | P    | P    | P    | P     | 11.4    | 20.8    | 15.5    |               |  |
| Jul 24                                                                                                  | P                                              | P    | P    | P    | P    | P                     | P    | P    | P    | P                                                                                       | P    | P    | P    | P    | P    | P    | P    | P    | P                   | P    | P    | P    | P    | P     | -       | -       | -       |               |  |
| Jul 25                                                                                                  | P                                              | P    | P    | P    | P    | P                     | P    | P    | P    | P                                                                                       | P    | P    | P    | P    | P    | P    | P    | P    | P                   | P    | P    | P    | P    | P     | -       | -       | -       |               |  |
| Jul 26                                                                                                  | P                                              | P    | P    | P    | P    | P                     | P    | P    | P    | P                                                                                       | P    | P    | P    | 22   | 22.8 | 22.7 | 22.4 | 22.2 | 21.6                | 21   | 18.6 | 16.5 | 15.1 | 13.9  | 13.9    | 22.8    | -       |               |  |
| Jul 27                                                                                                  | 13.4                                           | 12.6 | 12.9 | 12.1 | 11.3 | 11.5                  | 12.7 | 14.2 | 15.6 | 17.2                                                                                    | 18.6 | 19.7 | 20.7 | 21.6 | 22   | 22.8 | 20.9 | 18.1 | 19.9                | 20.1 | 17.2 | 15.1 | 13   | 11.6  | 11.3    | 22.8    | 16.5    |               |  |
| Jul 28                                                                                                  | 11.8                                           | 10.7 | 9.8  | 10.1 | 9.8  | 10.3                  | 12.3 | 14.6 | 16.8 | 18.5                                                                                    | 20.1 | 21.4 | 22.2 | 23.3 | 23.7 | 24   | 24   | 24.4 | 24.4                | 23.3 | 20.7 | 18.1 | 16.9 | 14.7  | 9.8     | 24.4    | 17.7    |               |  |
| Jul 29                                                                                                  | 12.8                                           | 13.3 | 11.6 | 11.3 | 12   | 11.4                  | 13.2 | 16   | 18.2 | 20.5                                                                                    | 21.4 | 22.6 | 23.5 | 25.2 | 25.6 | 26.3 | 26.5 | 26.5 | 26                  | 24.6 | 22.2 | 18   | 16.1 | 15.6  | 11.3    | 26.5    | 19.2    |               |  |
| Jul 30                                                                                                  | 14.1                                           | 13.4 | 12.2 | 11.1 | 9.7  | 10.1                  | 13.1 | 18.3 | 22.6 | 24                                                                                      | 25   | 25.8 | 26.4 | 27   | 27.6 | 27.7 | 28.1 | 28   | 27.7                | 26.4 | 23.4 | 20.8 | 17.3 | 15.9  | 9.7     | 28.1    | 20.7    |               |  |
| Jul 31                                                                                                  | 15                                             | 14.4 | 14.4 | 15.9 | 15.4 | 15.1                  | 17.7 | 20.6 | 23.8 | 25.8                                                                                    | 27.5 | 28.6 | 29.4 | 30.4 | 30.9 | 31.3 | 31.5 | 30.9 | 29.8                | 27.2 | 24.4 | 23.2 | 21.6 | 20    | 14.4    | 31.5    | 23.5    |               |  |
| Diurnal Maximum                                                                                         | 23.6                                           | 23.2 | 22.3 | 22.0 | 22.6 | 23.1                  | 23.4 | 24.1 | 25.3 | 27.2                                                                                    | 27.5 | 28.6 | 29.4 | 30.4 | 30.9 | 31.3 | 31.5 | 30.9 | 29.8                | 28.3 | 25.0 | 23.8 | 22.2 | 21.2  |         |         |         |               |  |
| Diurnal Average                                                                                         | 14.0                                           | 13.4 | 12.9 | 12.6 | 12.2 | 12.4                  | 13.8 | 15.4 | 17.1 | 18.5                                                                                    | 19.5 | 20.4 | 21.2 | 21.9 | 22.6 | 22.8 | 22.8 | 22.5 | 22.1                | 21.0 | 19.2 | 17.2 | 15.5 | 14.7  |         |         |         |               |  |
| C                                                                                                       | Monthly Calibration                            |      |      |      |      |                       |      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |      |      |      | Q    | Quality Assurance   |      |      |      |      |       |         |         |         |               |  |
| K                                                                                                       | Collection Error                               |      |      |      |      |                       |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |      |      |      | Y    | Routine Maintenance |      |      |      |      |       |         |         | P       | Power Failure |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |      |                       |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |      |      |      |      |                     |      |      |      |      |       |         |         |         |               |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |      |                       |      |      |      |                                                                                         |      |      |      |      |      |      |      |      |                     |      |      |      |      |       |         |         |         |               |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |      |                       |      |      |      |                                                                                         |      |      |      |      |      |      |      |      |                     |      |      |      |      |       |         |         |         |               |  |

***Timeseries Chart of Hourly Average for AT - 986c Station***





# PEACE RIVER AREA MONITORING PROGRAM

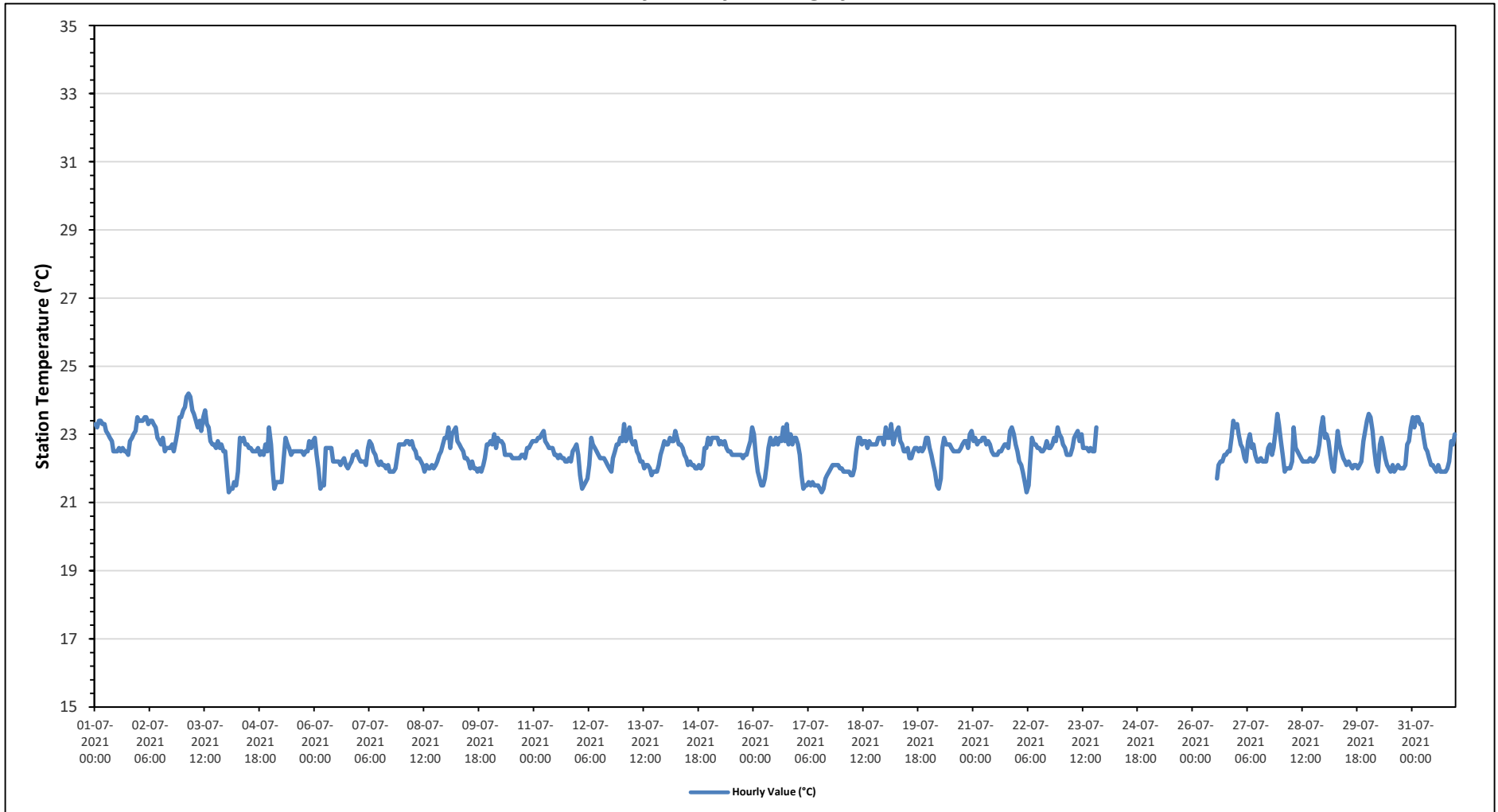
986c Station - July 2021

## Summary of Hourly Averages

### STATION TEMPERATURE (ST) in Degree Celsius

| Maximum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |                                                                                         | 24.2 | °C   | on July 3 at hour 3 |      |      |      |      | Hours in Service:      |      |      |      |      |                     |      |               |               |               | 744  |  |  |  |  |      |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|---------------------|------|------|------|------|------------------------|------|------|------|------|---------------------|------|---------------|---------------|---------------|------|--|--|--|--|------|
| Maximum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | 23.2 | °C   | on July 3           |      |      |      |      | Hours of Data:         |      |      |      |      |                     |      |               |               |               | 679  |  |  |  |  |      |
| Minimum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |                                                                                         | 21.3 | °C   | on July 4 at hour 1 |      |      |      |      | Hours of Missing Data: |      |      |      |      |                     |      |               |               |               | 65   |  |  |  |  |      |
| Minimum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | 21.8 | °C   | on July 17          |      |      |      |      | Hours of Calibration:  |      |      |      |      |                     |      |               |               |               | 0    |  |  |  |  |      |
| Monthly Average:                                                                                        |                                                |      |      |      |      |      |      |      |                                                                                         | 22.5 | °C   |                     |      |      |      |      |                        |      |      |      |      | Operational Uptime: |      |               |               |               |      |  |  |  |  | 91.3 |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |      |      |      |      |                                                                                         |      |      |                     |      |      |      |      |                        |      |      |      |      |                     |      | Daily Minimum | Daily Maximum | Daily Average |      |  |  |  |  |      |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8                                                                                       | 9    | 10   | 11                  | 12   | 13   | 14   | 15   | 16                     | 17   | 18   | 19   | 20   | 21                  | 22   | 23            |               |               |      |  |  |  |  |      |
| Jul 1                                                                                                   | 23.3                                           | 23.2 | 23.4 | 23.4 | 23.3 | 23.3 | 23.1 | 23.0 | 22.9                                                                                    | 22.8 | 22.5 | 22.5                | 22.5 | 22.6 | 22.5 | 22.6 | 22.5                   | 22.5 | 22.4 | 22.8 | 22.9 | 23.0                | 23.1 | 23.5          | 22.4          | 23.5          | 22.9 |  |  |  |  |      |
| Jul 2                                                                                                   | 23.4                                           | 23.4 | 23.4 | 23.5 | 23.5 | 23.3 | 23.4 | 23.4 | 23.3                                                                                    | 23.2 | 22.9 | 22.8                | 22.7 | 22.9 | 22.5 | 22.6 | 22.6                   | 22.6 | 22.7 | 22.5 | 22.8 | 23.1                | 23.5 | 23.5          | 22.5          | 23.5          | 23.1 |  |  |  |  |      |
| Jul 3                                                                                                   | 23.7                                           | 23.8 | 24.1 | 24.2 | 24.1 | 23.7 | 23.6 | 23.4 | 23.2                                                                                    | 23.4 | 23.1 | 23.5                | 23.7 | 23.3 | 23.2 | 22.8 | 22.7                   | 22.7 | 22.6 | 22.8 | 22.6 | 22.7                | 22.5 | 22.5          | 22.5          | 24.2          | 23.2 |  |  |  |  |      |
| Jul 4                                                                                                   | 21.9                                           | 21.3 | 21.4 | 21.4 | 21.6 | 21.5 | 21.9 | 22.9 | 22.8                                                                                    | 22.9 | 22.7 | 22.7                | 22.6 | 22.6 | 22.5 | 22.5 | 22.5                   | 22.6 | 22.4 | 22.5 | 22.4 | 22.7                | 22.5 | 23.2          | 21.3          | 23.2          | 22.3 |  |  |  |  |      |
| Jul 5                                                                                                   | 22.7                                           | 21.9 | 21.4 | 21.6 | 21.6 | 21.6 | 21.6 | 22.3 | 22.9                                                                                    | 22.7 | 22.6 | 22.4                | 22.5 | 22.5 | 22.5 | 22.5 | 22.5                   | 22.5 | 22.4 | 22.5 | 22.5 | 22.8                | 22.6 | 22.8          | 21.4          | 22.9          | 22.3 |  |  |  |  |      |
| Jul 6                                                                                                   | 22.9                                           | 22.4 | 22.0 | 21.4 | 21.5 | 21.5 | 22.6 | 22.6 | 22.6                                                                                    | 22.6 | 22.2 | 22.2                | 22.2 | 22.2 | 22.1 | 22.2 | 22.3                   | 22.1 | 22.0 | 22.1 | 22.2 | 22.4                | 22.4 | 22.5          | 21.4          | 22.9          | 22.2 |  |  |  |  |      |
| Jul 7                                                                                                   | 22.3                                           | 22.2 | 22.2 | 22.2 | 22.1 | 22.6 | 22.8 | 22.7 | 22.5                                                                                    | 22.4 | 22.2 | 22.1                | 22.2 | 22.1 | 22.1 | 22.0 | 22.1                   | 21.9 | 21.9 | 21.9 | 22.0 | 22.3                | 22.7 | 22.7          | 21.9          | 22.8          | 22.3 |  |  |  |  |      |
| Jul 8                                                                                                   | 22.7                                           | 22.7 | 22.8 | 22.8 | 22.7 | 22.8 | 22.6 | 22.5 | 22.3                                                                                    | 22.3 | 22.2 | 22.1                | 21.9 | 22.1 | 22.0 | 22.0 | 22.1                   | 22.0 | 21.9 | 22.1 | 22.2 | 22.4                | 22.5 | 22.7          | 21.9          | 22.9          | 22.4 |  |  |  |  |      |
| Jul 9                                                                                                   | 22.9                                           | 23.2 | 22.6 | 23.0 | 23.1 | 23.2 | 22.8 | 22.7 | 22.6                                                                                    | 22.5 | 22.3 | 22.3                | 22.2 | 22.0 | 22.2 | 22.0 | 22.0                   | 21.9 | 22.0 | 21.9 | 22.1 | 22.3                | 22.7 | 22.7          | 21.9          | 23.2          | 22.5 |  |  |  |  |      |
| Jul 10                                                                                                  | 22.8                                           | 22.7 | 23.0 | 22.6 | 22.9 | 22.8 | 22.8 | 22.7 | 22.4                                                                                    | 22.4 | 22.4 | 22.4                | 22.3 | 22.3 | 22.3 | 22.3 | 22.3                   | 22.4 | 22.4 | 22.3 | 22.6 | 22.6                | 22.7 | 22.8          | 22.3          | 23.0          | 22.6 |  |  |  |  |      |
| Jul 11                                                                                                  | 22.8                                           | 22.8 | 22.9 | 22.9 | 23.0 | 23.1 | 22.8 | 22.7 | 22.6                                                                                    | 22.6 | 22.6 | 22.4                | 22.4 | 22.3 | 22.4 | 22.3 | 22.3                   | 22.2 | 22.2 | 22.3 | 22.2 | 22.5                | 22.6 | 22.7          | 22.2          | 23.1          | 22.6 |  |  |  |  |      |
| Jul 12                                                                                                  | 22.4                                           | 21.8 | 21.4 | 21.5 | 21.6 | 21.7 | 22.1 | 22.9 | 22.7                                                                                    | 22.6 | 22.5 | 22.4                | 22.3 | 22.3 | 22.3 | 22.2 | 22.1                   | 22.0 | 21.9 | 22.3 | 22.5 | 22.7                | 22.7 | 22.9          | 21.4          | 22.9          | 22.2 |  |  |  |  |      |
| Jul 13                                                                                                  | 22.8                                           | 23.3 | 22.8 | 22.9 | 23.2 | 22.8 | 22.7 | 22.8 | 22.5                                                                                    | 22.4 | 22.2 | 22.2                | 22.0 | 22.1 | 22.1 | 22.0 | 21.8                   | 21.9 | 21.9 | 21.9 | 22.1 | 22.4                | 22.6 | 22.8          | 21.8          | 23.3          | 22.4 |  |  |  |  |      |
| Jul 14                                                                                                  | 22.7                                           | 22.7 | 22.9 | 22.8 | 22.8 | 23.1 | 22.9 | 22.7 | 22.7                                                                                    | 22.6 | 22.4 | 22.3                | 22.1 | 22.2 | 22.1 | 22.1 | 22.0                   | 22.0 | 22.1 | 22.0 | 22.1 | 22.6                | 22.6 | 22.9          | 22.0          | 23.1          | 22.5 |  |  |  |  |      |
| Jul 15                                                                                                  | 22.7                                           | 22.9 | 22.9 | 22.9 | 22.9 | 22.7 | 22.8 | 22.7 | 22.8                                                                                    | 22.6 | 22.5 | 22.5                | 22.4 | 22.4 | 22.4 | 22.4 | 22.4                   | 22.3 | 22.4 | 22.4 | 22.4 | 22.6                | 22.8 | 23.2          | 22.3          | 23.2          | 22.6 |  |  |  |  |      |
| Jul 16                                                                                                  | 23.0                                           | 22.4 | 21.9 | 21.7 | 21.5 | 21.5 | 21.7 | 22.1 | 22.6                                                                                    | 22.9 | 22.7 | 22.7                | 22.9 | 22.7 | 22.9 | 22.8 | 23.2                   | 22.8 | 23.3 | 22.7 | 23.0 | 22.7                | 22.9 | 22.9          | 21.5          | 23.3          | 22.6 |  |  |  |  |      |
| Jul 17                                                                                                  | 22.7                                           | 22.4 | 21.8 | 21.4 | 21.5 | 21.5 | 21.6 | 21.5 | 21.6                                                                                    | 21.5 | 21.5 | 21.5                | 21.4 | 21.3 | 21.4 | 21.7 | 21.8                   | 21.9 | 22.0 | 22.1 | 22.1 | 22.1                | 22.1 | 22.0          | 21.3          | 22.7          | 21.8 |  |  |  |  |      |
| Jul 18                                                                                                  | 22.0                                           | 21.9 | 21.9 | 21.9 | 21.9 | 21.8 | 21.8 | 22.0 | 22.5                                                                                    | 22.9 | 22.9 | 22.7                | 22.8 | 22.8 | 22.6 | 22.8 | 22.7                   | 22.7 | 22.7 | 22.7 | 22.9 | 22.9                | 22.9 | 22.7          | 21.8          | 22.9          | 22.5 |  |  |  |  |      |
| Jul 19                                                                                                  | 23.2                                           | 22.9 | 22.9 | 23.3 | 22.7 | 22.9 | 23.1 | 23.2 | 22.8                                                                                    | 22.7 | 22.5 | 22.5                | 22.6 | 22.3 | 22.3 | 22.5 | 22.6                   | 22.6 | 22.5 | 22.6 | 22.5 | 22.6                | 22.9 | 22.9          | 22.3          | 23.3          | 22.7 |  |  |  |  |      |
| Jul 20                                                                                                  | 22.6                                           | 22.4 | 22.1 | 21.9 | 21.5 | 21.4 | 21.7 | 22.6 | 22.9                                                                                    | 22.7 | 22.7 | 22.7                | 22.6 | 22.5 | 22.5 | 22.5 | 22.5                   | 22.6 | 22.7 | 22.8 | 22.8 | 22.6                | 23.0 | 23.1          | 21.4          | 23.1          | 22.5 |  |  |  |  |      |
| Jul 21                                                                                                  | 22.8                                           | 22.9 | 22.7 | 22.8 | 22.8 | 22.9 | 22.9 | 22.7 | 22.8                                                                                    | 22.7 | 22.5 | 22.4                | 22.4 | 22.4 | 22.5 | 22.5 | 22.6                   | 22.7 | 22.7 | 22.6 | 23.1 | 23.2                | 23.0 | 22.7          | 22.4          | 23.2          | 22.7 |  |  |  |  |      |
| Jul 22                                                                                                  | 22.5                                           | 22.2 | 22.1 | 21.9 | 21.6 | 21.3 | 21.5 | 22.2 | 22.9                                                                                    | 22.7 | 22.7 | 22.6                | 22.6 | 22.5 | 22.5 | 22.6 | 22.8                   | 22.6 | 22.6 | 22.7 | 22.9 | 22.8                | 23.2 | 23.0          | 21.3          | 23.2          | 22.5 |  |  |  |  |      |
| Jul 23                                                                                                  | 22.9                                           | 22.7 | 22.6 | 22.4 | 22.4 | 22.4 | 22.6 | 22.9 | 23.0                                                                                    | 23.1 | 22.8 | 23.0                | 22.6 | 22.6 | 22.6 | 22.5 | 22.6                   | 22.5 | 22.5 | 23.2 | P    | P                   | P    | P             | 22.4          | 23.2          | 22.7 |  |  |  |  |      |
| Jul 24                                                                                                  | P                                              | P    | P    | P    | P    | P    | P    | P    | P                                                                                       | P    | P    | P                   | P    | P    | P    | P    | P                      | P    | P    | P    | P    | P                   | P    | P             | -             | -             | -    |  |  |  |  |      |
| Jul 25                                                                                                  | P                                              | P    | P    | P    | P    | P    | P    | P    | P                                                                                       | P    | P    | P                   | P    | P    | P    | P    | P                      | P    | P    | P    | P    | P                   | P    | P             | -             | -             | -    |  |  |  |  |      |
| Jul 26                                                                                                  | P                                              | P    | P    | P    | P    | P    | P    | P    | P                                                                                       | P    | P    | P                   | P    | P    | 21.7 | 22.1 | 22.2                   | 22.2 | 22.4 | 22.4 | 22.5 | 22.9                | 23.4 | 23.2          | 21.7          | 23.4          | -    |  |  |  |  |      |
| Jul 27                                                                                                  | 23.3                                           | 23.0 | 22.7 | 22.6 | 22.3 | 22.2 | 22.8 | 23.0 | 22.6                                                                                    | 22.7 | 22.4 | 22.2                | 22.2 | 22.3 | 22.2 | 22.2 | 22.2                   | 22.6 | 22.7 | 22.4 | 22.6 | 23.1                | 23.6 | 23.3          | 22.2          | 23.6          | 22.6 |  |  |  |  |      |
| Jul 28                                                                                                  | 22.8                                           | 22.4 | 21.9 | 22.0 | 22.0 | 22.0 | 22.2 | 23.2 | 22.6                                                                                    | 22.5 | 22.4 | 22.3                | 22.2 | 22.2 | 22.2 | 22.2 | 22.3                   | 22.2 | 22.2 | 22.3 | 22.4 | 22.7                | 23.2 | 23.5          | 21.9          | 23.5          | 22.4 |  |  |  |  |      |
| Jul 29                                                                                                  | 22.9                                           | 23.0 | 22.8 | 22.4 | 22.0 | 21.9 | 22.5 | 23.1 | 22.7                                                                                    | 22.5 | 22.3 | 22.2                | 22.1 | 22.2 | 22.1 | 22.0 | 22.1                   | 22.1 | 22.0 | 22.1 | 22.2 | 22.8                | 23.1 | 23.4          | 21.9          | 23.4          | 22.4 |  |  |  |  |      |
| Jul 30                                                                                                  | 23.6                                           | 23.5 | 23.1 | 22.6 | 22.1 | 21.9 | 22.7 | 22.9 | 22.6                                                                                    | 22.3 | 22.1 | 22.0                | 21.9 | 22.1 | 21.9 | 22.0 | 22.1                   | 22.0 | 22.0 | 22.1 | 22.7 | 22.8                | 23.2 | 23.2          | 21.9          | 23.6          | 22.4 |  |  |  |  |      |
| Jul 31                                                                                                  | 23.5                                           | 23.2 | 23.5 | 23.5 | 23.3 | 23.3 | 22.9 | 22.6 | 22.5                                                                                    | 22.3 | 22.1 | 22.1                | 22.0 | 21.9 | 22.1 | 21.9 | 21.9                   | 21.9 | 21.9 | 22.0 | 22.2 | 22.8                | 22.7 | 23.0          | 21.9          | 23.5          | 22.5 |  |  |  |  |      |
| Diurnal Maximum                                                                                         | 23.7                                           | 23.8 | 24.1 | 24.2 | 24.1 | 23.7 | 23.6 | 23.4 | 23.3                                                                                    | 23.4 | 23.1 | 23.5                | 23.7 | 23.3 | 23.2 | 22.8 | 23.2                   | 22.8 | 23.3 | 23.2 | 23.1 | 23.2                | 23.6 | 23.5          |               |               |      |  |  |  |  |      |
| Diurnal Average                                                                                         | 22.9                                           | 22.7 | 22.5 | 22.5 | 22.4 | 22.4 | 22.5 | 22.7 | 22.7                                                                                    | 22.6 | 22.5 | 22.4                | 22.4 | 22.3 | 22.3 | 22.3 | 22.3                   | 22.3 | 22.3 | 22.4 | 22.5 | 22.7                | 22.8 | 22.9          |               |               |      |  |  |  |  |      |
| C                                                                                                       | Monthly Calibration                            |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |                     |      |      |      | Q    | Quality Assurance      |      |      |      |      |                     |      |               |               |               |      |  |  |  |  |      |
| K                                                                                                       | Collection Error                               |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |                     |      |      |      | Y    | Routine Maintenance    |      |      |      |      |                     |      | P             | Power Failure |               |      |  |  |  |  |      |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |                     |      |      |      |      |                        |      |      |      |      |                     |      |               |               |               |      |  |  |  |  |      |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |                     |      |      |      |      |                        |      |      |      |      |                     |      |               |               |               |      |  |  |  |  |      |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |                     |      |      |      |      |                        |      |      |      |      |                     |      |               |               |               |      |  |  |  |  |      |

***Timeseries Chart of Hourly Average for ST - 986c Station***





# PEACE RIVER AREA MONITORING PROGRAM

986c Station - July 2021

Summary of Hourly Averages

PRECIPITATION in mm

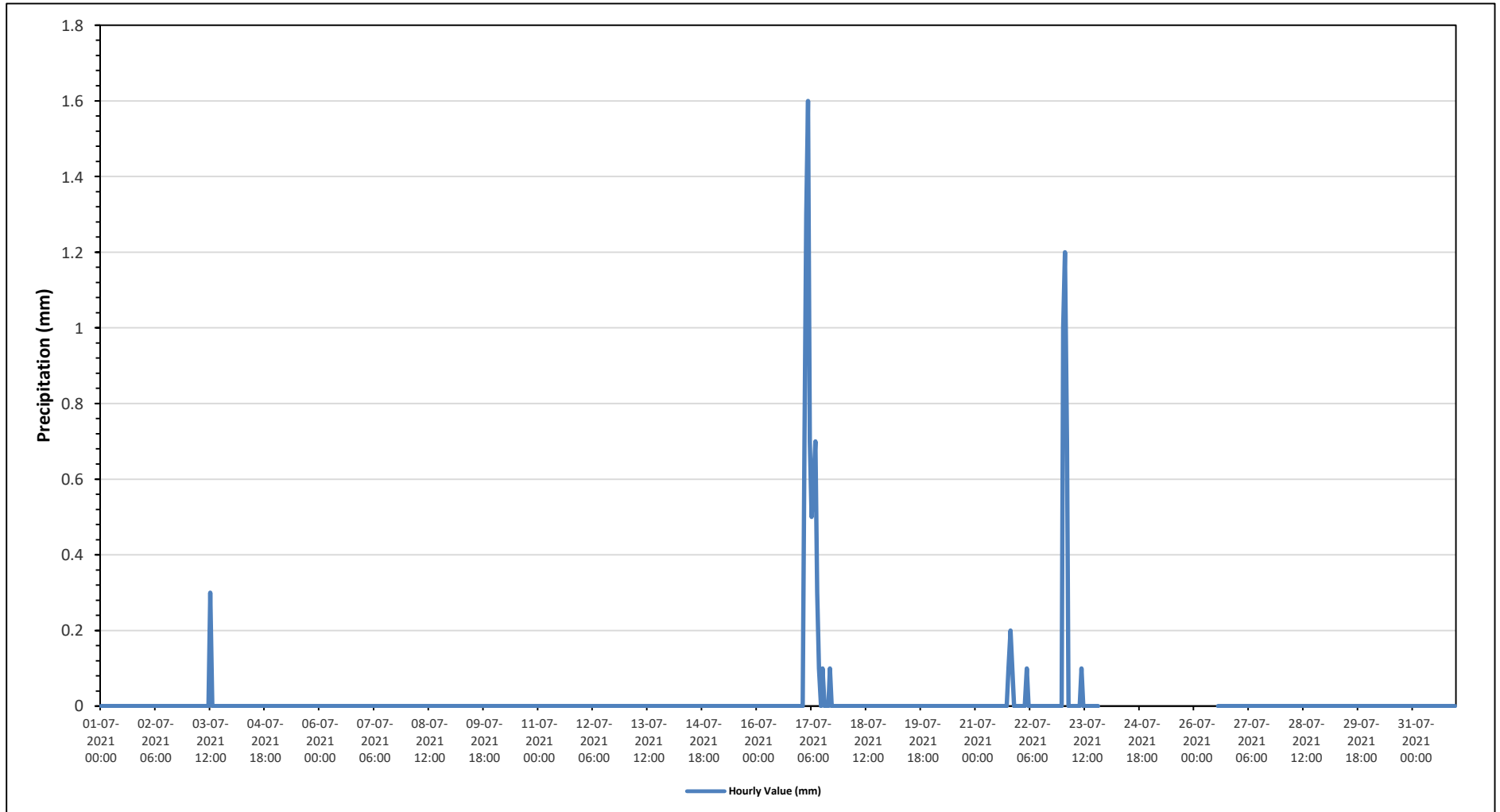
|                       |                             |                        |      |
|-----------------------|-----------------------------|------------------------|------|
| Maximum Hourly Value: | 1.6 mm on July 17 at hour 4 | Hours in Service:      | 744  |
| Maximum Daily Value:  | 6.7 mm on July 17           | Hours of Data:         | 679  |
| Minimum Hourly Value: | 0.0 mm on July 1 at hour 0  | Hours of Missing Data: | 65   |
| Minimum Daily Value:  | 0.0 mm on July 1            | Hours of Calibration:  | 0    |
| Monthly Total:        | 10.5 mm                     | Operational Uptime:    | 91.3 |

| Day             | Hourly Period Starting at (MST) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | Daily   | Daily   | Daily |
|-----------------|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|---------|-------|
|                 | 0                               | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | Minimum | Maximum | Total |
| Jul 1           | 0                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.0     | 0.0     | 0.0   |
| Jul 2           | 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     | 0.0   |
| Jul 3           | 0                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.3 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.0     | 0.3     | 0.3   |
| Jul 4           | 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     | 0.0   |
| Jul 5           | 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     | 0.0   |
| Jul 6           | 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     | 0.0   |
| Jul 7           | 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     | 0.0   |
| Jul 8           | 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     | 0.0   |
| Jul 9           | 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     | 0.0   |
| Jul 10          | 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     | 0.0   |
| Jul 11          | 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     | 0.0   |
| Jul 12          | 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     | 0.0   |
| Jul 13          | 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     | 0.0   |
| Jul 14          | 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     | 0.0   |
| Jul 15          | 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     | 0.0   |
| Jul 16          | 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     | 0.0   |
| Jul 17          | 0                               | 0   | 0.7 | 1.3 | 1.6 | 0.7 | 0.5 | 0.6 | 0.7 | 0.3 | 0.1 | 0   | 0.1 | 0   | 0   | 0   | 0.1 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.0     | 1.6     | 6.7   |
| Jul 18          | 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     | 0.0   |
| Jul 19          | 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     | 0.0   |
| Jul 20          | 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     | 0.0   |
| Jul 21          | 0                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.1 | 0.2 | 0.1 | 0   | 0   | 0   | 0.0     | 0.2     | 0.4   |
| Jul 22          | 0                               | 0   | 0   | 0   | 0.1 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.0     | 0.1     | 0.1   |
| Jul 23          | 1                               | 1.2 | 0.7 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.1 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | P   | P   | P   | P   | 0.0     | 1.2     | 3.0   |
| Jul 24          | P                               | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | -       | -       | -     |
| Jul 25          | P                               | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | -       | -       | -     |
| Jul 26          | P                               | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | P   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0.0     | 0.0     | -     |
| Jul 27          | 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     | 0.0   |
| Jul 28          | 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     | 0.0   |
| Jul 29          | 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     | 0.0   |
| Jul 30          | 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     | 0.0   |
| Jul 31          | 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     | 0.0   |
| Diurnal Maximum | 1.0                             | 1.2 | 0.7 | 1.3 | 1.6 | 0.7 | 0.5 | 0.6 | 0.7 | 0.3 | 0.1 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 |         |         |       |
| Diurnal Average | 0.0                             | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |         |         |       |

|                                                         |                                                                                                    |                              |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------|
| <b>C</b> Monthly Calibration                            | <b>S</b> Daily Zero-Span Check                                                                     | <b>Q</b> Quality Assurance   |
| <b>K</b> Collection Error                               | <b>N</b> No Data (Machine Not in Service)                                                          | <b>Y</b> Routine Maintenance |
| <b>X</b> InValid Data (Equipment Malfunction /Recovery) | <b>NRM</b> UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) | <b>P</b> Power Failure       |

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.  
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

***Timeseries Chart of Hourly Average for Precipitation - 986c Station***





# PEACE RIVER AREA MONITORING PROGRAM

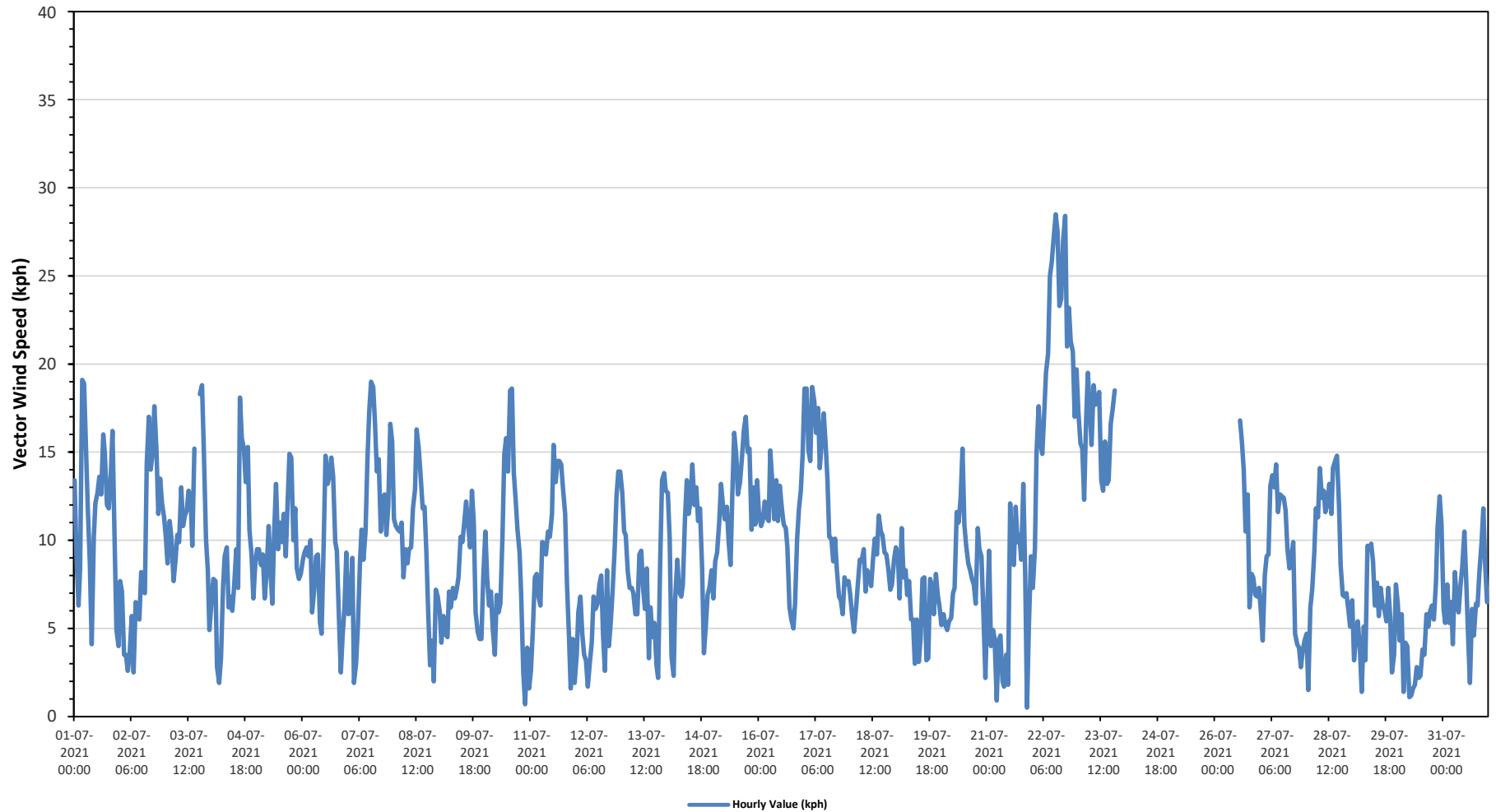
986c Station - July 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

|                                                                                                         |                                                |      |      |      |      |      |      |      |      |                                                                                         |      |                       |      |      |      |      |      |      |                     |      |      |                        |      |               |               |               |      |               |  |  |  |      |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|------|-----------------------|------|------|------|------|------|------|---------------------|------|------|------------------------|------|---------------|---------------|---------------|------|---------------|--|--|--|------|--|
| Maximum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |      | 28.5 kph                                                                                |      | on July 22 at hour 12 |      |      |      |      |      |      |                     |      |      | Hours in Service:      |      |               |               |               |      |               |  |  |  | 744  |  |
| Maximum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |      | 20.0 kph                                                                                |      | on July 22            |      |      |      |      |      |      |                     |      |      | Hours of Data:         |      |               |               |               |      |               |  |  |  | 677  |  |
| Minimum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |      | 0.5 kph                                                                                 |      | on July 21 at hour 21 |      |      |      |      |      |      |                     |      |      | Hours of Missing Data: |      |               |               |               |      |               |  |  |  | 65   |  |
| Minimum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |      | 2.0 kph                                                                                 |      | on July 29            |      |      |      |      |      |      |                     |      |      | Hours of Calibration:  |      |               |               |               |      |               |  |  |  | 2    |  |
| Monthly Average:                                                                                        |                                                |      |      |      |      |      |      |      |      | 1.8 kph                                                                                 |      |                       |      |      |      |      |      |      |                     |      |      | Operational Uptime:    |      |               |               |               |      |               |  |  |  | 91.3 |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |      |      |      |      |      |                                                                                         |      |                       |      |      |      |      |      |      |                     |      |      |                        |      | Daily Minimum | Daily Maximum | Daily Average |      |               |  |  |  |      |  |
| Jul 1                                                                                                   | 13.4                                           | 9.2  | 6.3  | 8.4  | 19.1 | 18.9 | 14.9 | 11.9 | 8.7  | 4.1                                                                                     | 10.2 | 12.1                  | 12.7 | 13.6 | 12.6 | 16.0 | 14.9 | 12.0 | 11.8                | 13.9 | 16.2 | 10.0                   | 4.9  | 4.0           | 4.0           | 19.1          | 9.8  |               |  |  |  |      |  |
| Jul 2                                                                                                   | 7.7                                            | 7.1  | 3.5  | 3.5  | 2.6  | 3.5  | 5.7  | 2.5  | 6.5  | 6.2                                                                                     | 5.5  | 8.2                   | 7.1  | 7.0  | 14.3 | 17.0 | 14.0 | 14.9 | 17.6                | 15.1 | 11.5 | 13.5                   | 12.1 | 11.3          | 2.5           | 17.6          | 7.6  |               |  |  |  |      |  |
| Jul 3                                                                                                   | 10.1                                           | 8.7  | 11.1 | 10.1 | 7.7  | 8.8  | 10.3 | 9.9  | 13.0 | 10.8                                                                                    | 11.4 | 11.7                  | 12.8 | 12.3 | 9.7  | 15.2 | C    | C    | 18.3                | 18.8 | 15.0 | 10.1                   | 8.3  | 4.9           | 4.9           | 18.8          | 10.0 |               |  |  |  |      |  |
| Jul 4                                                                                                   | 6.5                                            | 7.8  | 7.7  | 2.8  | 1.9  | 3.3  | 7.4  | 9.1  | 9.6  | 6.2                                                                                     | 6.8  | 6.0                   | 7.4  | 9.5  | 7.3  | 18.1 | 15.8 | 15.2 | 13.3                | 15.3 | 10.6 | 9.2                    | 6.7  | 8.6           | 1.9           | 18.1          | 7.1  |               |  |  |  |      |  |
| Jul 5                                                                                                   | 9.5                                            | 9.5  | 8.6  | 9.2  | 6.7  | 8.1  | 10.8 | 8.3  | 6.4  | 10.5                                                                                    | 13.2 | 9.5                   | 11.0 | 9.9  | 11.5 | 9.1  | 12.1 | 14.9 | 14.7                | 10.0 | 11.8 | 8.4                    | 7.8  | 8.1           | 6.4           | 14.9          | 9.4  |               |  |  |  |      |  |
| Jul 6                                                                                                   | 8.9                                            | 9.3  | 9.6  | 9.1  | 10.0 | 5.9  | 7.2  | 9.1  | 9.2  | 5.3                                                                                     | 4.7  | 9.8                   | 14.8 | 13.2 | 13.6 | 14.7 | 13.6 | 9.9  | 9.4                 | 5.6  | 2.5  | 4.6                    | 6.2  | 9.3           | 2.5           | 14.8          | 5.9  |               |  |  |  |      |  |
| Jul 7                                                                                                   | 5.8                                            | 5.9  | 9.0  | 1.9  | 3.0  | 5.2  | 8.8  | 10.6 | 8.9  | 10.5                                                                                    | 14.5 | 17.3                  | 19.0 | 18.7 | 16.6 | 13.9 | 14.6 | 10.5 | 12.1                | 12.6 | 10.3 | 11.9                   | 16.6 | 15.6          | 1.9           | 19.0          | 10.4 |               |  |  |  |      |  |
| Jul 8                                                                                                   | 11.2                                           | 10.8 | 10.6 | 10.5 | 11.0 | 7.9  | 9.5  | 8.7  | 9.5  | 9.6                                                                                     | 11.8 | 12.9                  | 16.3 | 15.2 | 13.7 | 11.8 | 11.9 | 9.3  | 5.9                 | 2.9  | 4.3  | 2.0                    | 7.2  | 6.8           | 2.0           | 16.3          | 8.8  |               |  |  |  |      |  |
| Jul 9                                                                                                   | 5.9                                            | 4.2  | 5.7  | 4.7  | 4.5  | 7.1  | 6.2  | 7.3  | 6.7  | 7.2                                                                                     | 7.9  | 10.2                  | 9.9  | 11.2 | 12.2 | 10.8 | 9.6  | 12.8 | 11.0                | 5.9  | 4.8  | 4.4                    | 4.4  | 7.9           | 4.2           | 12.8          | 7.0  |               |  |  |  |      |  |
| Jul 10                                                                                                  | 10.5                                           | 7.8  | 6.3  | 7.1  | 5.0  | 3.5  | 6.9  | 5.9  | 6.4  | 10.2                                                                                    | 14.9 | 15.8                  | 13.9 | 18.5 | 18.6 | 13.8 | 12.3 | 10.6 | 9.3                 | 6.9  | 2.5  | 0.7                    | 3.9  | 1.6           | 0.7           | 18.6          | 6.7  |               |  |  |  |      |  |
| Jul 11                                                                                                  | 2.6                                            | 4.8  | 7.9  | 8.1  | 6.9  | 6.3  | 9.9  | 9.8  | 9.2  | 10.5                                                                                    | 10.2 | 11.5                  | 15.4 | 13.3 | 14.5 | 14.5 | 14.3 | 12.9 | 11.5                | 7.5  | 4.4  | 1.6                    | 4.4  | 1.9           | 1.6           | 15.4          | 8.1  |               |  |  |  |      |  |
| Jul 12                                                                                                  | 3.5                                            | 5.9  | 6.8  | 4.7  | 3.5  | 3.2  | 1.7  | 3.1  | 4.2  | 6.8                                                                                     | 6.1  | 6.4                   | 7.5  | 8.0  | 4.6  | 2.6  | 8.3  | 4.0  | 5.3                 | 7.1  | 9.5  | 12.5                   | 13.9 | 13.9          | 1.7           | 13.9          | 2.7  |               |  |  |  |      |  |
| Jul 13                                                                                                  | 12.7                                           | 10.5 | 10.3 | 8.2  | 7.3  | 7.3  | 7.0  | 5.8  | 5.8  | 9.2                                                                                     | 9.4  | 7.3                   | 6.1  | 8.4  | 3.3  | 6.2  | 4.5  | 5.3  | 2.9                 | 2.2  | 8.9  | 13.4                   | 13.8 | 12.8          | 2.2           | 13.8          | 5.7  |               |  |  |  |      |  |
| Jul 14                                                                                                  | 12.7                                           | 10.1 | 3.4  | 2.3  | 6.7  | 8.9  | 7.1  | 6.8  | 7.5  | 11.2                                                                                    | 13.4 | 11.5                  | 12.2 | 14.3 | 12.0 | 13.0 | 11.1 | 11.8 | 8.5                 | 3.6  | 5.1  | 6.9                    | 7.4  | 8.3           | 2.3           | 14.3          | 6.7  |               |  |  |  |      |  |
| Jul 15                                                                                                  | 6.7                                            | 8.8  | 9.3  | 11.0 | 13.2 | 12.0 | 11.2 | 11.9 | 9.9  | 8.6                                                                                     | 12.7 | 16.1                  | 14.8 | 12.6 | 13.3 | 14.6 | 16.3 | 17.0 | 15.0                | 15.2 | 10.6 | 13.0                   | 10.9 | 13.4          | 6.7           | 17.0          | 6.3  |               |  |  |  |      |  |
| Jul 16                                                                                                  | 11.5                                           | 10.8 | 11.1 | 12.2 | 11.3 | 11.1 | 15.1 | 13.2 | 11.2 | 13.4                                                                                    | 11.1 | 13.1                  | 11.8 | 10.9 | 10.7 | 9.6  | 6.2  | 5.5  | 5.0                 | 6.4  | 10.1 | 11.8                   | 12.8 | 14.9          | 5.0           | 15.1          | 9.8  |               |  |  |  |      |  |
| Jul 17                                                                                                  | 18.6                                           | 18.6 | 15.1 | 14.5 | 18.7 | 17.9 | 16.1 | 17.5 | 14.1 | 15.5                                                                                    | 17.2 | 15.5                  | 13.5 | 10.2 | 10.1 | 8.8  | 10.1 | 8.3  | 6.8                 | 6.6  | 5.8  | 7.9                    | 7.5  | 7.7           | 5.8           | 18.7          | 12.5 |               |  |  |  |      |  |
| Jul 18                                                                                                  | 7.0                                            | 5.7  | 4.8  | 6.2  | 7.6  | 8.9  | 8.8  | 9.5  | 7.1  | 8.3                                                                                     | 7.9  | 7.4                   | 9.1  | 10.1 | 9.2  | 11.4 | 10.5 | 10.3 | 9.3                 | 9.2  | 8.4  | 7.2                    | 7.5  | 8.9           | 4.8           | 11.4          | 8.1  |               |  |  |  |      |  |
| Jul 19                                                                                                  | 9.6                                            | 9.0  | 6.7  | 10.7 | 7.9  | 8.3  | 6.9  | 7.7  | 5.5  | 5.5                                                                                     | 3.0  | 5.5                   | 3.1  | 4.5  | 7.8  | 7.9  | 3.2  | 3.3  | 7.8                 | 7.4  | 5.8  | 8.1                    | 6.9  | 6.2           | 3.0           | 10.7          | 5.7  |               |  |  |  |      |  |
| Jul 20                                                                                                  | 5.2                                            | 5.8  | 5.2  | 4.9  | 5.4  | 5.6  | 7.0  | 7.3  | 11.6 | 11.0                                                                                    | 12.4 | 15.2                  | 10.9 | 9.7  | 8.7  | 8.3  | 7.8  | 7.5  | 6.4                 | 10.7 | 9.5  | 9.1                    | 6.0  | 2.2           | 2.2           | 15.2          | 7.2  |               |  |  |  |      |  |
| Jul 21                                                                                                  | 5.7                                            | 9.4  | 4.0  | 4.9  | 4.4  | 0.9  | 4.3  | 4.6  | 2.0  | 1.7                                                                                     | 3.5  | 1.8                   | 12.1 | 9.9  | 8.6  | 11.9 | 9.9  | 10.3 | 8.9                 | 13.2 | 8.2  | 0.5                    | 5.1  | 9.1           | 0.5           | 13.2          | 4.3  |               |  |  |  |      |  |
| Jul 22                                                                                                  | 7.3                                            | 9.5  | 14.9 | 17.6 | 15.5 | 14.9 | 17.1 | 19.5 | 20.6 | 25.0                                                                                    | 25.8 | 27.1                  | 28.5 | 27.5 | 23.3 | 23.7 | 27.0 | 28.4 | 21.0                | 23.2 | 21.3 | 20.7                   | 17.0 | 19.7          | 7.3           | 28.5          | 20.0 |               |  |  |  |      |  |
| Jul 23                                                                                                  | 17.3                                           | 15.5 | 15.2 | 12.3 | 16.6 | 19.5 | 17.2 | 15.4 | 18.8 | 17.7                                                                                    | 17.8 | 18.4                  | 13.4 | 12.8 | 15.6 | 13.2 | 13.4 | 16.6 | 17.4                | 18.5 | P    | P                      | P    | P             | 12.3          | 19.5          | 16.0 |               |  |  |  |      |  |
| Jul 24                                                                                                  | P                                              | P    | P    | P    | P    | P    | P    | P    | P    | P                                                                                       | P    | P                     | P    | P    | P    | P    | P    | P    | P                   | P    | P    | P                      | P    | P             | -             | -             | -    |               |  |  |  |      |  |
| Jul 25                                                                                                  | P                                              | P    | P    | P    | P    | P    | P    | P    | P    | P                                                                                       | P    | P                     | P    | P    | P    | P    | P    | P    | P                   | P    | P    | P                      | P    | P             | -             | -             | -    |               |  |  |  |      |  |
| Jul 26                                                                                                  | P                                              | P    | P    | P    | P    | P    | P    | P    | P    | P                                                                                       | P    | P                     | P    | 16.8 | 15.6 | 14.0 | 10.5 | 12.6 | 6.2                 | 8.1  | 7.9  | 6.9                    | 6.8  | 7.3           | 6.2           | 16.8          | -    |               |  |  |  |      |  |
| Jul 27                                                                                                  | 6.0                                            | 4.3  | 8.0  | 9.1  | 9.2  | 13.1 | 13.7 | 13.0 | 14.3 | 11.6                                                                                    | 12.6 | 12.5                  | 12.4 | 11.7 | 9.5  | 8.4  | 9.1  | 9.9  | 4.7                 | 4.1  | 3.9  | 2.8                    | 3.7  | 4.3           | 2.8           | 14.3          | 6.1  |               |  |  |  |      |  |
| Jul 28                                                                                                  | 4.7                                            | 1.5  | 6.2  | 7.2  | 9.3  | 11.8 | 11.3 | 14.1 | 12.4 | 12.8                                                                                    | 11.6 | 12.1                  | 13.2 | 11.5 | 14.1 | 14.5 | 14.8 | 11.9 | 8.6                 | 6.9  | 6.8  | 7.0                    | 6.1  | 5.1           | 1.5           | 14.8          | 8.9  |               |  |  |  |      |  |
| Jul 29                                                                                                  | 6.6                                            | 3.2  | 4.6  | 5.4  | 3.9  | 1.4  | 5.1  | 3.2  | 9.7  | 9.5                                                                                     | 9.8  | 8.8                   | 6.3  | 7.6  | 5.7  | 7.3  | 6.4  | 6.0  | 5.4                 | 7.3  | 5.7  | 2.5                    | 3.5  | 7.5           | 1.4           | 9.8           | 2.0  |               |  |  |  |      |  |
| Jul 30                                                                                                  | 6.4                                            | 4.3  | 5.8  | 1.4  | 4.2  | 4.0  | 1.1  | 1.2  | 1.6  | 1.8                                                                                     | 2.8  | 2.2                   | 2.3  | 3.8  | 3.5  | 5.8  | 5.1  | 6.0  | 6.3                 | 5.5  | 7.6  | 10.7                   | 12.5 | 10.9          | 1.1           | 12.5          | 3.4  |               |  |  |  |      |  |
| Jul 31                                                                                                  | 6.1                                            | 5.3  | 7.5  | 5.3  | 6.5  | 4.1  | 8.2  | 6.6  | 5.9  | 7.4                                                                                     | 8.5  | 10.5                  | 7.7  | 4.2  | 1.9  | 6.1  | 4.6  | 6.4  | 6.3                 | 8.2  | 9.8  | 11.8                   | 8.6  | 6.5           | 1.9           | 11.8          | 6.1  |               |  |  |  |      |  |
| Diurnal Maximum                                                                                         | 19                                             | 19   | 15   | 18   | 19   | 20   | 17   | 20   | 21   | 25                                                                                      | 26   | 27                    | 29   | 28   | 23   | 24   | 27   | 28   | 21                  | 23   | 21   | 21                     | 17   | 20            |               |               |      |               |  |  |  |      |  |
| Diurnal Average                                                                                         | 8.6                                            | 8.0  | 8.0  | 7.6  | 8.2  | 8.3  | 9.2  | 9.1  | 9.2  | 9.6                                                                                     | 10.6 | 11.3                  | 11.6 | 11.6 | 11.1 | 11.8 | 11.1 | 10.9 | 9.9                 | 9.6  | 8.5  | 8.2                    | 8.3  | 8.5           |               |               |      |               |  |  |  |      |  |
| C                                                                                                       | Monthly Calibration                            |      |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |                       |      |      |      |      |      | Q    | Quality Assurance   |      |      |                        |      |               |               |               |      |               |  |  |  |      |  |
| K                                                                                                       | Collection Error                               |      |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |                       |      |      |      |      |      | Y    | Routine Maintenance |      |      |                        |      |               |               |               | P    | Power Failure |  |  |  |      |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |                       |      |      |      |      |      |      |                     |      |      |                        |      |               |               |               |      |               |  |  |  |      |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |      |      |      |      |      |                                                                                         |      |                       |      |      |      |      |      |      |                     |      |      |                        |      |               |               |               |      |               |  |  |  |      |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |      |      |      |      |      |                                                                                         |      |                       |      |      |      |      |      |      |                     |      |      |                        |      |               |               |               |      |               |  |  |  |      |  |

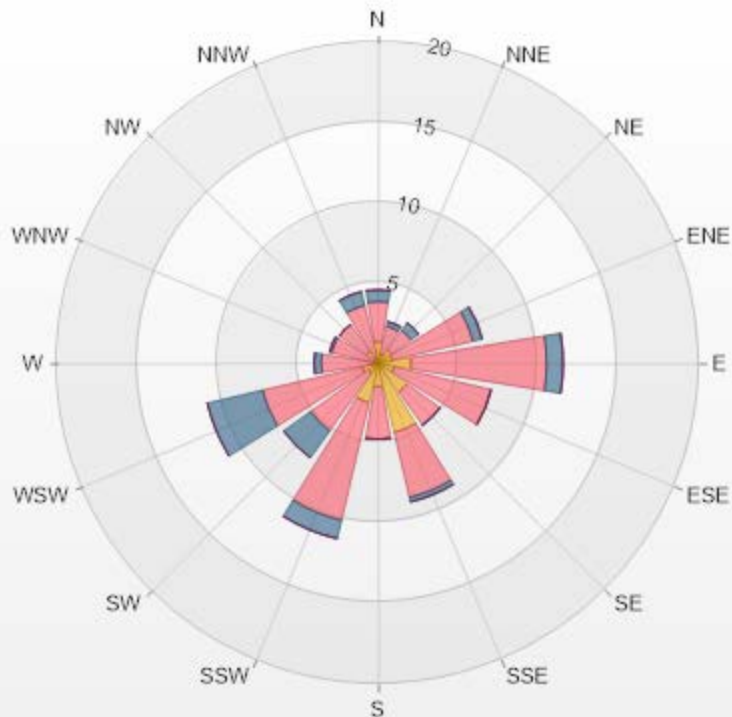
*Timeseries Chart of Hourly Average for VWS - 986c Station*





Wind: PRAMP 986c Monitor: WDS [KPH] Monthly: 07-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 1.92% Valid Data: 90.99%

| Direction | 1.8-6.0 | 6.0-15.0 | 15.0-29.0 | 29.0-39.0 | >39.0 | Total |
|-----------|---------|----------|-----------|-----------|-------|-------|
| N         | 1.33    | 2.51     | 0.74      | 0         | 0     | 4.58  |
| NNE       | 0.59    | 1.77     | 0.3       | 0         | 0     | 2.66  |
| NE        | 1.03    | 1.48     | 0.59      | 0         | 0     | 3.1   |
| ENE       | 0.89    | 5.17     | 0.59      | 0         | 0     | 6.65  |
| E         | 2.07    | 8.42     | 1.03      | 0         | 0     | 11.52 |
| ESE       | 1.03    | 6.2      | 0         | 0         | 0     | 7.23  |
| SE        | 2.22    | 2.51     | 0         | 0         | 0     | 4.73  |
| SSE       | 4.43    | 4.14     | 0.3       | 0         | 0     | 8.87  |
| S         | 1.48    | 3.25     | 0         | 0         | 0     | 4.73  |
| SSW       | 2.51    | 7.53     | 1.18      | 0         | 0     | 11.22 |
| SW        | 0.74    | 4.43     | 2.07      | 0         | 0     | 7.24  |
| WSW       | 1.03    | 6.35     | 3.55      | 0         | 0     | 10.93 |
| W         | 0.3     | 3.25     | 0.44      | 0         | 0     | 3.99  |
| WNW       | 0.3     | 2.66     | 0.15      | 0         | 0     | 3.11  |
| NW        | 0.89    | 2.07     | 0         | 0         | 0     | 2.96  |
| NNW       | 0.3     | 3.4      | 0.89      | 0         | 0     | 4.59  |
| Summary   | 21.14   | 65.14    | 11.83     | 0         | 0     | 98.11 |



PRAMP-202107

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% Icon Classes (KPH)

21

1.8-6.0

65

6.0-15.0

12

15.0-29.0

0

29.0-39.0

0

>39.0



# PEACE RIVER AREA MONITORING PROGRAM

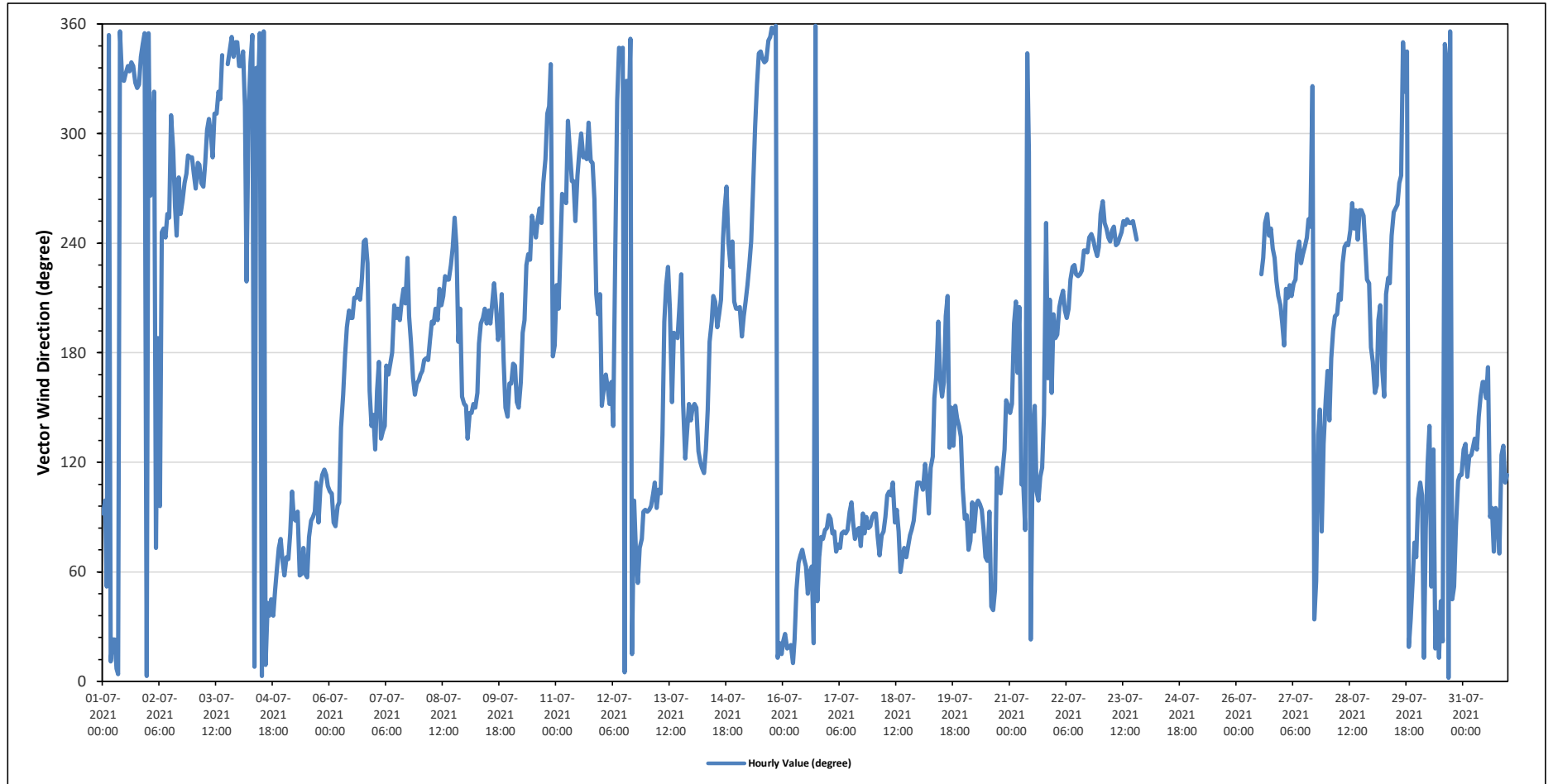
986c Station - July 2021

## Summary of Hourly Averages

### WIND DIRECTION (VWD) in sector

| Monthly Average:                                                                                        |                                              | 195 (SSW) degree |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     |     |     |     |     |               | Hours in Service:      |          | 744  |               |  |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|---------------------|-----|-----|-----|-----|---------------|------------------------|----------|------|---------------|--|
|                                                                                                         |                                              |                  |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     |     |     |     |     |               | Hours of Data:         |          | 677  |               |  |
|                                                                                                         |                                              |                  |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     |     |     |     |     |               | Hours of Missing Data: |          | 65   |               |  |
|                                                                                                         |                                              |                  |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     |     |     |     |     |               | Hours of Calibration:  |          | 2    |               |  |
|                                                                                                         |                                              |                  |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     |     |     |     |     |               | Operational Uptime:    |          | 91.3 |               |  |
| Day                                                                                                     | Hourly Period Starting at (MST)              |                  |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     |     |     |     |     | Daily Average |                        |          |      |               |  |
|                                                                                                         | 0                                            | 1                | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9                                                                                       | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18                  | 19  | 20  | 21  | 22  | 23            | Degree                 | Quadrant |      |               |  |
| Jul 1                                                                                                   | E                                            | E                | NE  | N   | NNE | NNE | NNE | N   | N   | N                                                                                       | NNW | NNW | NNW | NNW | NNW | NNW | NNW | NNW | NW                  | NW  | NNW | NNW | N   | N             | 355                    | N        |      |               |  |
| Jul 2                                                                                                   | N                                            | W                | WNW | NW  | ENE | S   | E   | WSW | WSW | WSW                                                                                     | WSW | WSW | NW  | WNW | WSW | WSW | W   | WSW | W                   | W   | W   | WNW | WNW | WNW           | 271                    | W        |      |               |  |
| Jul 3                                                                                                   | W                                            | W                | WNW | W   | W   | W   | WNW | WNW | NW  | WNW                                                                                     | WNW | NW  | NW  | NW  | NW  | NNW | C   | C   | NNW                 | NNW | N   | NNW | N   | N             | 313                    | NW       |      |               |  |
| Jul 4                                                                                                   | NNW                                          | NNW              | NNW | NW  | SW  | NW  | NNW | N   | N   | NNW                                                                                     | NW  | N   | N   | N   | N   | NE  | NE  | NE  | NE                  | NE  | ENE | ENE | ENE | ENE           | 21                     | NNE      |      |               |  |
| Jul 5                                                                                                   | ENE                                          | ENE              | ENE | E   | ESE | E   | E   | E   | ENE | ENE                                                                                     | ENE | ENE | ENE | E   | E   | E   | ESE | E   | ESE                 | ESE | ESE | ESE | ESE | ESE           | 86                     | E        |      |               |  |
| Jul 6                                                                                                   | ESE                                          | ESE              | E   | E   | E   | E   | SE  | SSE | S   | SSW                                                                                     | SSW | SSW | SSW | SSW | SSW | SSW | SSW | SW  | WSW                 | WSW | SW  | SSE | SE  | SE            | 176                    | S        |      |               |  |
| Jul 7                                                                                                   | SE                                           | SSE              | S   | SE  | SE  | SE  | S   | SSE | S   | S                                                                                       | SSW | SSW | SSW | SSW | SSW | SSW | SSW | SW  | SSW                 | S   | SSE | SSE | SSE | SSE           | 186                    | S        |      |               |  |
| Jul 8                                                                                                   | SSE                                          | SSE              | S   | S   | S   | S   | SSW | SSW | SSW | SSW                                                                                     | SSW | SSW | SSW | SW  | SW  | SW  | SW  | SW  | WSW                 | SW  | S   | SSW | SSE | SSE           | 201                    | SSW      |      |               |  |
| Jul 9                                                                                                   | SSE                                          | SE               | SE  | SE  | SSE | SSE | SSE | S   | SSW | SSW                                                                                     | SSW | SSW | SSW | SSW | SSW | SW  | SSW | S   | S                   | SSW | S   | SSE | SE  | SSE           | 185                    | S        |      |               |  |
| Jul 10                                                                                                  | SSE                                          | S                | S   | SSE | SSE | SSE | S   | SSW | SW  | SW                                                                                      | SW  | WSW | WSW | WSW | WSW | WSW | WSW | W   | WNW                 | NW  | NW  | NNW | S   | S             | 234                    | SW       |      |               |  |
| Jul 11                                                                                                  | SW                                           | SSW              | SW  | W   | W   | W   | NW  | WNW | W   | W                                                                                       | WSW | W   | WNW | WNW | WNW | WNW | WNW | NW  | WNW                 | WNW | W   | SSW | SSW | SSW           | 278                    | W        |      |               |  |
| Jul 12                                                                                                  | SSE                                          | SSE              | SSE | SSE | SSE | SSE | SE  | SW  | NW  | NNW                                                                                     | NNW | NNW | N   | NNW | WNW | N   | NNE | E   | ENE                 | NE  | ENE | ENE | E   | E             | 63                     | ENE      |      |               |  |
| Jul 13                                                                                                  | E                                            | E                | E   | ESE | ESE | E   | ESE | ESE | SE  | SSW                                                                                     | SW  | SW  | SSW | SSE | S   | S   | S   | SSW | SW                  | SSE | ESE | SE  | SSE | SE            | 142                    | SE       |      |               |  |
| Jul 14                                                                                                  | SSE                                          | SSE              | SSE | SE  | ESE | ESE | ESE | SE  | SSE | S                                                                                       | SSW | SSW | SSW | SSW | SSW | SSW | WSW | WSW | W                   | WSW | SW  | WSW | SSW | SSW           | 193                    | S        |      |               |  |
| Jul 15                                                                                                  | SSW                                          | SSW              | S   | SSW | SSW | SW  | SW  | WSW | W   | WNW                                                                                     | NW  | NNW | NNW | NNW | NNW | NNW | N   | N   | N                   | N   | N   | NNE | NNE | NNE           | 325                    | NW       |      |               |  |
| Jul 16                                                                                                  | NNE                                          | NNE              | NNE | NNE | NNE | N   | NNE | NE  | ENE | ENE                                                                                     | ENE | ENE | ENE | NE  | ENE | ENE | NNE | N   | NE                  | ENE | ENE | ENE | E   | E             | 50                     | NE       |      |               |  |
| Jul 17                                                                                                  | E                                            | E                | E   | E   | ENE | ENE | ENE | E   | E   | E                                                                                       | E   | E   | E   | E   | ENE | E   | E   | ENE | E                   | E   | E   | E   | E   | E             | 83                     | E        |      |               |  |
| Jul 18                                                                                                  | E                                            | E                | ENE | ENE | E   | E   | E   | E   | ESE | E                                                                                       | ESE | E   | E   | E   | ENE | ENE | ENE | ENE | ENE                 | E   | E   | E   | E   | ESE           | 85                     | E        |      |               |  |
| Jul 19                                                                                                  | ESE                                          | ESE              | ESE | ESE | ESE | E   | ESE | ESE | SSE | SSE                                                                                     | SSW | SSE | SSE | SSE | SSW | SSW | SE  | SSE | SE                  | SSE | SE  | SE  | SE  | ESE           | 135                    | SE       |      |               |  |
| Jul 20                                                                                                  | E                                            | E                | ENE | ENE | E   | E   | E   | E   | E   | E                                                                                       | ENE | ENE | E   | NE  | NE  | NE  | NE  | ESE | ESE                 | ESE | ESE | SE  | SSE | SSE           | 89                     | E        |      |               |  |
| Jul 21                                                                                                  | SE                                           | SSE              | SSW | SSW | SSE | SSW | ESE | ESE | E   | NNW                                                                                     | WNW | NNE | SE  | SSE | ESE | E   | ESE | ESE | SE                  | WSW | SSE | SSW | SSE | SSW           | 147                    | SE       |      |               |  |
| Jul 22                                                                                                  | S                                            | S                | SSW | SSW | SSW | SSW | SSW | SSW | SW  | SW                                                                                      | SW  | SW  | SW  | SW  | SW  | SW  | SW  | SW  | WSW                 | WSW | WSW | WSW | SW  | SW            | 225                    | SW       |      |               |  |
| Jul 23                                                                                                  | WSW                                          | W                | WSW | WSW | WSW | WSW | WSW | WSW | WSW | WSW                                                                                     | WSW | WSW | WSW | WSW | WSW | WSW | WSW | WSW | WSW                 | WSW | WSW | P   | P   | P             | P                      | 248      | WSW  |               |  |
| Jul 24                                                                                                  | P                                            | P                | P   | P   | P   | P   | P   | P   | P   | P                                                                                       | P   | P   | P   | P   | P   | P   | P   | P   | P                   | P   | P   | P   | P   | P             | -                      | #N/A     |      |               |  |
| Jul 25                                                                                                  | P                                            | P                | P   | P   | P   | P   | P   | P   | P   | P                                                                                       | P   | P   | P   | P   | P   | P   | P   | P   | P                   | P   | P   | P   | P   | P             | -                      | #N/A     |      |               |  |
| Jul 26                                                                                                  | P                                            | P                | P   | P   | P   | P   | P   | P   | P   | P                                                                                       | P   | P   | P   | P   | P   | P   | P   | P   | P                   | P   | P   | P   | P   | P             | -                      | SW       |      |               |  |
| Jul 27                                                                                                  | SSW                                          | S                | SSW | SSW | SW  | SSW | SW  | SW  | WSW | SW                                                                                      | SW  | SW  | WSW | WSW | WSW | WSW | NW  | NE  | NE                  | SE  | SSE | E   | SE  | SSE           | 224                    | SW       |      |               |  |
| Jul 28                                                                                                  | SSE                                          | SE               | S   | S   | SSW | SSW | SSW | SSW | SW  | SW                                                                                      | WSW | WSW | WSW | W   | WSW | WSW | WSW | WSW | WSW                 | WSW | SW  | SW  | SW  | S             | 231                    | SW       |      |               |  |
| Jul 29                                                                                                  | S                                            | SSE              | SSE | SSW | SSW | SSE | SSW | SSW | SW  | SW                                                                                      | WSW | WSW | WSW | W   | W   | W   | N   | NW  | NNW                 | NNE | NE  | NE  | ENE | ENE           | 245                    | WSW      |      |               |  |
| Jul 30                                                                                                  | E                                            | ESE              | E   | NNE | E   | ESE | SE  | NE  | SE  | NNE                                                                                     | NE  | NNE | NE  | NNE | NNW | NNW | N   | N   | NE                  | NE  | E   | ESE | ESE | ESE           | 74                     | ENE      |      |               |  |
| Jul 31                                                                                                  | SE                                           | SE               | ESE | ESE | ESE | SE  | SE  | SE  | SE  | SSE                                                                                     | SSE | SSE | SSE | S   | E   | E   | ENE | E   | E                   | ENE | ESE | SE  | ESE | ESE           | 125                    | SE       |      |               |  |
| C                                                                                                       | Monthly Calibration                          |                  |     |     |     |     |     |     | S   | Daily Zero-Span Check                                                                   |     |     |     |     |     |     |     | Q   | Quality Assurance   |     |     |     |     |               |                        |          |      |               |  |
| K                                                                                                       | Collection Error                             |                  |     |     |     |     |     |     | N   | No Data (Machine Not in Service)                                                        |     |     |     |     |     |     |     | Y   | Routine Maintenance |     |     |     |     |               |                        |          | P    | Power Failure |  |
| X                                                                                                       | Invalid Data (Machine Malfunction /Recovery) |                  |     |     |     |     |     |     | NRM | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |     |     |     |     |     |     |     |     |                     |     |     |     |     |               |                        |          |      |               |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                              |                  |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     |     |     |     |     |               |                        |          |      |               |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                              |                  |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     |     |     |     |     |               |                        |          |      |               |  |

***Timeseries Chart of Hourly Average for VWD - 986c Station***





## PEACE RIVER AREA MONITORING PROGRAM

986c Station - July 2021

### Summary of Hourly Averages

#### VECTOR WIND SPEED (VWS) in km/hr & WIND DIRECTION (VWD) in sector

| WIND SPEED            |                                 |                                |      |      |      |      |      |      |      |      |      |                        |      |      |      |      |      |      |      |      |      |      |      |               |               |               |      |      |
|-----------------------|---------------------------------|--------------------------------|------|------|------|------|------|------|------|------|------|------------------------|------|------|------|------|------|------|------|------|------|------|------|---------------|---------------|---------------|------|------|
| Maximum Hourly Value: |                                 | 28.5 kph on July 22 at hour 12 |      |      |      |      |      |      |      |      |      | Hours in Service:      |      | 744  |      |      |      |      |      |      |      |      |      |               |               |               |      |      |
| Maximum Daily Value:  |                                 | 20.0 kph on July 22            |      |      |      |      |      |      |      |      |      | Hours of Data:         |      | 677  |      |      |      |      |      |      |      |      |      |               |               |               |      |      |
| Minimum Hourly Value: |                                 | 0.5 kph on July 21 at hour 21  |      |      |      |      |      |      |      |      |      | Hours of Missing Data: |      | 65   |      |      |      |      |      |      |      |      |      |               |               |               |      |      |
| Minimum Daily Value:  |                                 | 2.0 kph on July 29             |      |      |      |      |      |      |      |      |      | Hours of Calibration:  |      | 2    |      |      |      |      |      |      |      |      |      |               |               |               |      |      |
| Monthly Average:      |                                 | 1.8 kph                        |      |      |      |      |      |      |      |      |      | Operational Uptime:    |      | 91.3 |      |      |      |      |      |      |      |      |      |               |               |               |      |      |
| WIND DIRECTION        |                                 |                                |      |      |      |      |      |      |      |      |      |                        |      |      |      |      |      |      |      |      |      |      |      |               |               |               |      |      |
| Monthly Average:      |                                 | 195 (SSW) degree               |      |      |      |      |      |      |      |      |      |                        |      |      |      |      |      |      |      |      |      |      |      |               |               |               |      |      |
| Day                   | Hourly Period Starting at (MST) |                                |      |      |      |      |      |      |      |      |      |                        |      |      |      |      |      |      |      |      |      |      |      | Daily Minimum | Daily Maximum | Daily Average |      |      |
| Jul 1                 | 13.4                            | 9.2                            | 6.3  | 8.4  | 19.1 | 18.9 | 14.9 | 11.9 | 8.7  | 4.1  | 10.2 | 12.1                   | 12.7 | 13.6 | 12.6 | 16.0 | 14.9 | 12.0 | 11.8 | 13.9 | 16.2 | 10.0 | 4.9  | 4.0           | 4.0           | 19.1          | 9.8  |      |
| Jul 2                 | E                               | E                              | NE   | N    | NNE  | NNE  | NNE  | N    | N    | N    | NNW  | NNW                    | NNW  | NNW  | NNW  | NNW  | NNW  | NNW  | NW   | NW   | NNW  | NNW  | N    | N             | N             | 2.5           | 17.6 | 7.6  |
| Jul 3                 | 7.7                             | 7.1                            | 3.5  | 3.5  | 2.6  | 3.5  | 5.7  | 2.5  | 6.5  | 6.2  | 5.5  | 8.2                    | 7.1  | 7.0  | 14.3 | 17.0 | 14.0 | 14.9 | 17.6 | 15.1 | 11.5 | 13.5 | 12.1 | 11.3          | 4.9           | 18.8          | 10.0 |      |
| Jul 4                 | N                               | W                              | WNW  | NW   | ENE  | S    | E    | WSW  | WSW  | WSW  | WSW  | NW                     | WNW  | WSW  | WSW  | W    | WSW  | W    | W    | W    | WNW  | WNW  | WNW  | NNW           | NNW           | 4.9           | 18.8 | 10.0 |
| Jul 5                 | 10.1                            | 8.7                            | 11.1 | 10.1 | 7.7  | 8.8  | 10.3 | 9.9  | 13.0 | 10.8 | 11.4 | 11.7                   | 12.8 | 12.3 | 9.7  | 15.2 | C    | C    | 18.3 | 18.8 | 15.0 | 10.1 | 8.3  | 4.9           | 4.9           | 18.8          | 10.0 |      |
| Jul 6                 | W                               | W                              | WNW  | W    | W    | W    | WNW  | WNW  | NW   | WNW  | WNW  | NW                     | NW   | NW   | NW   | NNW  | C    | C    | NNW  | NNW  | N    | NNW  | N    | N             | 1.9           | 18.1          | 7.1  |      |
| Jul 7                 | 6.5                             | 7.8                            | 7.7  | 2.8  | 1.9  | 3.3  | 7.4  | 9.1  | 9.6  | 6.2  | 6.8  | 6.0                    | 7.4  | 9.5  | 7.3  | 18.1 | 15.8 | 15.2 | 13.3 | 15.3 | 10.6 | 9.2  | 6.7  | 8.6           | 1.9           | 18.1          | 7.1  |      |
| Jul 8                 | NNW                             | NNW                            | NNW  | NW   | SW   | NW   | NNW  | N    | N    | NNW  | NW   | N                      | N    | N    | NE   | NE   | NE   | NE   | NE   | ENE  | ENE  | ENE  | ENE  | ENE           | 6.4           | 14.9          | 9.4  |      |
| Jul 9                 | 9.5                             | 9.5                            | 8.6  | 9.2  | 6.7  | 8.1  | 10.8 | 8.3  | 6.4  | 10.5 | 13.2 | 9.5                    | 11.0 | 9.9  | 11.5 | 9.1  | 12.1 | 14.9 | 14.7 | 10.0 | 11.8 | 8.4  | 7.8  | 8.1           | 6.4           | 14.9          | 9.4  |      |
| Jul 10                | ENE                             | ENE                            | ENE  | E    | ESE  | E    | E    | ENE  | ENE  | ENE  | ENE  | ENE                    | ENE  | E    | E    | ESE  | E    | ESE  | ESE  | ESE  | ESE  | ESE  | ESE  | ESE           | 2.5           | 14.8          | 5.9  |      |
| Jul 11                | 8.9                             | 9.3                            | 9.6  | 9.1  | 10.0 | 5.9  | 7.2  | 9.1  | 9.2  | 5.3  | 4.7  | 9.8                    | 14.8 | 13.2 | 13.6 | 14.7 | 13.6 | 9.9  | 9.4  | 5.6  | 2.5  | 4.6  | 6.2  | 9.3           | 2.5           | 14.8          | 5.9  |      |
| Jul 12                | ESE                             | ESE                            | E    | E    | E    | E    | SE   | SSE  | S    | SSW  | SSW  | SSW                    | SSW  | SSW  | SSW  | SSW  | SSW  | SSW  | SW   | WSW  | WSW  | SW   | SSE  | SE            | SE            | 2.5           | 14.8 | 5.9  |
| Jul 13                | 5.8                             | 5.9                            | 9.0  | 1.9  | 3.0  | 5.2  | 8.8  | 10.6 | 8.9  | 10.5 | 14.5 | 17.3                   | 19.0 | 18.7 | 16.6 | 13.9 | 14.6 | 10.5 | 12.1 | 12.6 | 10.3 | 11.9 | 16.6 | 15.6          | 1.9           | 19.0          | 10.4 |      |
| Jul 14                | SE                              | SSE                            | S    | SE   | SE   | SE   | S    | SSE  | S    | S    | SSW  | SSW                    | SSW  | SSW  | SSW  | SSW  | SSW  | SW   | SSW  | S    | SSE  | SSE  | SSE  | SSE           | 1.9           | 19.0          | 10.4 |      |
| Jul 15                | 11.2                            | 10.8                           | 10.6 | 10.5 | 11.0 | 7.9  | 9.5  | 8.7  | 9.5  | 9.6  | 11.8 | 12.9                   | 16.3 | 15.2 | 13.7 | 11.8 | 11.9 | 9.3  | 5.9  | 2.9  | 4.3  | 2.0  | 7.2  | 6.8           | 2.0           | 16.3          | 8.8  |      |
| Jul 16                | SSE                             | SSE                            | S    | S    | S    | S    | SSW  | SSW  | SSW  | SSW  | SSW  | SSW                    | SSW  | SSW  | SW   | SW   | SW   | SW   | WSW  | SW   | S    | SSW  | SSE  | SSE           | 4.2           | 12.8          | 7.0  |      |
| Jul 17                | 5.9                             | 4.2                            | 5.7  | 4.7  | 4.5  | 7.1  | 6.2  | 7.3  | 6.7  | 7.2  | 7.9  | 10.2                   | 9.9  | 11.2 | 12.2 | 10.8 | 9.6  | 12.8 | 11.0 | 5.9  | 4.8  | 4.4  | 4.4  | 7.9           | 4.2           | 12.8          | 7.0  |      |
| Jul 18                | SSE                             | SE                             | SE   | SE   | SSE  | SSE  | S    | SSW  | SSW  | SSW  | SSW  | SSW                    | SSW  | SSW  | SSW  | SW   | SSW  | S    | S    | SSW  | S    | SSE  | SE   | SSE           | 0.7           | 18.6          | 6.7  |      |
| Jul 19                | 10.5                            | 7.8                            | 6.3  | 7.1  | 5.0  | 3.5  | 6.9  | 5.9  | 6.4  | 10.2 | 14.9 | 15.8                   | 13.9 | 18.5 | 18.6 | 13.8 | 12.3 | 10.6 | 9.3  | 6.9  | 2.5  | 0.7  | 3.9  | 1.6           | 0.7           | 18.6          | 6.7  |      |
| Jul 20                | SSE                             | S                              | S    | SSE  | SSE  | SSE  | S    | SSW  | SW   | SW   | SW   | WSW                    | WSW  | WSW  | WSW  | WSW  | W    | WNW  | NW   | NW   | NNW  | S    | S    | S             | 0.7           | 18.6          | 6.7  |      |
| Jul 21                | 2.6                             | 4.8                            | 7.9  | 8.1  | 6.9  | 6.3  | 9.9  | 9.8  | 9.2  | 10.5 | 10.2 | 11.5                   | 15.4 | 13.3 | 14.5 | 14.5 | 14.3 | 12.9 | 11.5 | 7.5  | 4.4  | 1.6  | 4.4  | 1.9           | 1.6           | 15.4          | 8.1  |      |
| Jul 22                | SW                              | SSW                            | SW   | W    | W    | W    | NW   | WNW  | W    | W    | WSW  | W                      | WNW  | WNW  | WNW  | WNW  | WNW  | NW   | WNW  | WNW  | W    | SSW  | SSW  | SSW           | 1.7           | 13.9          | 2.7  |      |
| Jul 23                | 3.5                             | 5.9                            | 6.8  | 4.7  | 3.5  | 3.2  | 1.7  | 3.1  | 4.2  | 6.8  | 6.1  | 6.4                    | 7.5  | 8.0  | 4.6  | 2.6  | 8.3  | 4.0  | 5.3  | 7.1  | 9.5  | 12.5 | 13.9 | 13.9          | 1.7           | 13.9          | 2.7  |      |
| Jul 24                | SSE                             | SSE                            | SSE  | SSE  | SSE  | SSE  | SE   | SW   | NW   | NNW  | NNW  | NNW                    | N    | NNW  | WNW  | N    | NNE  | E    | ENE  | ENE  | ENE  | ENE  | E    | E             | 2.2           | 13.8          | 5.7  |      |
| Jul 25                | 12.7                            | 10.5                           | 10.3 | 8.2  | 7.3  | 7.3  | 7.0  | 5.8  | 5.8  | 9.2  | 9.4  | 7.3                    | 6.1  | 8.4  | 3.3  | 6.2  | 4.5  | 5.3  | 2.9  | 2.2  | 8.9  | 13.4 | 13.8 | 12.8          | 2.2           | 13.8          | 5.7  |      |
| Jul 26                | E                               | E                              | E    | ESE  | ESE  | E    | ESE  | ESE  | SE   | SSW  | SW   | SW                     | SSW  | SSE  | S    | S    | S    | SSW  | SW   | SSE  | ESE  | SE   | SSE  | SE            | 2.3           | 14.3          | 6.7  |      |
| Jul 27                | 12.7                            | 10.1                           | 3.4  | 2.3  | 6.7  | 8.9  | 7.1  | 6.8  | 7.5  | 11.2 | 13.4 | 11.5                   | 12.2 | 14.3 | 12.0 | 13.0 | 11.1 | 11.8 | 8.5  | 3.6  | 5.1  | 6.9  | 7.4  | 8.3           | 2.3           | 14.3          | 6.7  |      |
| Jul 28                | SSE                             | SSE                            | SSE  | SE   | ESE  | ESE  | ESE  | SE   | SSE  | S    | SSW  | SSW                    | SSW  | SSW  | SSW  | SSW  | WSW  | WSW  | W    | WSW  | SW   | WSW  | SSW  | SSW           | 6.7           | 17.0          | 6.3  |      |
| Jul 29                | 6.7                             | 8.8                            | 9.3  | 11.0 | 13.2 | 12.0 | 11.2 | 11.9 | 9.9  | 8.6  | 12.7 | 16.1                   | 14.8 | 12.6 | 13.3 | 14.6 | 16.3 | 17.0 | 15.0 | 15.2 | 10.6 | 13.0 | 10.9 | 13.4          | 6.7           | 17.0          | 6.3  |      |
| Jul 30                | SSW                             | SSW                            | S    | SSW  | SSW  | SW   | SW   | WSW  | W    | WNW  | NW   | NNW                    | NNW  | NNW  | NNW  | NNW  | N    | N    | N    | N    | N    | NNE  | NNE  | NNE           | 5.0           | 15.1          | 9.8  |      |
| Jul 31                | 11.5                            | 10.8                           | 11.1 | 12.2 | 11.3 | 11.1 | 15.1 | 13.2 | 11.2 | 13.4 | 11.1 | 13.1                   | 11.8 | 10.9 | 10.7 | 9.6  | 6.2  | 5.5  | 5.0  | 6.4  | 10.1 | 11.8 | 12.8 | 14.9          | 5.0           | 15.1          | 9.8  |      |
| Jul 32                | NNE                             | NNE                            | NNE  | NNE  | NNE  | N    | NNE  | NE   | ENE  | ENE  | ENE  | ENE                    | ENE  | NE   | ENE  | ENE  | NNE  | N    | NE   | ENE  | ENE  | ENE  | E    | E             | 5.8           | 18.7          | 12.5 |      |
| Jul 33                | 18.6                            | 18.6                           | 15.1 | 14.5 | 18.7 | 17.9 | 16.1 | 17.5 | 14.1 | 15.5 | 17.2 | 15.5                   | 13.5 | 10.2 | 10.1 | 8.8  | 10.1 | 8.3  | 6.8  | 6.6  | 5.8  | 7.9  | 7.5  | 7.7           | 5.8           | 18.7          | 12.5 |      |
| Jul 34                | E                               | E                              | E    | E    | ENE  | ENE  | ENE  | E    | E    | E    | E    | E                      | E    | E    | E    | ENE  | E    | E    | ENE  | E    | E    | E    | E    | E             | 4.8           | 11.4          | 8.1  |      |
| Jul 35                | 7.0                             | 5.7                            | 4.8  | 6.2  | 7.6  | 8.9  | 8.8  | 9.5  | 7.1  | 8.3  | 7.9  | 7.4                    | 9.1  | 10.1 | 9.2  | 11.4 | 10.5 | 10.3 | 9.3  | 9.2  | 8.4  | 7.2  | 7.5  | 8.9           | 4.8           | 11.4          | 8.1  |      |
| Jul 36                | E                               | E                              | ENE  | ENE  | E    | E    | E    | E    | ESE  | E    | ESE  | E                      | E    | E    | E    | ENE  | ENE  | ENE  | ENE  | ENE  | E    | E    | E    | ESE           | 3.0           | 10.7          | 5.7  |      |
| Jul 37                | 9.6                             | 9.0                            | 6.7  | 10.7 | 7.9  | 8.3  | 6.9  | 7.7  | 5.5  | 5.5  | 3.0  | 5.5                    | 3.1  | 4.5  | 7.8  | 7.9  | 3.2  | 3.3  | 7.8  | 7.4  | 5.8  | 8.1  | 6.9  | 6.2           | 3.0           | 10.7          | 5.7  |      |
| Jul 38                | ESE                             | ESE                            | ESE  | ESE  | ESE  | E    | ESE  | ESE  | SSE  | SSE  | SSW  | SSE                    | SSE  | SSE  | SSW  | SSW  | SE   | SSE  | SE   | SSE  | SE   | SE   | SE   | ESE           | 2.2           | 15.2          | 7.2  |      |
| Jul 39                | 5.2                             | 5.8                            | 5.2  | 4.9  | 5.4  | 5.6  | 7.0  | 7.3  | 11.6 | 11.0 | 12.4 | 15.2                   | 10.9 | 9.7  | 8.7  | 8.3  | 7.8  | 7.5  | 6.4  | 10.7 | 9.5  | 9.1  | 6.0  | 2.2           | 2.2           | 15.2          | 7.2  |      |
| Jul 40                | E                               | E                              | ENE  | ENE  | E    | E    | E    | E    | E    | E    | E    | ENE                    | ENE  | E    | NE   | NE   | NE   | ESE  | ESE  | ESE  | ESE  | SE   | SSE  | SSE           | 2.2           | 15.2          | 7.2  |      |



# PEACE RIVER AREA MONITORING PROGRAM

986c Station - July 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr & WIND DIRECTION (VWD) in sector

| WIND SPEED                                                                                              |                                               |                                |      |      |      |      |      |      |                                                                                          |      |      |      |      |      |                        |      |      |      |      |                     |      |      |      |               |               |               |      |  |  |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------|------|------|------|------|------|------|------------------------------------------------------------------------------------------|------|------|------|------|------|------------------------|------|------|------|------|---------------------|------|------|------|---------------|---------------|---------------|------|--|--|
| Maximum Hourly Value:                                                                                   |                                               | 28.5 kph on July 22 at hour 12 |      |      |      |      |      |      |                                                                                          |      |      |      |      |      | Hours in Service:      |      | 744  |      |      |                     |      |      |      |               |               |               |      |  |  |
| Maximum Daily Value:                                                                                    |                                               | 20.0 kph on July 22            |      |      |      |      |      |      |                                                                                          |      |      |      |      |      | Hours of Data:         |      | 677  |      |      |                     |      |      |      |               |               |               |      |  |  |
| Minimum Hourly Value:                                                                                   |                                               | 0.5 kph on July 21 at hour 21  |      |      |      |      |      |      |                                                                                          |      |      |      |      |      | Hours of Missing Data: |      | 65   |      |      |                     |      |      |      |               |               |               |      |  |  |
| Minimum Daily Value:                                                                                    |                                               | 2.0 kph on July 29             |      |      |      |      |      |      |                                                                                          |      |      |      |      |      | Hours of Calibration:  |      | 2    |      |      |                     |      |      |      |               |               |               |      |  |  |
| Monthly Average:                                                                                        |                                               | 1.8 kph                        |      |      |      |      |      |      |                                                                                          |      |      |      |      |      | Operational Uptime:    |      | 91.3 |      |      |                     |      |      |      |               |               |               |      |  |  |
| WIND DIRECTION                                                                                          |                                               |                                |      |      |      |      |      |      |                                                                                          |      |      |      |      |      |                        |      |      |      |      |                     |      |      |      |               |               |               |      |  |  |
| Monthly Average:                                                                                        |                                               | 195 (SSW) degree               |      |      |      |      |      |      |                                                                                          |      |      |      |      |      |                        |      |      |      |      |                     |      |      |      |               |               |               |      |  |  |
| Day                                                                                                     | Hourly Period Starting at (MST)               |                                |      |      |      |      |      |      |                                                                                          |      |      |      |      |      |                        |      |      |      |      |                     |      |      |      | Daily Minimum | Daily Maximum | Daily Average |      |  |  |
|                                                                                                         | 0                                             | 1                              | 2    | 3    | 4    | 5    | 6    | 7    | 8                                                                                        | 9    | 10   | 11   | 12   | 13   | 14                     | 15   | 16   | 17   | 18   | 19                  | 20   | 21   | 22   | 23            |               |               |      |  |  |
| Jul 21                                                                                                  | 5.7                                           | 9.4                            | 4.0  | 4.9  | 4.4  | 0.9  | 4.3  | 4.6  | 2.0                                                                                      | 1.7  | 3.5  | 1.8  | 12.1 | 9.9  | 8.6                    | 11.9 | 9.9  | 10.3 | 8.9  | 13.2                | 8.2  | 0.5  | 5.1  | 9.1           | 0.5           | 13.2          | 4.3  |  |  |
| Jul 22                                                                                                  | 7.3                                           | 9.5                            | 14.9 | 17.6 | 15.5 | 14.9 | 17.1 | 19.5 | 20.6                                                                                     | 25.0 | 25.8 | 27.1 | 28.5 | 27.5 | 23.3                   | 23.7 | 27.0 | 28.4 | 21.0 | 23.2                | 21.3 | 20.7 | 17.0 | 19.7          | 7.3           | 28.5          | 20.0 |  |  |
| Jul 23                                                                                                  | 17.3                                          | 15.5                           | 15.2 | 12.3 | 16.6 | 19.5 | 17.2 | 15.4 | 18.8                                                                                     | 17.7 | 17.8 | 18.4 | 13.4 | 12.8 | 15.6                   | 13.2 | 13.4 | 16.6 | 17.4 | 18.5                | P    | P    | P    | P             | 12.3          | 19.5          | 16.0 |  |  |
| Jul 24                                                                                                  | P                                             | P                              | P    | P    | P    | P    | P    | P    | P                                                                                        | P    | P    | P    | P    | P    | P                      | P    | P    | P    | P    | P                   | P    | P    | P    | P             | -             | -             | -    |  |  |
| Jul 25                                                                                                  | P                                             | P                              | P    | P    | P    | P    | P    | P    | P                                                                                        | P    | P    | P    | P    | P    | P                      | P    | P    | P    | P    | P                   | P    | P    | P    | P             | -             | -             | -    |  |  |
| Jul 26                                                                                                  | P                                             | P                              | P    | P    | P    | P    | P    | P    | P                                                                                        | P    | P    | P    | P    | 16.8 | 15.6                   | 14.0 | 10.5 | 12.6 | 6.2  | 8.1                 | 7.9  | 6.9  | 6.8  | 7.3           | 6.2           | 16.8          | -    |  |  |
| Jul 27                                                                                                  | 6.0                                           | 4.3                            | 8.0  | 9.1  | 9.2  | 13.1 | 13.7 | 13.0 | 14.3                                                                                     | 11.6 | 12.6 | 12.5 | 12.4 | 11.7 | 9.5                    | 8.4  | 9.1  | 9.9  | 4.7  | 4.1                 | 3.9  | 2.8  | 3.7  | 4.3           | 2.8           | 14.3          | 6.1  |  |  |
| Jul 28                                                                                                  | SSW                                           | S                              | SSW  | SSW  | SW   | SSW  | SW   | SW   | SSW                                                                                      | SW   | SSW  | SSW  | SSW  | SSW  | WSW                    | WSW  | WSW  | WSW  | WSW  | WSW                 | SSW  | SSW  | SSW  | SSW           | 1.5           | 14.8          | 8.9  |  |  |
| Jul 29                                                                                                  | 4.7                                           | 1.5                            | 6.2  | 7.2  | 9.3  | 11.8 | 11.3 | 14.1 | 12.4                                                                                     | 12.8 | 11.6 | 12.1 | 13.2 | 11.5 | 14.1                   | 14.5 | 14.8 | 11.9 | 8.6  | 6.9                 | 6.8  | 7.0  | 6.1  | 5.1           | 1.4           | 9.8           | 2.0  |  |  |
| Jul 30                                                                                                  | SSE                                           | SE                             | S    | S    | SSW  | SSW  | SSW  | SSW  | SW                                                                                       | SW   | WSW  | WSW  | WSW  | W    | WSW                    | WSW  | WSW  | WSW  | WSW  | WSW                 | SW   | SW   | SW   | S             | 1.1           | 12.5          | 3.4  |  |  |
| Jul 31                                                                                                  | 6.6                                           | 3.2                            | 4.6  | 5.4  | 3.9  | 1.4  | 5.1  | 3.2  | 9.7                                                                                      | 9.5  | 9.8  | 8.8  | 6.3  | 7.6  | 5.7                    | 7.3  | 6.4  | 6.0  | 5.4  | 7.3                 | 5.7  | 2.5  | 3.5  | 7.5           | 1.9           | 11.8          | 6.1  |  |  |
|                                                                                                         | S                                             | SSE                            | SSW  | SSW  | SSW  | SSE  | SSE  | SSW  | SW                                                                                       | SSW  | WSW  | WSW  | WSW  | W    | W                      | N    | NNW  | NNE  | N    | NNE                 | NNE  | E    | ENE  | ENE           | 1.1           | 12.5          | 3.4  |  |  |
|                                                                                                         | 6.4                                           | 4.3                            | 5.8  | 1.4  | 4.2  | 4.0  | 1.1  | 1.2  | 1.6                                                                                      | 1.8  | 2.8  | 2.2  | 2.3  | 3.8  | 3.5                    | 5.8  | 5.1  | 6.0  | 6.3  | 5.5                 | 7.6  | 10.7 | 12.5 | 10.9          | 1.1           | 12.5          | 3.4  |  |  |
|                                                                                                         | E                                             | ESE                            | E    | NNE  | E    | ESE  | SE   | NNE  | SE                                                                                       | NNE  | NE   | NNE  | NNE  | NNE  | NNW                    | N    | N    | NE   | NE   | E                   | ESE  | ESE  | ESE  | 1.1           | 12.5          | 3.4           |      |  |  |
|                                                                                                         | 6.1                                           | 5.3                            | 7.5  | 5.3  | 6.5  | 4.1  | 8.2  | 6.6  | 5.9                                                                                      | 7.4  | 8.5  | 10.5 | 7.7  | 4.2  | 1.9                    | 6.1  | 4.6  | 6.4  | 6.3  | 8.2                 | 9.8  | 11.8 | 8.6  | 6.5           | 1.9           | 11.8          | 6.1  |  |  |
|                                                                                                         | SE                                            | SE                             | ESE  | ESE  | ESE  | SE   | SE   | SE   | SSE                                                                                      | SSE  | SSE  | SSE  | SSE  | S    | E                      | E    | ENE  | E    | E    | ENE                 | ESE  | SE   | ESE  | ESE           | 1.9           | 11.8          | 6.1  |  |  |
| C                                                                                                       | Monthly Calibration                           |                                |      |      |      |      |      | S    | Daily Zero-Span Check                                                                    |      |      |      |      |      |                        |      |      |      | Q    | Quality Assurance   |      |      |      |               |               |               |      |  |  |
| K                                                                                                       | Collection Error                              |                                |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                         |      |      |      |      |      |                        |      |      |      | Y    | Routine Maintenance |      |      |      |               |               |               |      |  |  |
| X                                                                                                       | Invalid Data (Equipment Malfunction/Recovery) |                                |      |      |      |      |      | NRM  | Unit/Maint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |      |                        |      |      |      | P    | Power Failure       |      |      |      |               |               |               |      |  |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                               |                                |      |      |      |      |      |      |                                                                                          |      |      |      |      |      |                        |      |      |      |      |                     |      |      |      |               |               |               |      |  |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                               |                                |      |      |      |      |      |      |                                                                                          |      |      |      |      |      |                        |      |      |      |      |                     |      |      |      |               |               |               |      |  |  |

842b STATION



# PEACE RIVER AREA MONITORING PROGRAM

842b Station - July 2021

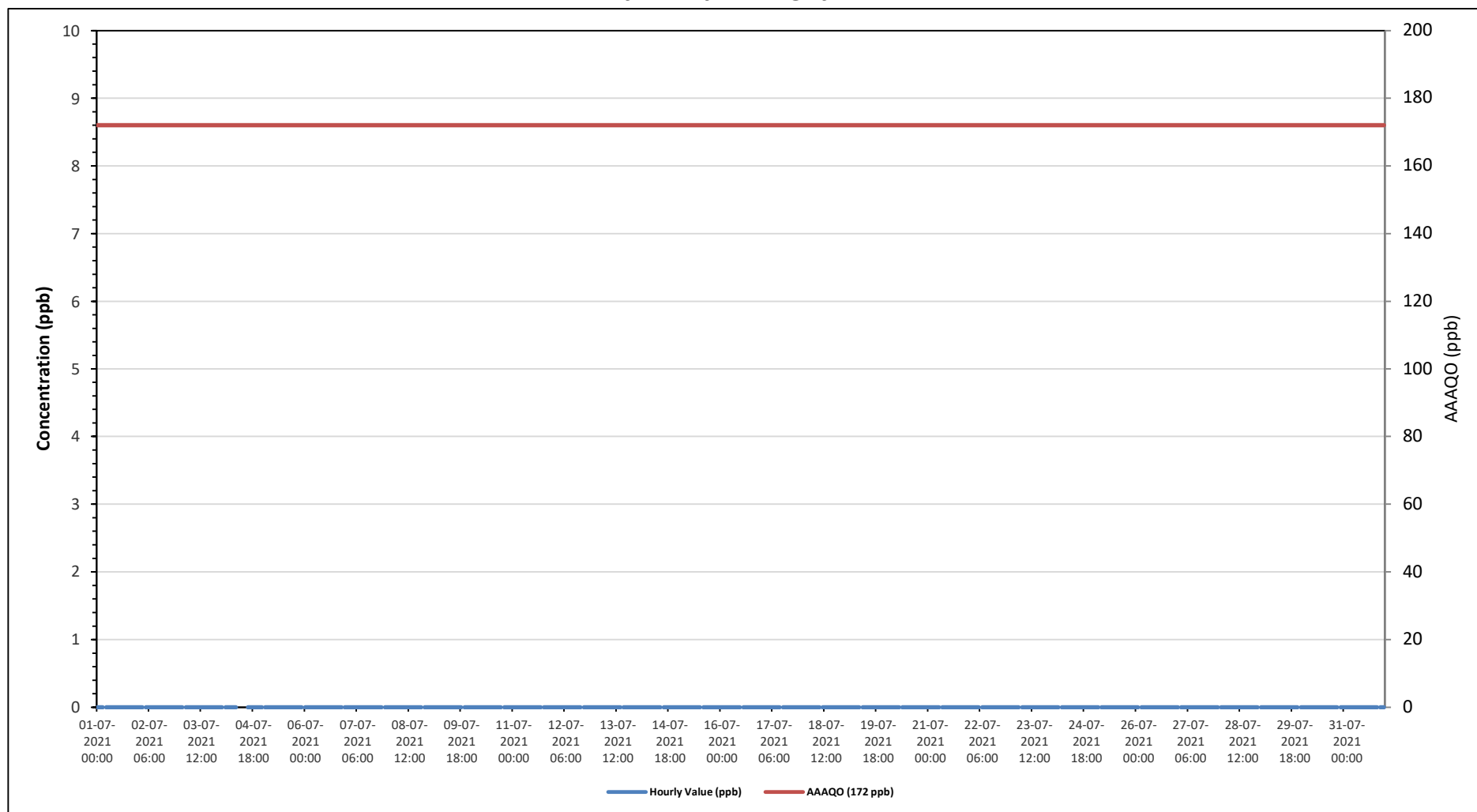
Summary of Hourly Averages

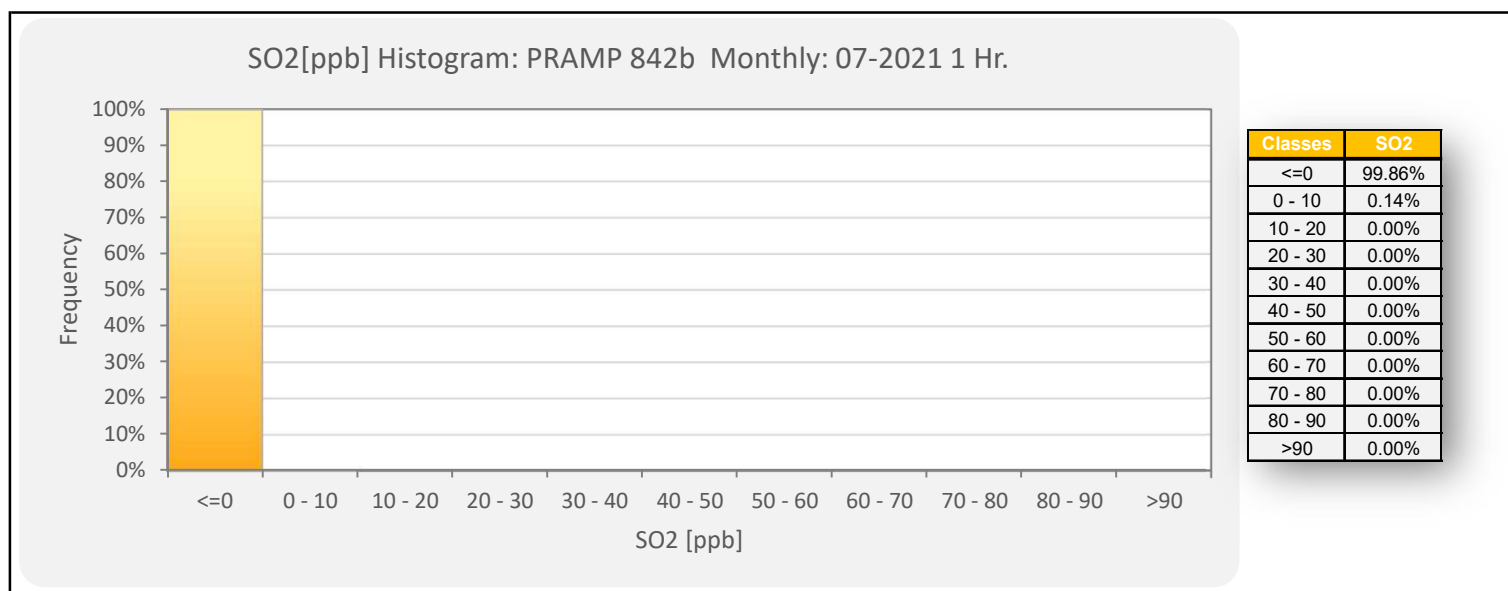
SULPHUR DIOXIDE (SO<sub>2</sub>) in ppb

| Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb           |                                                |     |     |     |                           |     |     |     |                                                                                         |                                |     |     |     |     |       |     |                     |     |     |                    |     |     |     |               |               |               |     |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|-----|-----|-----|---------------------------|-----|-----|-----|-----------------------------------------------------------------------------------------|--------------------------------|-----|-----|-----|-----|-------|-----|---------------------|-----|-----|--------------------|-----|-----|-----|---------------|---------------|---------------|-----|
| Number of 1-Hour Exceedances:                                                                           |                                                |     |     |     | 0                         |     |     |     |                                                                                         | Number of 24-Hour Exceedances: |     |     |     |     | 0     |     |                     |     |     | 30-Day Exceedance: |     |     |     |               | 0             |               |     |
| Maximum Hourly Value:                                                                                   |                                                |     |     |     | 0 ppb on July 1 at hour 0 |     |     |     |                                                                                         | Hours in Service:              |     |     |     |     | 744   |     |                     |     |     |                    |     |     |     |               |               |               |     |
| Maximum Daily Value:                                                                                    |                                                |     |     |     | 0.0 ppb on July 1         |     |     |     |                                                                                         | Hours of Data:                 |     |     |     |     | 705   |     |                     |     |     |                    |     |     |     |               |               |               |     |
| Minimum Hourly Value:                                                                                   |                                                |     |     |     | 0 ppb on July 1 at hour 0 |     |     |     |                                                                                         | Hours of Missing Data:         |     |     |     |     | 0     |     |                     |     |     |                    |     |     |     |               |               |               |     |
| Minimum Daily Value:                                                                                    |                                                |     |     |     | 0.0 ppb on July 1         |     |     |     |                                                                                         | Hours of Calibration:          |     |     |     |     | 39    |     |                     |     |     |                    |     |     |     |               |               |               |     |
| Monthly Average:                                                                                        |                                                |     |     |     | 0.0 ppb                   |     |     |     |                                                                                         | Operational Uptime:            |     |     |     |     | 100.0 |     |                     |     |     |                    |     |     |     |               |               |               |     |
| Day                                                                                                     | Hourly Period Starting at (MST)                |     |     |     |                           |     |     |     |                                                                                         |                                |     |     |     |     |       |     |                     |     |     |                    |     |     |     | Daily Minimum | Daily Maximum | Daily Average |     |
|                                                                                                         | 0                                              | 1   | 2   | 3   | 4                         | 5   | 6   | 7   | 8                                                                                       | 9                              | 10  | 11  | 12  | 13  | 14    | 15  | 16                  | 17  | 18  | 19                 | 20  | 21  | 22  | 23            |               |               |     |
| Jul 1                                                                                                   | 0                                              | 0   | 0   | 0   | S                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 2                                                                                                   | 0                                              | 0   | 0   | S   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 3                                                                                                   | 0                                              | 0   | S   | 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 |
| Jul 4                                                                                                   | 0                                              | S   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | C                              | C   | C   | C   | C   | C     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | -   |
| Jul 5                                                                                                   | S                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | S             | 0             | 0.0 |
| Jul 6                                                                                                   | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | S             | 0             | 0             | 0.0 |
| Jul 7                                                                                                   | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | S   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 8                                                                                                   | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | S   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 9                                                                                                   | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | S                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 10                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | S   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 11                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | S   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 12                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | S                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 13                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | S   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 14                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | S     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 15                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | S   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 16                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | S   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 17                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | S   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 18                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | S   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 19                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | S                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 20                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | S                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 21                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | S   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 22                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | S   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 23                                                                                                  | 0                                              | 0   | 0   | 0   | S                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 24                                                                                                  | 0                                              | 0   | 0   | S   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 25                                                                                                  | 0                                              | 0   | S   | 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 |
| Jul 26                                                                                                  | 0                                              | S   | 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 |
| Jul 27                                                                                                  | S                                              | 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 |
| Jul 28                                                                                                  | S                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | 0   | 0   | S             | 0             | 0             | 0.0 |
| Jul 29                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | 0   | S   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 30                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | 0                  | S   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Jul 31                                                                                                  | 0                                              | 0   | 0   | 0   | 0                         | 0   | 0   | 0   | 0                                                                                       | 0                              | 0   | 0   | 0   | 0   | 0     | 0   | 0                   | 0   | 0   | S                  | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |
| Diurnal Maximum                                                                                         | 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             |     |
| Diurnal Average                                                                                         | 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 | 0.0   | 0.0 | 0.0                 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0           | 0.0           | 0.0           |     |
| C                                                                                                       | Monthly Calibration                            |     |     |     |                           |     |     | S   | Daily Zero-Span Check                                                                   |                                |     |     |     |     |       | Q   | Quality Assurance   |     |     |                    |     |     |     |               |               |               |     |
| K                                                                                                       | Collection Error                               |     |     |     |                           |     |     | N   | No Data (Machine Not in Service)                                                        |                                |     |     |     |     |       | Y   | Routine Maintenance |     |     |                    |     |     |     |               |               |               |     |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |     |     |     |                           |     |     | NRM | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |                                |     |     |     |     |       | P   | Power Failure       |     |     |                    |     |     |     |               |               |               |     |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |     |     |     |                           |     |     |     |                                                                                         |                                |     |     |     |     |       |     |                     |     |     |                    |     |     |     |               |               |               |     |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |     |     |     |                           |     |     |     |                                                                                         |                                |     |     |     |     |       |     |                     |     |     |                    |     |     |     |               |               |               |     |



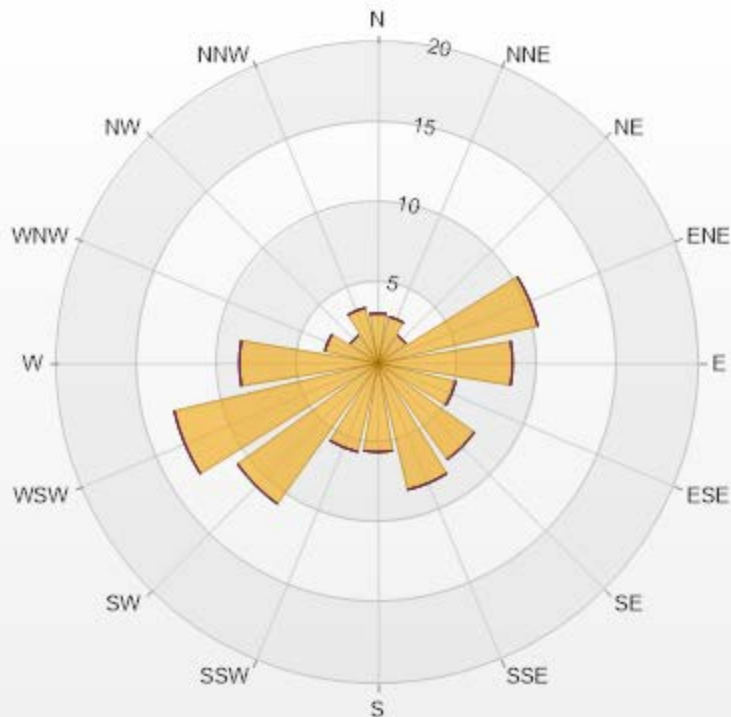
***Timeseries Chart of Hourly Average for SO2 - 842b Station***





Wind: PRAMP 842b Poll.: PRAMP 842b-SO2[ppb] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 94.76% Calm Avg: 0.00 [ppb]

| Direction | 0-10  | 10-50 | 50-100 | 100-172 | >172.0 | Total |
|-----------|-------|-------|--------|---------|--------|-------|
| N         | 3.12  | 0     | 0      | 0       | 0      | 3.12  |
| NNE       | 2.98  | 0     | 0      | 0       | 0      | 2.98  |
| NE        | 2.13  | 0     | 0      | 0       | 0      | 2.13  |
| ENE       | 10.21 | 0     | 0      | 0       | 0      | 10.21 |
| E         | 8.37  | 0     | 0      | 0       | 0      | 8.37  |
| ESE       | 4.96  | 0     | 0      | 0       | 0      | 4.96  |
| SE        | 7.38  | 0     | 0      | 0       | 0      | 7.38  |
| SSE       | 8.09  | 0     | 0      | 0       | 0      | 8.09  |
| S         | 5.53  | 0     | 0      | 0       | 0      | 5.53  |
| SSW       | 5.67  | 0     | 0      | 0       | 0      | 5.67  |
| SW        | 10.78 | 0     | 0      | 0       | 0      | 10.78 |
| WSW       | 13.05 | 0     | 0      | 0       | 0      | 13.05 |
| W         | 8.65  | 0     | 0      | 0       | 0      | 8.65  |
| WNW       | 3.4   | 0     | 0      | 0       | 0      | 3.4   |
| NW        | 2.13  | 0     | 0      | 0       | 0      | 2.13  |
| NNW       | 3.55  | 0     | 0      | 0       | 0      | 3.55  |
| Summary   | 100   | 0     | 0      | 0       | 0      | 100   |



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% Icon Classes (ppb)

100 0-10

0 10-50

0 50-100

0 100-172

0 >172.0



# PEACE RIVER AREA MONITORING PROGRAM

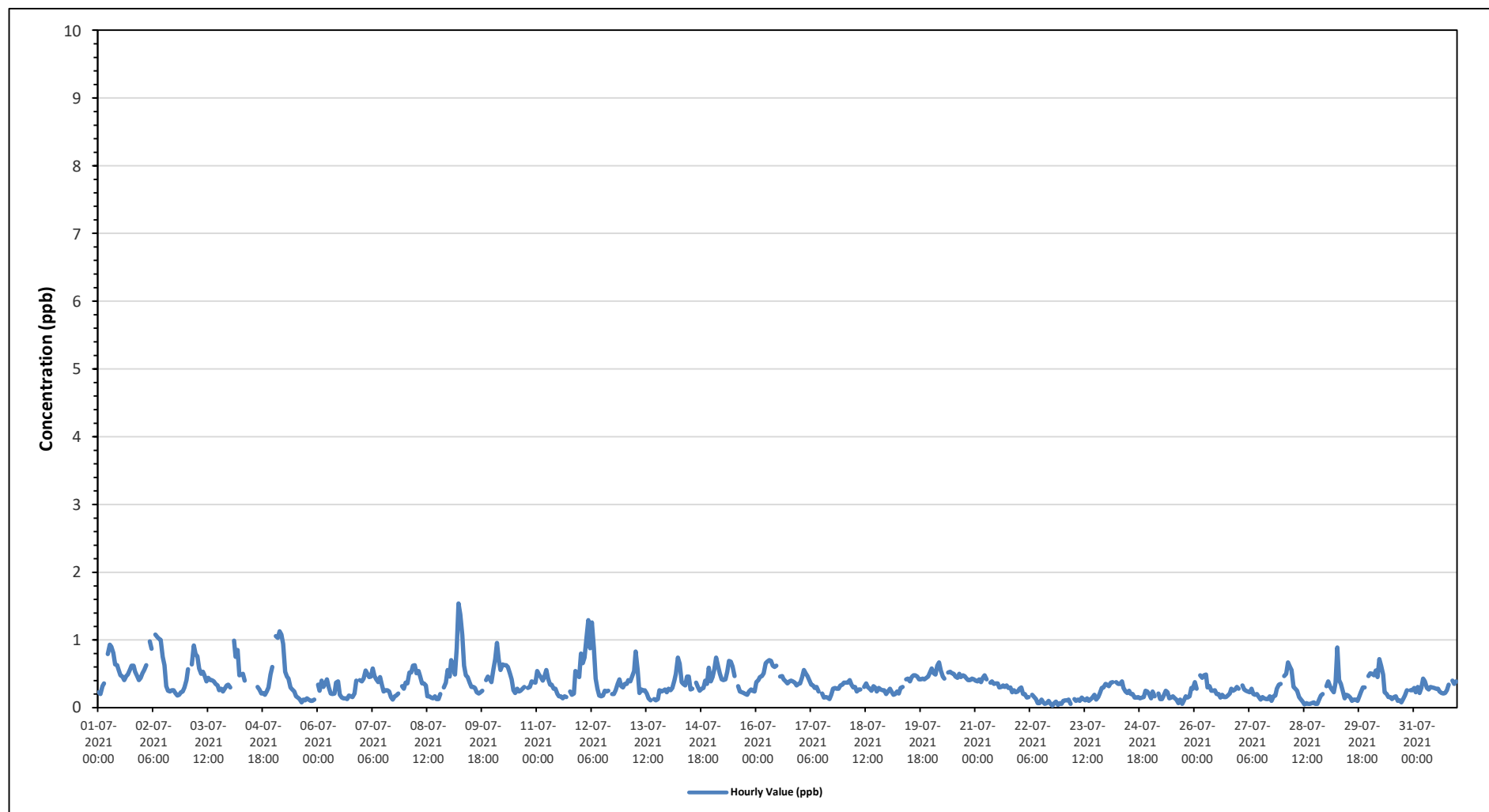
842b Station - July 2021

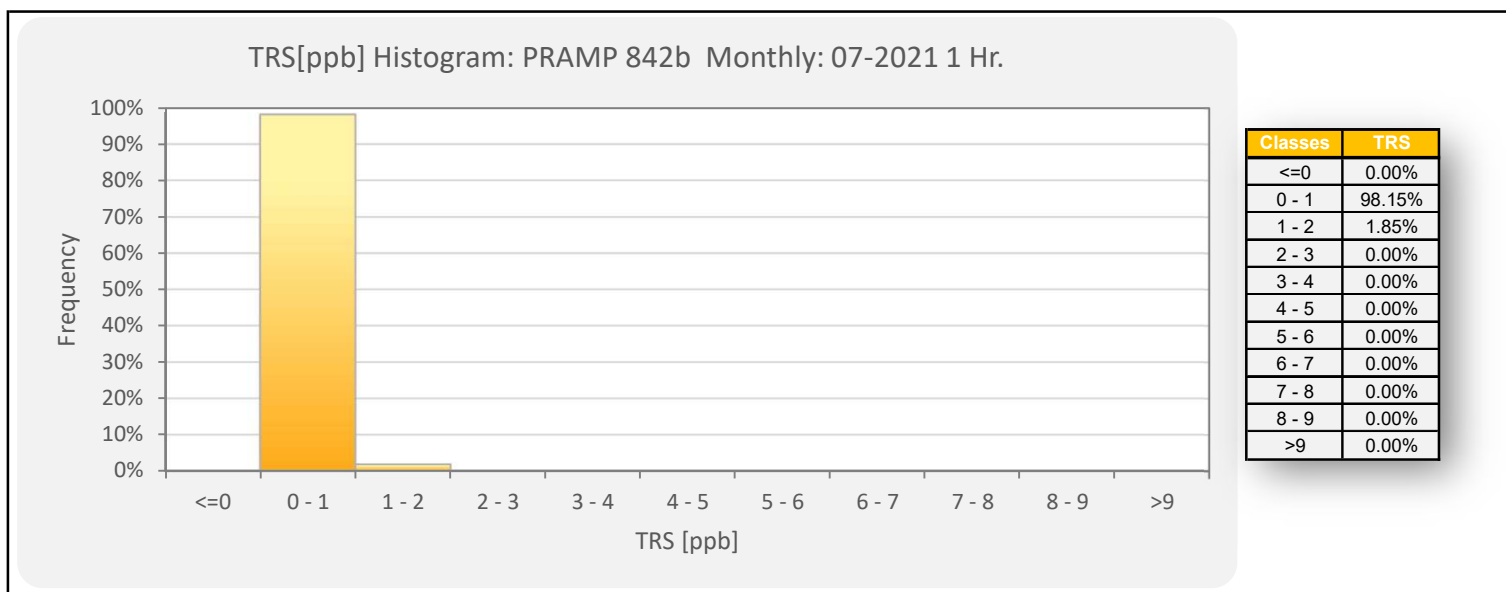
Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

| Maximum Hourly Value:                                                                                   |                                                |      | 1.54 | ppb  | on July 9 at hour 5   |      |      |                                                                                         |      |      |      |      |      |      | Hours in Service:      |      |      | 744  |      |      |      |               |      |       |         |         |         |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|-----------------------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|------|------|------------------------|------|------|------|------|------|------|---------------|------|-------|---------|---------|---------|
| Maximum Daily Value:                                                                                    |                                                |      | 0.55 | ppb  | on July 9             |      |      |                                                                                         |      |      |      |      |      |      | Hours of Data:         |      |      | 704  |      |      |      |               |      |       |         |         |         |
| Minimum Hourly Value:                                                                                   |                                                |      | 0.03 | ppb  | on July 22 at hour 18 |      |      |                                                                                         |      |      |      |      |      |      | Hours of Missing Data: |      |      | 1    |      |      |      |               |      |       |         |         |         |
| Minimum Daily Value:                                                                                    |                                                |      | 0.12 | ppb  | on July 22            |      |      |                                                                                         |      |      |      |      |      |      | Hours of Calibration:  |      |      | 39   |      |      |      |               |      |       |         |         |         |
| Monthly Average:                                                                                        |                                                |      | 0.35 | ppb  |                       |      |      |                                                                                         |      |      |      |      |      |      | Operational Uptime:    |      |      | 99.9 |      |      |      |               |      |       |         |         |         |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |                       |      |      |                                                                                         |      |      |      |      |      |      |                        |      |      |      |      |      |      |               |      | Daily | Daily   | Daily   |         |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4                     | 5    | 6    | 7                                                                                       | 8    | 9    | 10   | 11   | 12   | 13   | 14                     | 15   | 16   | 17   | 18   | 19   | 20   | 21            | 22   | 23    | Minimum | Maximum | Average |
| Jul 1                                                                                                   | 0.23                                           | 0.2  | 0.32 | 0.36 | S                     | 0.79 | 0.93 | 0.9                                                                                     | 0.81 | 0.64 | 0.63 | 0.56 | 0.48 | 0.46 | 0.41                   | 0.47 | 0.49 | 0.56 | 0.62 | 0.62 | 0.53 | 0.47          | 0.41 | 0.44  | 0.20    | 0.93    | 0.54    |
| Jul 2                                                                                                   | 0.51                                           | 0.56 | 0.63 | S    | 0.98                  | 0.87 | NRM  | 1.08                                                                                    | 1.04 | 1.02 | 1    | 0.75 | 0.63 | 0.32 | 0.25                   | 0.24 | 0.26 | 0.26 | 0.22 | 0.18 | 0.19 | 0.23          | 0.24 | 0.3   | 0.18    | 1.08    | 0.53    |
| Jul 3                                                                                                   | 0.41                                           | 0.57 | S    | 0.64 | 0.92                  | 0.79 | 0.76 | 0.58                                                                                    | 0.5  | 0.53 | 0.48 | 0.39 | 0.44 | 0.41 | 0.41                   | 0.39 | 0.35 | 0.33 | 0.26 | 0.28 | 0.24 | 0.28          | 0.33 | 0.34  | 0.24    | 0.92    | 0.46    |
| Jul 4                                                                                                   | 0.3                                            | S    | 0.99 | 0.75 | 0.85                  | 0.48 | 0.49 | 0.5                                                                                     | 0.4  | C    | C    | C    | C    | C    | C                      | 0.31 | 0.27 | 0.21 | 0.22 | 0.19 | 0.24 | 0.3           | 0.49 | 0.6   | 0.19    | 0.99    | -       |
| Jul 5                                                                                                   | S                                              | 1.06 | 1.03 | 1.13 | 1.08                  | 0.94 | 0.53 | 0.46                                                                                    | 0.43 | 0.3  | 0.27 | 0.24 | 0.17 | 0.15 | 0.13                   | 0.08 | 0.12 | 0.11 | 0.14 | 0.12 | 0.1  | 0.1           | 0.12 | S     | 0.08    | 1.13    | 0.40    |
| Jul 6                                                                                                   | 0.34                                           | 0.25 | 0.4  | 0.31 | 0.36                  | 0.42 | 0.29 | 0.21                                                                                    | 0.2  | 0.21 | 0.37 | 0.39 | 0.19 | 0.15 | 0.14                   | 0.14 | 0.13 | 0.18 | 0.17 | 0.16 | 0.21 | 0.4           | S    | 0.41  | 0.13    | 0.42    | 0.26    |
| Jul 7                                                                                                   | 0.39                                           | 0.43 | 0.55 | 0.51 | 0.45                  | 0.46 | 0.58 | 0.47                                                                                    | 0.42 | 0.38 | 0.45 | 0.34 | 0.24 | 0.26 | 0.26                   | 0.24 | 0.16 | 0.12 | 0.17 | 0.18 | 0.21 | S             | 0.32 | 0.28  | 0.12    | 0.58    | 0.34    |
| Jul 8                                                                                                   | 0.37                                           | 0.36 | 0.52 | 0.52 | 0.62                  | 0.63 | 0.51 | 0.54                                                                                    | 0.47 | 0.36 | 0.36 | 0.33 | 0.17 | 0.17 | 0.15                   | 0.14 | 0.17 | 0.13 | 0.13 | 0.2  | S    | 0.3           | 0.37 | 0.56  | 0.13    | 0.63    | 0.35    |
| Jul 9                                                                                                   | 0.46                                           | 0.7  | 0.61 | 0.49 | 0.88                  | 1.54 | 1.38 | 1.07                                                                                    | 0.62 | 0.48 | 0.45 | 0.37 | 0.31 | 0.31 | 0.29                   | 0.23 | 0.21 | 0.23 | 0.25 | S    | 0.41 | 0.46          | 0.43 | 0.38  | 0.21    | 1.54    | 0.55    |
| Jul 10                                                                                                  | 0.57                                           | 0.72 | 0.96 | 0.71 | 0.56                  | 0.64 | 0.63 | 0.63                                                                                    | 0.6  | 0.51 | 0.42 | 0.26 | 0.22 | 0.28 | 0.24                   | 0.25 | 0.28 | 0.31 | S    | 0.29 | 0.31 | 0.39          | 0.38 | 0.37  | 0.22    | 0.96    | 0.46    |
| Jul 11                                                                                                  | 0.54                                           | 0.49 | 0.45 | 0.4  | 0.45                  | 0.56 | 0.43 | 0.34                                                                                    | 0.34 | 0.28 | 0.28 | 0.2  | 0.17 | 0.17 | 0.14                   | 0.17 | 0.16 | S    | 0.24 | 0.19 | 0.21 | 0.54          | 0.51 | 0.45  | 0.14    | 0.56    | 0.34    |
| Jul 12                                                                                                  | 0.8                                            | 0.66 | 0.74 | 1.04 | 1.29                  | 0.88 | 1.26 | 0.88                                                                                    | 0.43 | 0.28 | 0.18 | 0.17 | 0.18 | 0.25 | 0.24                   | 0.25 | S    | 0.2  | 0.2  | 0.26 | 0.35 | 0.42          | 0.32 | 0.3   | 0.17    | 1.29    | 0.50    |
| Jul 13                                                                                                  | 0.35                                           | 0.35 | 0.41 | 0.39 | 0.46                  | 0.54 | 0.83 | 0.56                                                                                    | 0.22 | 0.27 | 0.25 | 0.26 | 0.21 | 0.14 | 0.11                   | S    | 0.13 | 0.11 | 0.13 | 0.26 | 0.24 | 0.25          | 0.27 | 0.23  | 0.11    | 0.83    | 0.30    |
| Jul 14                                                                                                  | 0.28                                           | 0.26 | 0.29 | 0.4  | 0.5                   | 0.74 | 0.65 | 0.38                                                                                    | 0.35 | 0.33 | 0.46 | 0.46 | 0.27 | 0.28 | S                      | 0.37 | 0.31 | 0.25 | 0.28 | 0.29 | 0.4  | 0.35          | 0.59 | 0.39  | 0.25    | 0.74    | 0.39    |
| Jul 15                                                                                                  | 0.45                                           | 0.57 | 0.74 | 0.61 | 0.5                   | 0.42 | 0.41 | 0.42                                                                                    | 0.53 | 0.69 | 0.68 | 0.61 | 0.47 | S    | 0.32                   | 0.24 | 0.23 | 0.22 | 0.2  | 0.19 | 0.24 | 0.27          | 0.25 | 0.24  | 0.19    | 0.74    | 0.41    |
| Jul 16                                                                                                  | 0.38                                           | 0.41 | 0.45 | 0.47 | 0.51                  | 0.66 | 0.68 | 0.7                                                                                     | 0.69 | 0.62 | 0.6  | 0.62 | S    | 0.46 | 0.47                   | 0.42 | 0.39 | 0.36 | 0.39 | 0.4  | 0.39 | 0.37          | 0.33 | 0.35  | 0.33    | 0.70    | 0.48    |
| Jul 17                                                                                                  | 0.36                                           | 0.45 | 0.56 | 0.51 | 0.47                  | 0.4  | 0.34 | 0.33                                                                                    | 0.29 | 0.31 | 0.24 | S    | 0.21 | 0.15 | 0.16                   | 0.15 | 0.13 | 0.19 | 0.28 | 0.29 | 0.28 | 0.28          | 0.33 | 0.34  | 0.13    | 0.56    | 0.31    |
| Jul 18                                                                                                  | 0.37                                           | 0.37 | 0.37 | 0.41 | 0.34                  | 0.3  | 0.31 | 0.24                                                                                    | 0.27 | 0.27 | S    | 0.31 | 0.36 | 0.31 | 0.28                   | 0.25 | 0.32 | 0.3  | 0.24 | 0.29 | 0.27 | 0.26          | 0.26 | 0.2   | 0.20    | 0.41    | 0.30    |
| Jul 19                                                                                                  | 0.24                                           | 0.28 | 0.24 | 0.19 | 0.2                   | 0.24 | 0.21 | 0.29                                                                                    | 0.31 | S    | 0.42 | 0.43 | 0.39 | 0.45 | 0.48                   | 0.48 | 0.46 | 0.42 | 0.42 | 0.43 | 0.42 | 0.44          | 0.46 | 0.52  | 0.19    | 0.52    | 0.37    |
| Jul 20                                                                                                  | 0.58                                           | 0.51 | 0.49 | 0.62 | 0.67                  | 0.55 | 0.46 | 0.43                                                                                    | S    | 0.52 | 0.53 | 0.51 | 0.5  | 0.46 | 0.44                   | 0.5  | 0.45 | 0.48 | 0.47 | 0.43 | 0.41 | 0.41          | 0.43 | 0.42  | 0.41    | 0.67    | 0.49    |
| Jul 21                                                                                                  | 0.4                                            | 0.39 | 0.42 | 0.38 | 0.44                  | 0.48 | 0.42 | S                                                                                       | 0.37 | 0.39 | 0.35 | 0.36 | 0.36 | 0.3  | 0.31                   | 0.33 | 0.31 | 0.33 | 0.29 | 0.3  | 0.23 | 0.26          | 0.23 | 0.24  | 0.23    | 0.48    | 0.34    |
| Jul 22                                                                                                  | 0.28                                           | 0.3  | 0.2  | 0.2  | 0.15                  | 0.16 | S    | 0.19                                                                                    | 0.16 | 0.13 | 0.07 | 0.07 | 0.12 | 0.08 | 0.06                   | 0.07 | 0.1  | 0.06 | 0.03 | 0.07 | 0.09 | 0.04          | 0.07 | 0.06  | 0.03    | 0.30    | 0.12    |
| Jul 23                                                                                                  | 0.1                                            | 0.11 | 0.11 | 0.12 | 0.06                  | S    | 0.13 | 0.1                                                                                     | 0.12 | 0.1  | 0.15 | 0.13 | 0.11 | 0.14 | 0.1                    | 0.13 | 0.15 | 0.19 | 0.12 | 0.16 | 0.21 | 0.29          | 0.3  | 0.35  | 0.06    | 0.35    | 0.15    |
| Jul 24                                                                                                  | 0.34                                           | 0.32 | 0.37 | 0.38 | S                     | 0.38 | 0.35 | 0.35                                                                                    | 0.39 | 0.29 | 0.24 | 0.22 | 0.25 | 0.2  | 0.2                    | 0.15 | 0.15 | 0.16 | 0.14 | 0.15 | 0.16 | 0.25          | 0.24 | 0.2   | 0.14    | 0.39    | 0.26    |
| Jul 25                                                                                                  | 0.14                                           | 0.24 | 0.17 | S    | 0.21                  | 0.13 | 0.13 | 0.18                                                                                    | 0.25 | 0.23 | 0.14 | 0.15 | 0.17 | 0.14 | 0.12                   | 0.07 | 0.12 | 0.06 | 0.1  | 0.17 | 0.15 | 0.17          | 0.29 | 0.28  | 0.06    | 0.29    | 0.17    |
| Jul 26                                                                                                  | 0.38                                           | 0.28 | S    | 0.48 | 0.44                  | 0.48 | 0.49 | 0.3                                                                                     | 0.32 | 0.25 | 0.25 | 0.26 | 0.2  | 0.2  | 0.15                   | 0.19 | 0.16 | 0.16 | 0.18 | 0.21 | 0.28 | 0.25          | 0.27 | 0.31  | 0.15    | 0.49    | 0.28    |
| Jul 27                                                                                                  | 0.28                                           | S    | 0.33 | 0.27 | 0.25                  | 0.24 | 0.23 | 0.28                                                                                    | 0.2  | 0.19 | 0.2  | 0.16 | 0.12 | 0.16 | 0.14                   | 0.13 | 0.13 | 0.17 | 0.1  | 0.17 | 0.18 | 0.28          | 0.34 | 0.35  | 0.10    | 0.35    | 0.21    |
| Jul 28                                                                                                  | S                                              | 0.47 | 0.5  | 0.67 | 0.6                   | 0.56 | 0.31 | 0.28                                                                                    | 0.25 | 0.16 | 0.13 | 0.09 | 0.05 | 0.07 | 0.06                   | 0.06 | 0.07 | 0.08 | 0.06 | 0.06 | 0.12 | 0.18          | 0.2  | S     | 0.05    | 0.67    | 0.23    |
| Jul 29                                                                                                  | 0.32                                           | 0.39 | 0.31 | 0.27 | 0.23                  | 0.37 | 0.89 | 0.41                                                                                    | 0.35 | 0.24 | 0.14 | 0.19 | 0.18 | 0.15 | 0.1                    | 0.12 | 0.12 | 0.1  | 0.17 | 0.23 | 0.3  | 0.3           | S    | 0.47  | 0.10    | 0.89    | 0.28    |
| Jul 30                                                                                                  | 0.51                                           | 0.5  | 0.48 | 0.55 | 0.45                  | 0.72 | 0.62 | 0.49                                                                                    | 0.23 | 0.2  | 0.16 | 0.16 | 0.13 | 0.16 | 0.17                   | 0.1  | 0.11 | 0.08 | 0.13 | 0.18 | 0.26 | S             | 0.26 | 0.26  | 0.08    | 0.72    | 0.30    |
| Jul 31                                                                                                  | 0.29                                           | 0.23 | 0.31 | 0.22 | 0.29                  | 0.43 | 0.39 | 0.29                                                                                    | 0.27 | 0.31 | 0.3  | 0.29 | 0.28 | 0.28 | 0.24                   | 0.22 | 0.21 | 0.22 | 0.26 | 0.34 | S    | 0.4           | 0.35 | 0.39  | 0.21    | 0.43    | 0.30    |
| Diurnal Maximum                                                                                         | 0.80                                           | 1.06 | 1.03 | 1.13 | 1.29                  | 1.54 | 1.38 | 1.08                                                                                    | 1.04 | 1.02 | 1.00 | 0.75 | 0.63 | 0.46 | 0.48                   | 0.50 | 0.49 | 0.56 | 0.62 | 0.62 | 0.53 | 0.54          | 0.59 | 0.60  |         |         |         |
| Diurnal Average                                                                                         | 0.38                                           | 0.43 | 0.48 | 0.48 | 0.52                  | 0.56 | 0.54 | 0.46                                                                                    | 0.39 | 0.36 | 0.35 | 0.32 | 0.26 | 0.24 | 0.23                   | 0.23 | 0.22 | 0.22 | 0.24 | 0.26 | 0.31 | 0.32          | 0.35 |       |         |         |         |
| C                                                                                                       | Monthly Calibration                            |      |      |      |                       |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |      | Q    | Quality Assurance      |      |      |      |      |      |      |               |      |       |         |         |         |
| K                                                                                                       | Collection Error                               |      |      |      |                       |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |      | Y    | Routine Maintenance    |      |      |      |      |      | P    | Power Failure |      |       |         |         |         |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |                       |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |      |      |                        |      |      |      |      |      |      |               |      |       |         |         |         |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |                       |      |      |                                                                                         |      |      |      |      |      |      |                        |      |      |      |      |      |      |               |      |       |         |         |         |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |                       |      |      |                                                                                         |      |      |      |      |      |      |                        |      |      |      |      |      |      |               |      |       |         |         |         |

***Timeseries Chart of Hourly Average for TRS - 842b Station***

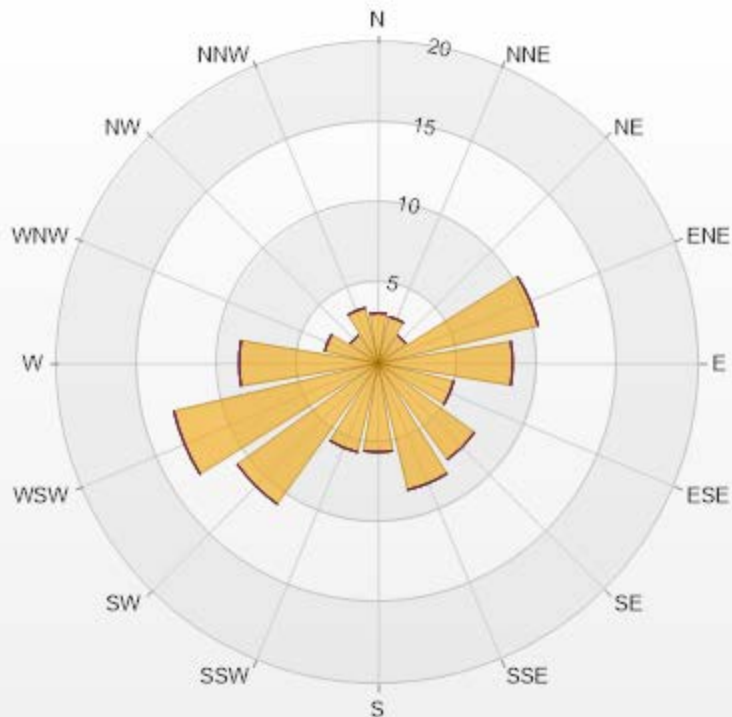




Wind: PRAMP 842b Poll.: PRAMP 842b-TRS[ppb] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 94.62% Calm Avg: 0.00 [ppb]

| Direction | 0-2   | 2-5 | 5-10 | 10-50 | >50.0 | Total |
|-----------|-------|-----|------|-------|-------|-------|
| N         | 3.13  | 0   | 0    | 0     | 0     | 3.13  |
| NNE       | 2.98  | 0   | 0    | 0     | 0     | 2.98  |
| NE        | 2.13  | 0   | 0    | 0     | 0     | 2.13  |
| ENE       | 10.23 | 0   | 0    | 0     | 0     | 10.23 |
| E         | 8.38  | 0   | 0    | 0     | 0     | 8.38  |
| ESE       | 4.83  | 0   | 0    | 0     | 0     | 4.83  |
| SE        | 7.39  | 0   | 0    | 0     | 0     | 7.39  |
| SSE       | 8.1   | 0   | 0    | 0     | 0     | 8.1   |
| S         | 5.54  | 0   | 0    | 0     | 0     | 5.54  |
| SSW       | 5.68  | 0   | 0    | 0     | 0     | 5.68  |
| SW        | 10.8  | 0   | 0    | 0     | 0     | 10.8  |
| WSW       | 13.07 | 0   | 0    | 0     | 0     | 13.07 |
| W         | 8.66  | 0   | 0    | 0     | 0     | 8.66  |
| WNW       | 3.41  | 0   | 0    | 0     | 0     | 3.41  |
| NW        | 2.13  | 0   | 0    | 0     | 0     | 2.13  |
| NNW       | 3.55  | 0   | 0    | 0     | 0     | 3.55  |
| Summary   | 100   | 0   | 0    | 0     | 0     | 100   |





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% Icon Classes (ppb)

100 0-2

0 2-5

0 5-10

0 10-50

0 >50.0



# PEACE RIVER AREA MONITORING PROGRAM

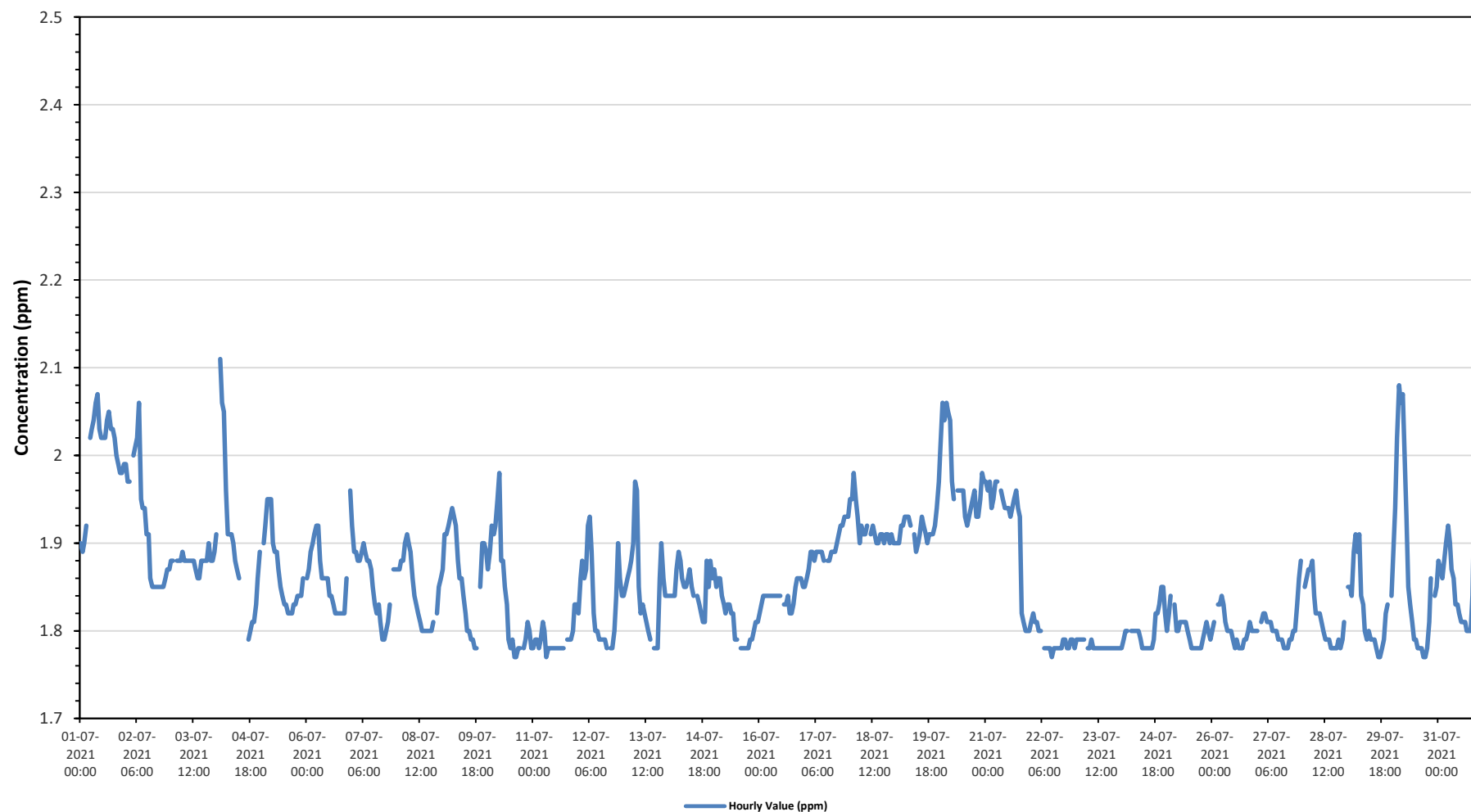
842b Station - July 2021

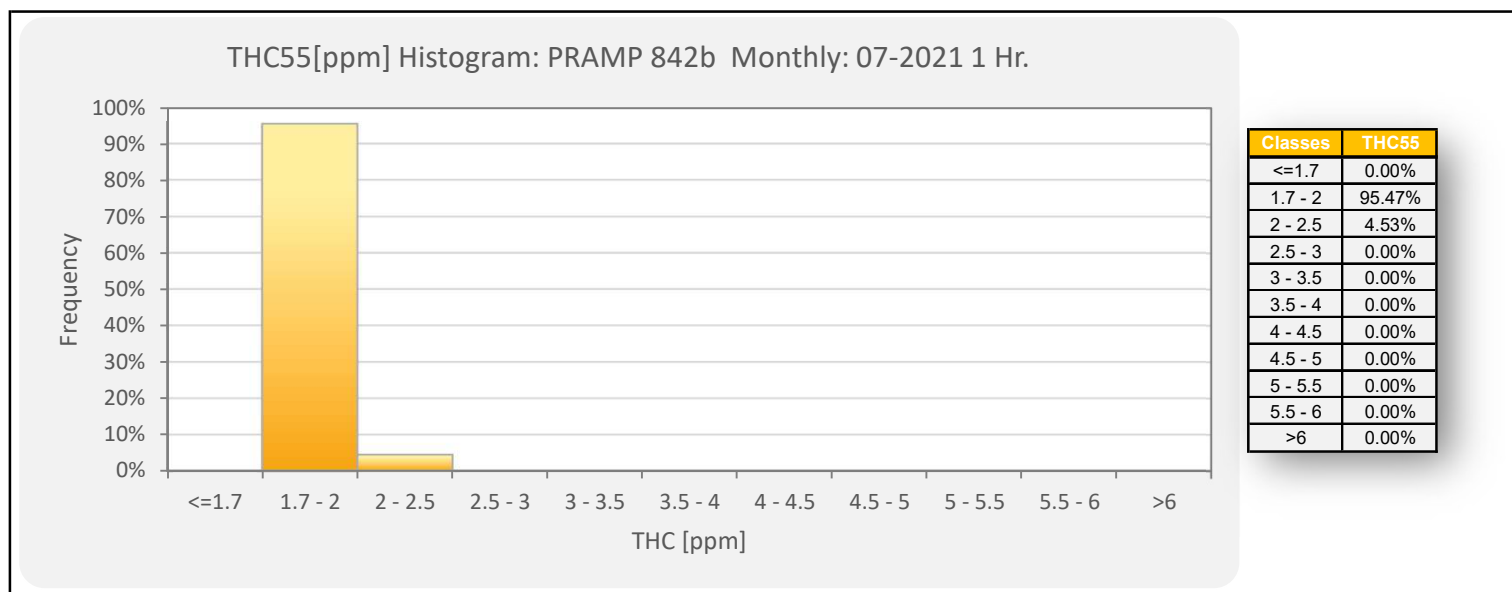
Summary of Hourly Averages

## TOTAL HYDROCARBONS (THC) in ppm

|                                                                                                         |                                                |      |      |      |      |      |      |      |                                                                                         |                                |      |                        |      |      |      |      |                     |      |      |      |      |       |      |       |         |         |         |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|--------------------------------|------|------------------------|------|------|------|------|---------------------|------|------|------|------|-------|------|-------|---------|---------|---------|
| Maximum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |                                                                                         | 2.11 ppm on July 4 at hour 2   |      | Hours in Service:      |      |      |      |      |                     |      |      |      |      | 744   |      |       |         |         |         |
| Maximum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | 2.00 ppm on July 1             |      | Hours of Data:         |      |      |      |      |                     |      |      |      |      | 707   |      |       |         |         |         |
| Minimum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |                                                                                         | 1.77 ppm on July 10 at hour 14 |      | Hours of Missing Data: |      |      |      |      |                     |      |      |      |      | 0     |      |       |         |         |         |
| Minimum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | 1.78 ppm on July 23            |      | Hours of Calibration:  |      |      |      |      |                     |      |      |      |      | 37    |      |       |         |         |         |
| Monthly Average:                                                                                        |                                                |      |      |      |      |      |      |      |                                                                                         | 1.86 ppm                       |      | Operational Uptime:    |      |      |      |      |                     |      |      |      |      | 100.0 |      |       |         |         |         |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |      |      |      |      |                                                                                         |                                |      |                        |      |      |      |      |                     |      |      |      |      |       |      | Daily | Daily   | Daily   |         |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8                                                                                       | 9                              | 10   | 11                     | 12   | 13   | 14   | 15   | 16                  | 17   | 18   | 19   | 20   | 21    | 22   | 23    | Minimum | Maximum | Average |
| Jul 1                                                                                                   | 1.90                                           | 1.89 | 1.90 | 1.92 | S    | 2.02 | 2.03 | 2.04 | 2.06                                                                                    | 2.07                           | 2.03 | 2.02                   | 2.02 | 2.02 | 2.04 | 2.05 | 2.03                | 2.03 | 2.02 | 2.00 | 1.99 | 1.98  | 1.98 | 1.99  | 1.89    | 2.07    | 2.00    |
| Jul 2                                                                                                   | 1.99                                           | 1.97 | 1.97 | S    | 2.00 | 2.01 | 2.02 | 2.06 | 1.95                                                                                    | 1.94                           | 1.94 | 1.91                   | 1.91 | 1.86 | 1.85 | 1.85 | 1.85                | 1.85 | 1.85 | 1.85 | 1.85 | 1.86  | 1.87 | 1.87  | 1.85    | 2.06    | 1.92    |
| Jul 3                                                                                                   | 1.88                                           | 1.88 | S    | 1.88 | 1.88 | 1.88 | 1.89 | 1.88 | 1.88                                                                                    | 1.88                           | 1.88 | 1.88                   | 1.88 | 1.87 | 1.86 | 1.86 | 1.88                | 1.88 | 1.88 | 1.88 | 1.90 | 1.88  | 1.88 | 1.89  | 1.86    | 1.90    | 1.88    |
| Jul 4                                                                                                   | 1.91                                           | S    | 2.11 | 2.06 | 2.05 | 1.96 | 1.91 | 1.91 | 1.91                                                                                    | 1.90                           | 1.88 | 1.87                   | 1.86 | C    | C    | C    | C                   | 1.79 | 1.80 | 1.81 | 1.81 | 1.83  | 1.86 | 1.89  | 1.79    | 2.11    | 1.90    |
| Jul 5                                                                                                   | S                                              | 1.90 | 1.92 | 1.95 | 1.95 | 1.95 | 1.90 | 1.89 | 1.89                                                                                    | 1.87                           | 1.85 | 1.84                   | 1.83 | 1.83 | 1.82 | 1.82 | 1.82                | 1.83 | 1.83 | 1.84 | 1.84 | 1.84  | 1.86 | S     | 1.82    | 1.95    | 1.87    |
| Jul 6                                                                                                   | 1.86                                           | 1.87 | 1.89 | 1.90 | 1.91 | 1.92 | 1.92 | 1.88 | 1.86                                                                                    | 1.86                           | 1.86 | 1.86                   | 1.84 | 1.84 | 1.83 | 1.82 | 1.82                | 1.82 | 1.82 | 1.82 | 1.82 | 1.86  | S    | 1.96  | 1.82    | 1.96    | 1.86    |
| Jul 7                                                                                                   | 1.92                                           | 1.89 | 1.89 | 1.88 | 1.88 | 1.89 | 1.90 | 1.89 | 1.88                                                                                    | 1.88                           | 1.87 | 1.85                   | 1.83 | 1.82 | 1.83 | 1.81 | 1.79                | 1.79 | 1.80 | 1.81 | 1.83 | S     | 1.87 | 1.87  | 1.79    | 1.92    | 1.86    |
| Jul 8                                                                                                   | 1.87                                           | 1.87 | 1.88 | 1.88 | 1.90 | 1.91 | 1.90 | 1.89 | 1.86                                                                                    | 1.84                           | 1.83 | 1.82                   | 1.81 | 1.80 | 1.80 | 1.80 | 1.80                | 1.80 | 1.80 | 1.81 | S    | 1.82  | 1.85 | 1.86  | 1.80    | 1.91    | 1.84    |
| Jul 9                                                                                                   | 1.87                                           | 1.91 | 1.91 | 1.92 | 1.93 | 1.94 | 1.93 | 1.92 | 1.88                                                                                    | 1.86                           | 1.86 | 1.84                   | 1.82 | 1.80 | 1.80 | 1.79 | 1.79                | 1.78 | 1.78 | S    | 1.85 | 1.90  | 1.90 | 1.89  | 1.78    | 1.94    | 1.86    |
| Jul 10                                                                                                  | 1.87                                           | 1.89 | 1.92 | 1.91 | 1.92 | 1.95 | 1.98 | 1.88 | 1.88                                                                                    | 1.85                           | 1.83 | 1.79                   | 1.78 | 1.79 | 1.77 | 1.77 | 1.78                | 1.78 | S    | 1.78 | 1.79 | 1.81  | 1.80 | 1.78  | 1.77    | 1.98    | 1.84    |
| Jul 11                                                                                                  | 1.78                                           | 1.79 | 1.79 | 1.78 | 1.79 | 1.81 | 1.80 | 1.77 | 1.78                                                                                    | 1.78                           | 1.78 | 1.78                   | 1.78 | 1.78 | 1.78 | 1.78 | 1.78                | S    | 1.79 | 1.79 | 1.79 | 1.80  | 1.83 | 1.83  | 1.77    | 1.83    | 1.79    |
| Jul 12                                                                                                  | 1.82                                           | 1.86 | 1.88 | 1.86 | 1.87 | 1.92 | 1.93 | 1.89 | 1.82                                                                                    | 1.80                           | 1.80 | 1.79                   | 1.79 | 1.79 | 1.79 | 1.78 | S                   | 1.78 | 1.78 | 1.80 | 1.84 | 1.90  | 1.86 | 1.84  | 1.78    | 1.93    | 1.83    |
| Jul 13                                                                                                  | 1.84                                           | 1.85 | 1.86 | 1.87 | 1.88 | 1.90 | 1.97 | 1.96 | 1.85                                                                                    | 1.82                           | 1.83 | 1.82                   | 1.81 | 1.80 | 1.79 | S    | 1.78                | 1.78 | 1.78 | 1.86 | 1.90 | 1.86  | 1.84 | 1.84  | 1.78    | 1.97    | 1.85    |
| Jul 14                                                                                                  | 1.84                                           | 1.84 | 1.84 | 1.84 | 1.87 | 1.89 | 1.88 | 1.86 | 1.85                                                                                    | 1.85                           | 1.86 | 1.87                   | 1.85 | 1.84 | S    | 1.84 | 1.83                | 1.82 | 1.81 | 1.81 | 1.88 | 1.85  | 1.88 | 1.86  | 1.81    | 1.89    | 1.85    |
| Jul 15                                                                                                  | 1.87                                           | 1.85 | 1.86 | 1.86 | 1.84 | 1.83 | 1.82 | 1.83 | 1.83                                                                                    | 1.82                           | 1.82 | 1.79                   | 1.79 | S    | 1.78 | 1.78 | 1.78                | 1.78 | 1.78 | 1.79 | 1.79 | 1.80  | 1.81 | 1.81  | 1.78    | 1.87    | 1.81    |
| Jul 16                                                                                                  | 1.82                                           | 1.83 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84                                                                                    | 1.84                           | 1.84 | 1.84                   | S    | 1.83 | 1.83 | 1.84 | 1.82                | 1.82 | 1.83 | 1.85 | 1.86 | 1.86  | 1.86 | 1.85  | 1.82    | 1.86    | 1.84    |
| Jul 17                                                                                                  | 1.85                                           | 1.86 | 1.87 | 1.89 | 1.89 | 1.88 | 1.89 | 1.89 | 1.89                                                                                    | 1.89                           | 1.88 | S                      | 1.88 | 1.88 | 1.89 | 1.89 | 1.89                | 1.90 | 1.91 | 1.92 | 1.92 | 1.93  | 1.93 | 1.93  | 1.85    | 1.93    | 1.89    |
| Jul 18                                                                                                  | 1.95                                           | 1.95 | 1.98 | 1.95 | 1.93 | 1.90 | 1.92 | 1.91 | 1.91                                                                                    | 1.92                           | S    | 1.91                   | 1.92 | 1.91 | 1.90 | 1.90 | 1.91                | 1.91 | 1.90 | 1.91 | 1.91 | 1.90  | 1.91 | 1.90  | 1.90    | 1.98    | 1.92    |
| Jul 19                                                                                                  | 1.90                                           | 1.90 | 1.90 | 1.92 | 1.92 | 1.93 | 1.93 | 1.93 | 1.92                                                                                    | S                              | 1.91 | 1.89                   | 1.90 | 1.91 | 1.93 | 1.92 | 1.91                | 1.90 | 1.91 | 1.91 | 1.91 | 1.92  | 1.94 | 1.97  | 1.89    | 1.97    | 1.92    |
| Jul 20                                                                                                  | 2.01                                           | 2.06 | 2.04 | 2.06 | 2.05 | 2.04 | 1.97 | 1.95 | S                                                                                       | 1.96                           | 1.96 | 1.96                   | 1.96 | 1.93 | 1.92 | 1.93 | 1.94                | 1.95 | 1.96 | 1.93 | 1.93 | 1.95  | 1.98 | 1.97  | 1.92    | 2.06    | 1.97    |
| Jul 21                                                                                                  | 1.97                                           | 1.96 | 1.97 | 1.94 | 1.95 | 1.97 | 1.97 | S    | 1.96                                                                                    | 1.95                           | 1.94 | 1.94                   | 1.94 | 1.93 | 1.94 | 1.95 | 1.96                | 1.94 | 1.93 | 1.82 | 1.81 | 1.80  | 1.80 | 1.80  | 1.80    | 1.97    | 1.92    |
| Jul 22                                                                                                  | 1.81                                           | 1.82 | 1.81 | 1.81 | 1.80 | 1.80 | S    | 1.78 | 1.78                                                                                    | 1.78                           | 1.78 | 1.77                   | 1.78 | 1.78 | 1.78 | 1.78 | 1.78                | 1.78 | 1.79 | 1.78 | 1.78 | 1.79  | 1.79 | 1.78  | 1.77    | 1.82    | 1.79    |
| Jul 23                                                                                                  | 1.79                                           | 1.79 | 1.79 | 1.79 | 1.79 | S    | 1.78 | 1.78 | 1.79                                                                                    | 1.78                           | 1.78 | 1.78                   | 1.78 | 1.78 | 1.78 | 1.78 | 1.78                | 1.78 | 1.78 | 1.78 | 1.78 | 1.78  | 1.78 | 1.78  | 1.78    | 1.79    | 1.78    |
| Jul 24                                                                                                  | 1.78                                           | 1.79 | 1.80 | 1.80 | S    | 1.80 | 1.80 | 1.80 | 1.80                                                                                    | 1.80                           | 1.79 | 1.78                   | 1.78 | 1.78 | 1.78 | 1.78 | 1.78                | 1.79 | 1.82 | 1.82 | 1.83 | 1.85  | 1.85 | 1.82  | 1.78    | 1.85    | 1.80    |
| Jul 25                                                                                                  | 1.80                                           | 1.82 | 1.84 | S    | 1.83 | 1.80 | 1.80 | 1.81 | 1.81                                                                                    | 1.81                           | 1.81 | 1.80                   | 1.79 | 1.78 | 1.78 | 1.78 | 1.78                | 1.78 | 1.78 | 1.79 | 1.80 | 1.81  | 1.80 | 1.79  | 1.78    | 1.84    | 1.80    |
| Jul 26                                                                                                  | 1.80                                           | 1.81 | S    | 1.83 | 1.83 | 1.84 | 1.83 | 1.81 | 1.80                                                                                    | 1.80                           | 1.80 | 1.79                   | 1.78 | 1.79 | 1.78 | 1.78 | 1.78                | 1.79 | 1.79 | 1.80 | 1.81 | 1.80  | 1.80 | 1.80  | 1.78    | 1.84    | 1.80    |
| Jul 27                                                                                                  | 1.80                                           | S    | 1.81 | 1.82 | 1.82 | 1.81 | 1.81 | 1.81 | 1.80                                                                                    | 1.80                           | 1.80 | 1.79                   | 1.79 | 1.79 | 1.78 | 1.78 | 1.78                | 1.79 | 1.79 | 1.80 | 1.80 | 1.83  | 1.86 | 1.88  | 1.78    | 1.88    | 1.81    |
| Jul 28                                                                                                  | S                                              | 1.85 | 1.86 | 1.87 | 1.87 | 1.88 | 1.84 | 1.82 | 1.82                                                                                    | 1.82                           | 1.81 | 1.80                   | 1.79 | 1.79 | 1.79 | 1.78 | 1.78                | 1.78 | 1.78 | 1.79 | 1.78 | 1.79  | 1.81 | S     | 1.78    | 1.88    | 1.81    |
| Jul 29                                                                                                  | 1.85                                           | 1.85 | 1.84 | 1.89 | 1.91 | 1.89 | 1.91 | 1.84 | 1.83                                                                                    | 1.80                           | 1.79 | 1.80                   | 1.79 | 1.79 | 1.79 | 1.78 | 1.77                | 1.77 | 1.78 | 1.79 | 1.82 | 1.83  | S    | 1.84  | 1.77    | 1.91    | 1.82    |
| Jul 30                                                                                                  | 1.89                                           | 1.94 | 2.02 | 2.08 | 2.06 | 2.07 | 2.00 | 1.93 | 1.85                                                                                    | 1.83                           | 1.81 | 1.79                   | 1.79 | 1.78 | 1.78 | 1.77 | 1.77                | 1.78 | 1.81 | 1.86 | S    | 1.84  | 1.85 | 1.77  | 2.08    | 1.87    |         |
| Jul 31                                                                                                  | 1.88                                           | 1.87 | 1.86 | 1.88 | 1.90 | 1.92 | 1.90 | 1.87 | 1.86                                                                                    | 1.83                           | 1.83 | 1.82                   | 1.81 | 1.81 | 1.81 | 1.80 | 1.80                | 1.80 | 1.84 | 1.95 | S    | 1.90  | 1.91 | 1.91  | 1.80    | 1.95    | 1.86    |
| Diurnal Maximum                                                                                         | 2.01                                           | 2.06 | 2.11 | 2.08 | 2.06 | 2.07 | 2.03 | 2.06 | 2.06                                                                                    | 2.07                           | 2.03 | 2.02                   | 2.02 | 2.02 | 2.04 | 2.05 | 2.03                | 2.03 | 2.02 | 2.00 | 1.99 | 1.98  | 1.98 | 1.99  |         |         |         |
| Diurnal Average                                                                                         | 1.87                                           | 1.87 | 1.89 | 1.89 | 1.90 | 1.91 | 1.90 | 1.88 | 1.86                                                                                    | 1.85                           | 1.85 | 1.84                   | 1.84 | 1.83 | 1.83 | 1.83 | 1.83                | 1.83 | 1.83 | 1.84 | 1.84 | 1.85  | 1.86 | 1.86  |         |         |         |
| C                                                                                                       | Monthly Calibration                            |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |                                |      |                        |      |      |      | Q    | Quality Assurance   |      |      |      |      |       |      |       |         |         |         |
| K                                                                                                       | Collection Error                               |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |                                |      |                        |      |      |      | Y    | Routine Maintenance |      |      |      |      |       |      |       |         |         |         |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |                                |      |                        |      |      |      |      | P Power Failure     |      |      |      |      |       |      |       |         |         |         |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |                                |      |                        |      |      |      |      |                     |      |      |      |      |       |      |       |         |         |         |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |                                |      |                        |      |      |      |      |                     |      |      |      |      |       |      |       |         |         |         |

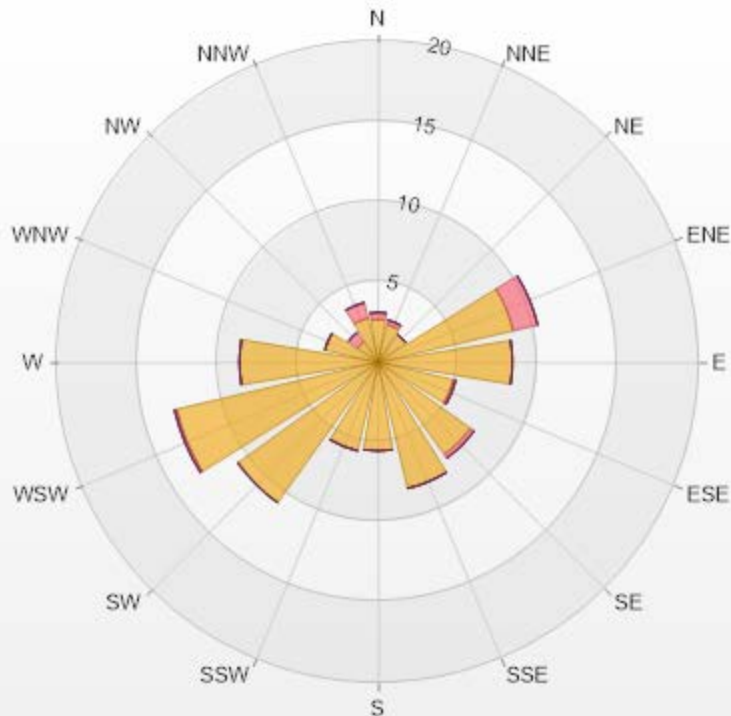
*Timeseries Chart of Hourly Average for THC - 842b Station*





Wind: PRAMP 842b Poll.: PRAMP 842b-THC55[ppm] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 94.89% Calm Avg: 0.00 [ppm]

| Direction | 0-2   | 2-5  | 5-10 | 10-40 | >40.0 | Total |
|-----------|-------|------|------|-------|-------|-------|
| N         | 2.69  | 0.42 | 0    | 0     | 0     | 3.11  |
| NNE       | 2.41  | 0.28 | 0    | 0     | 0     | 2.69  |
| NE        | 2.12  | 0    | 0    | 0     | 0     | 2.12  |
| ENE       | 8.64  | 1.56 | 0    | 0     | 0     | 10.2  |
| E         | 8.36  | 0    | 0    | 0     | 0     | 8.36  |
| ESE       | 4.82  | 0.14 | 0    | 0     | 0     | 4.96  |
| SE        | 7.08  | 0.28 | 0    | 0     | 0     | 7.36  |
| SSE       | 8.07  | 0    | 0    | 0     | 0     | 8.07  |
| S         | 5.52  | 0    | 0    | 0     | 0     | 5.52  |
| SSW       | 5.67  | 0    | 0    | 0     | 0     | 5.67  |
| SW        | 10.76 | 0    | 0    | 0     | 0     | 10.76 |
| WSW       | 12.89 | 0.14 | 0    | 0     | 0     | 13.03 |
| W         | 8.64  | 0    | 0    | 0     | 0     | 8.64  |
| WNW       | 3.4   | 0    | 0    | 0     | 0     | 3.4   |
| NW        | 1.56  | 0.71 | 0    | 0     | 0     | 2.27  |
| NNW       | 2.83  | 0.99 | 0    | 0     | 0     | 3.82  |
| Summary   | 95.46 | 4.52 | 0    | 0     | 0     | 100   |



PRAMP-202107

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% Icon Classes (ppm)

95 0-2

5 2-5

0 5-10

0 10-40

0 >40.0



# PEACE RIVER AREA MONITORING PROGRAM

842b Station - July 2021

Summary of Hourly Averages

METHANE (CH4) in ppm

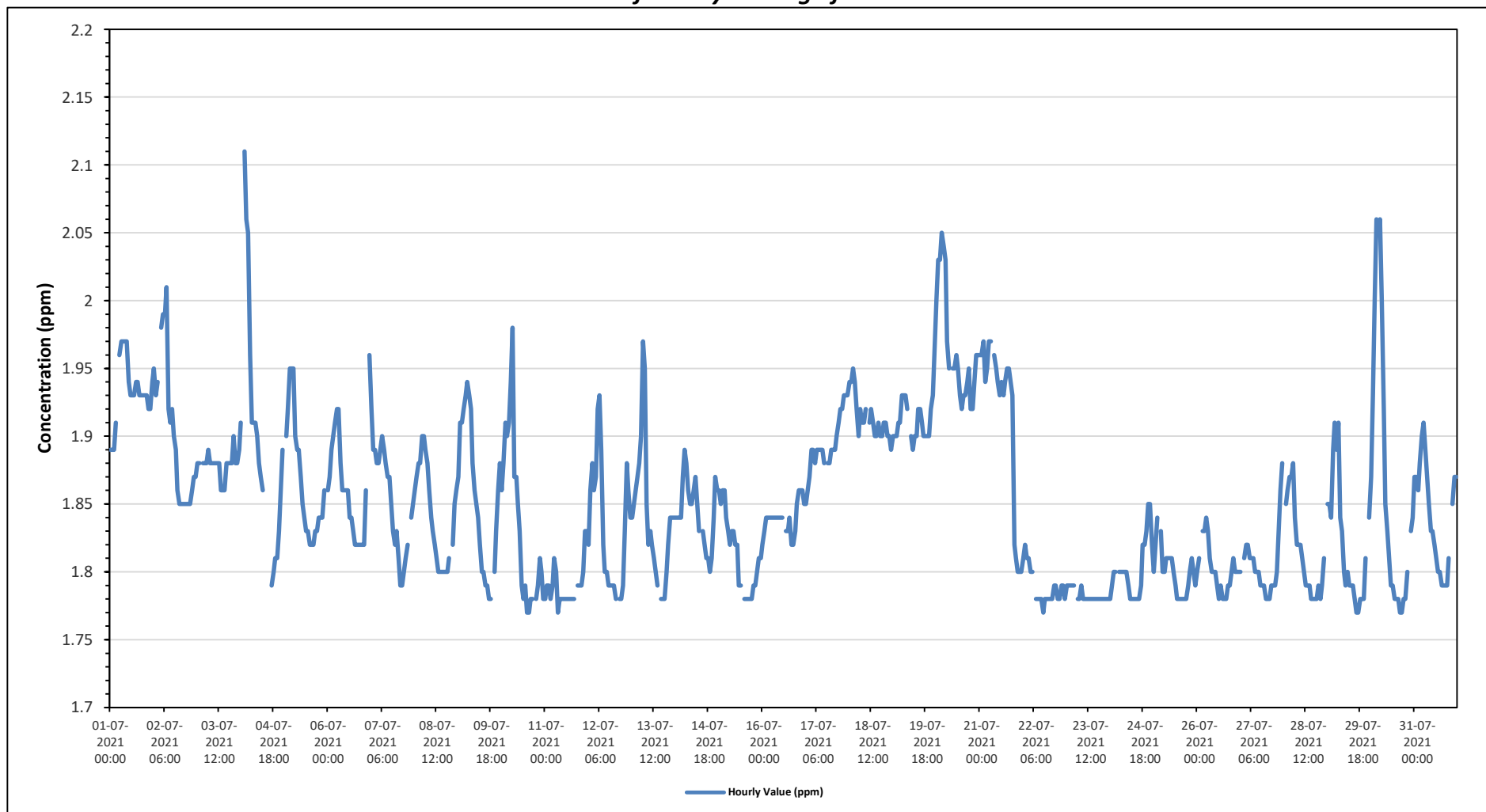
|                       |                                |                        |       |
|-----------------------|--------------------------------|------------------------|-------|
| Maximum Hourly Value: | 2.11 ppm on July 4 at hour 2   | Hours in Service:      | 744   |
| Maximum Daily Value:  | 1.97 ppm on July 20            | Hours of Data:         | 707   |
| Minimum Hourly Value: | 1.77 ppm on July 10 at hour 14 | Hours of Missing Data: | 0     |
| Minimum Daily Value:  | 1.78 ppm on July 23            | Hours of Calibration:  | 37    |
| Monthly Average:      | 1.85 ppm                       | Operational Uptime:    | 100.0 |

| Day             | Hourly Period Starting at (MST) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | Daily Minimum | Daily Maximum | Daily Average |      |
|-----------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|---------------|---------------|------|
|                 | 0                               | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23            |               |               |      |
| Jul 1           | 1.89                            | 1.89 | 1.89 | 1.91 | S    | 1.96 | 1.97 | 1.97 | 1.97 | 1.97 | 1.94 | 1.93 | 1.93 | 1.93 | 1.94 | 1.94 | 1.93 | 1.93 | 1.93 | 1.93 | 1.92 | 1.92 | 1.94 | 1.89          | 1.97          | 1.93          |      |
| Jul 2           | 1.95                            | 1.93 | 1.94 | S    | 1.98 | 1.99 | 1.99 | 2.01 | 1.92 | 1.91 | 1.92 | 1.90 | 1.89 | 1.86 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.85 | 1.86 | 1.87 | 1.87          | 1.85          | 2.01          | 1.90 |
| Jul 3           | 1.88                            | 1.88 | S    | 1.88 | 1.88 | 1.88 | 1.89 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.88 | 1.86 | 1.86 | 1.86 | 1.88 | 1.88 | 1.88 | 1.88 | 1.90 | 1.88 | 1.88 | 1.89          | 1.86          | 1.90          | 1.88 |
| Jul 4           | 1.91                            | S    | 2.11 | 2.06 | 2.05 | 1.96 | 1.91 | 1.91 | 1.91 | 1.90 | 1.88 | 1.87 | 1.86 | C    | C    | C    | C    | 1.79 | 1.80 | 1.81 | 1.81 | 1.83 | 1.86 | 1.89          | 1.79          | 2.11          | 1.90 |
| Jul 5           | S                               | 1.90 | 1.92 | 1.95 | 1.95 | 1.95 | 1.90 | 1.89 | 1.89 | 1.87 | 1.85 | 1.84 | 1.83 | 1.83 | 1.82 | 1.82 | 1.82 | 1.83 | 1.83 | 1.84 | 1.84 | 1.84 | 1.86 | S             | 1.82          | 1.95          | 1.87 |
| Jul 6           | 1.86                            | 1.87 | 1.89 | 1.90 | 1.91 | 1.92 | 1.92 | 1.88 | 1.86 | 1.86 | 1.86 | 1.86 | 1.84 | 1.84 | 1.83 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.86 | S    | 1.96          | 1.82          | 1.96          | 1.86 |
| Jul 7           | 1.92                            | 1.89 | 1.89 | 1.88 | 1.88 | 1.89 | 1.90 | 1.89 | 1.88 | 1.87 | 1.87 | 1.85 | 1.83 | 1.82 | 1.83 | 1.81 | 1.79 | 1.79 | 1.80 | 1.81 | 1.82 | S    | 1.84 | 1.85          | 1.79          | 1.92          | 1.85 |
| Jul 8           | 1.86                            | 1.87 | 1.88 | 1.88 | 1.90 | 1.90 | 1.89 | 1.88 | 1.86 | 1.84 | 1.83 | 1.82 | 1.81 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.81 | S    | 1.82 | 1.85 | 1.86          | 1.80          | 1.90          | 1.84 |
| Jul 9           | 1.87                            | 1.91 | 1.91 | 1.92 | 1.93 | 1.94 | 1.93 | 1.92 | 1.88 | 1.86 | 1.85 | 1.84 | 1.82 | 1.80 | 1.80 | 1.79 | 1.79 | 1.78 | 1.78 | S    | 1.80 | 1.83 | 1.86 | 1.88          | 1.78          | 1.94          | 1.86 |
| Jul 10          | 1.86                            | 1.88 | 1.91 | 1.90 | 1.91 | 1.94 | 1.98 | 1.87 | 1.87 | 1.85 | 1.83 | 1.79 | 1.78 | 1.79 | 1.77 | 1.77 | 1.78 | 1.78 | S    | 1.78 | 1.79 | 1.81 | 1.80 | 1.78          | 1.77          | 1.98          | 1.84 |
| Jul 11          | 1.78                            | 1.79 | 1.79 | 1.78 | 1.79 | 1.81 | 1.80 | 1.77 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | S    | 1.79 | 1.79 | 1.79 | 1.80 | 1.83 | 1.83          | 1.77          | 1.83          | 1.79 |
| Jul 12          | 1.82                            | 1.86 | 1.88 | 1.86 | 1.87 | 1.92 | 1.93 | 1.89 | 1.82 | 1.80 | 1.80 | 1.79 | 1.79 | 1.79 | 1.79 | 1.78 | S    | 1.78 | 1.78 | 1.79 | 1.83 | 1.88 | 1.86 | 1.84          | 1.78          | 1.93          | 1.83 |
| Jul 13          | 1.84                            | 1.85 | 1.86 | 1.87 | 1.88 | 1.90 | 1.97 | 1.95 | 1.85 | 1.82 | 1.83 | 1.82 | 1.81 | 1.80 | 1.79 | S    | 1.78 | 1.78 | 1.78 | 1.80 | 1.82 | 1.84 | 1.84 | 1.84          | 1.78          | 1.97          | 1.84 |
| Jul 14          | 1.84                            | 1.84 | 1.84 | 1.84 | 1.87 | 1.89 | 1.88 | 1.86 | 1.85 | 1.85 | 1.86 | 1.87 | 1.85 | 1.83 | S    | 1.83 | 1.82 | 1.81 | 1.81 | 1.80 | 1.81 | 1.84 | 1.87 | 1.86          | 1.80          | 1.89          | 1.84 |
| Jul 15          | 1.86                            | 1.85 | 1.86 | 1.86 | 1.84 | 1.83 | 1.82 | 1.83 | 1.83 | 1.82 | 1.82 | 1.79 | 1.79 | S    | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.79 | 1.79 | 1.80 | 1.81 | 1.81          | 1.78          | 1.86          | 1.81 |
| Jul 16          | 1.82                            | 1.83 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | 1.84 | S    | 1.83 | 1.83 | 1.84 | 1.82 | 1.82 | 1.83 | 1.85 | 1.86 | 1.86 | 1.86 | 1.85          | 1.82          | 1.86          | 1.84 |
| Jul 17          | 1.85                            | 1.86 | 1.87 | 1.89 | 1.89 | 1.88 | 1.89 | 1.89 | 1.89 | 1.89 | 1.88 | S    | 1.88 | 1.88 | 1.89 | 1.89 | 1.89 | 1.90 | 1.91 | 1.92 | 1.92 | 1.93 | 1.93 | 1.93          | 1.85          | 1.93          | 1.89 |
| Jul 18          | 1.94                            | 1.94 | 1.95 | 1.94 | 1.92 | 1.90 | 1.92 | 1.91 | 1.91 | 1.92 | S    | 1.91 | 1.92 | 1.91 | 1.90 | 1.90 | 1.91 | 1.90 | 1.90 | 1.91 | 1.91 | 1.90 | 1.90 | 1.89          | 1.89          | 1.95          | 1.91 |
| Jul 19          | 1.90                            | 1.90 | 1.90 | 1.91 | 1.91 | 1.93 | 1.93 | 1.93 | 1.92 | S    | 1.90 | 1.89 | 1.90 | 1.90 | 1.92 | 1.92 | 1.91 | 1.90 | 1.90 | 1.90 | 1.90 | 1.92 | 1.93 | 1.96          | 1.89          | 1.96          | 1.91 |
| Jul 20          | 2.00                            | 2.03 | 2.03 | 2.05 | 2.04 | 2.03 | 1.97 | 1.95 | S    | 1.95 | 1.95 | 1.96 | 1.95 | 1.93 | 1.92 | 1.93 | 1.93 | 1.94 | 1.95 | 1.92 | 1.92 | 1.94 | 1.96 | 1.96          | 1.92          | 2.05          | 1.97 |
| Jul 21          | 1.96                            | 1.96 | 1.97 | 1.94 | 1.95 | 1.97 | 1.97 | S    | 1.96 | 1.95 | 1.94 | 1.93 | 1.94 | 1.93 | 1.94 | 1.95 | 1.95 | 1.94 | 1.93 | 1.82 | 1.81 | 1.80 | 1.80 | 1.80          | 1.80          | 1.97          | 1.92 |
| Jul 22          | 1.81                            | 1.82 | 1.81 | 1.81 | 1.80 | 1.80 | S    | 1.78 | 1.78 | 1.78 | 1.78 | 1.77 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.79 | 1.79 | 1.78 | 1.78 | 1.79 | 1.79 | 1.78          | 1.77          | 1.82          | 1.79 |
| Jul 23          | 1.79                            | 1.79 | 1.79 | 1.79 | 1.79 | S    | 1.78 | 1.78 | 1.79 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78          | 1.78          | 1.79          | 1.78 |
| Jul 24          | 1.78                            | 1.79 | 1.80 | 1.80 | S    | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.79 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.79 | 1.82 | 1.82 | 1.83 | 1.85 | 1.85 | 1.82          | 1.78          | 1.85          | 1.80 |
| Jul 25          | 1.80                            | 1.82 | 1.84 | S    | 1.83 | 1.80 | 1.80 | 1.81 | 1.81 | 1.81 | 1.81 | 1.80 | 1.79 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 | 1.79 | 1.80 | 1.81 | 1.80 | 1.79          | 1.78          | 1.84          | 1.80 |
| Jul 26          | 1.80                            | 1.81 | S    | 1.83 | 1.83 | 1.84 | 1.83 | 1.81 | 1.80 | 1.80 | 1.80 | 1.79 | 1.78 | 1.79 | 1.78 | 1.78 | 1.78 | 1.79 | 1.79 | 1.80 | 1.81 | 1.80 | 1.80 | 1.80          | 1.78          | 1.84          | 1.80 |
| Jul 27          | 1.80                            | S    | 1.81 | 1.82 | 1.82 | 1.81 | 1.81 | 1.81 | 1.80 | 1.80 | 1.80 | 1.79 | 1.79 | 1.79 | 1.78 | 1.78 | 1.78 | 1.79 | 1.79 | 1.79 | 1.80 | 1.83 | 1.86 | 1.88          | 1.78          | 1.88          | 1.81 |
| Jul 28          | S                               | 1.85 | 1.86 | 1.87 | 1.87 | 1.88 | 1.84 | 1.82 | 1.82 | 1.82 | 1.81 | 1.80 | 1.79 | 1.79 | 1.79 | 1.78 | 1.78 | 1.78 | 1.78 | 1.79 | 1.78 | 1.79 | 1.81 | S             | 1.78          | 1.88          | 1.81 |
| Jul 29          | 1.85                            | 1.85 | 1.84 | 1.89 | 1.91 | 1.89 | 1.91 | 1.84 | 1.83 | 1.80 | 1.79 | 1.80 | 1.79 | 1.79 | 1.79 | 1.78 | 1.77 | 1.77 | 1.78 | 1.78 | 1.78 | 1.81 | S    | 1.84          | 1.77          | 1.91          | 1.82 |
| Jul 30          | 1.87                            | 1.93 | 2.00 | 2.06 | 2.05 | 2.06 | 2.00 | 1.92 | 1.85 | 1.83 | 1.81 | 1.79 | 1.79 | 1.78 | 1.78 | 1.78 | 1.77 | 1.77 | 1.78 | 1.78 | 1.80 | S    | 1.83 | 1.84          | 1.77          | 2.06          | 1.86 |
| Jul 31          | 1.87                            | 1.87 | 1.86 | 1.88 | 1.90 | 1.91 | 1.89 | 1.87 | 1.85 | 1.83 | 1.83 | 1.82 | 1.81 | 1.80 | 1.80 | 1.79 | 1.79 | 1.79 | 1.79 | 1.81 | S    | 1.85 | 1.87 | 1.87          | 1.79          | 1.91          | 1.84 |
| Diurnal Maximum | 2.00                            | 2.03 | 2.11 | 2.06 | 2.05 | 2.06 | 2.00 | 2.01 | 1.97 | 1.97 | 1.95 | 1.96 | 1.95 | 1.93 | 1.94 | 1.95 | 1.95 | 1.94 | 1.95 | 1.93 | 1.93 | 1.94 | 1.96 | 1.96          |               |               |      |
| Diurnal Average | 1.86                            | 1.87 | 1.89 | 1.89 | 1.90 | 1.90 | 1.90 | 1.87 | 1.86 | 1.85 | 1.84 | 1.84 | 1.83 | 1.83 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.83 | 1.84 | 1.85          | 1.86          |               |      |

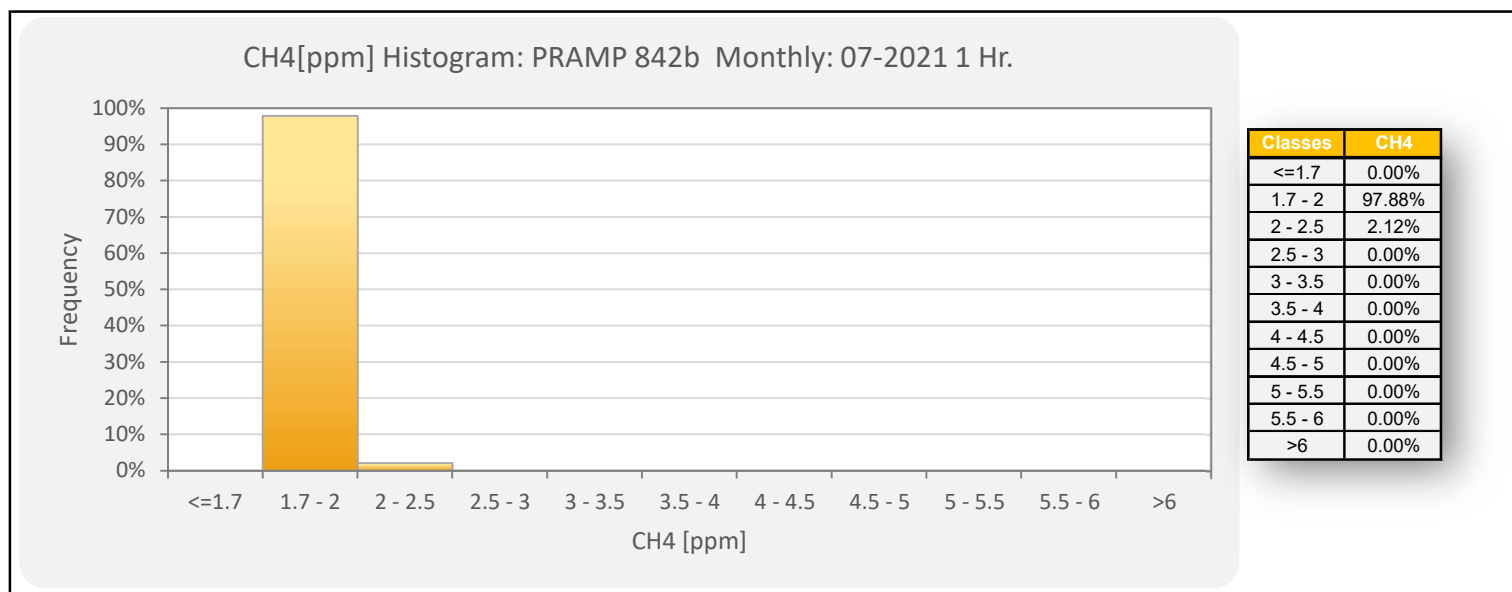
|          |                                                |            |                                                                                         |          |                     |
|----------|------------------------------------------------|------------|-----------------------------------------------------------------------------------------|----------|---------------------|
| <b>C</b> | Monthly Calibration                            | <b>S</b>   | Daily Zero-Span Check                                                                   | <b>Q</b> | Quality Assurance   |
| <b>K</b> | Collection Error                               | <b>N</b>   | No Data (Machine Not in Service)                                                        | <b>Y</b> | Routine Maintenance |
| <b>X</b> | InValid Data (Equipment Malfunction /Recovery) | <b>NRM</b> | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) | <b>P</b> | Power Failure       |

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.  
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

*Timeseries Chart of Hourly Average for CH4 - 842b Station*

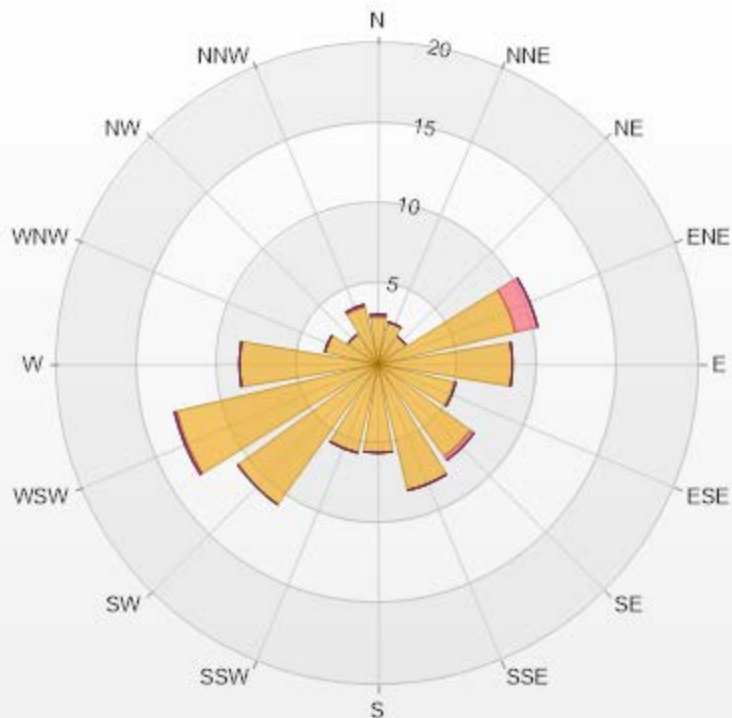






Wind: PRAMP 842b Poll.: PRAMP 842b-CH4[ppm] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 94.89% Calm Avg: 0.00 [ppm]

| Direction | 0-2   | 2-5  | 5-10 | 10-20 | >20.0 | Total |
|-----------|-------|------|------|-------|-------|-------|
| N         | 2.97  | 0.14 | 0    | 0     | 0     | 3.11  |
| NNE       | 2.69  | 0    | 0    | 0     | 0     | 2.69  |
| NE        | 2.12  | 0    | 0    | 0     | 0     | 2.12  |
| ENE       | 8.78  | 1.42 | 0    | 0     | 0     | 10.2  |
| E         | 8.36  | 0    | 0    | 0     | 0     | 8.36  |
| ESE       | 4.96  | 0    | 0    | 0     | 0     | 4.96  |
| SE        | 7.08  | 0.28 | 0    | 0     | 0     | 7.36  |
| SSE       | 8.07  | 0    | 0    | 0     | 0     | 8.07  |
| S         | 5.52  | 0    | 0    | 0     | 0     | 5.52  |
| SSW       | 5.67  | 0    | 0    | 0     | 0     | 5.67  |
| SW        | 10.76 | 0    | 0    | 0     | 0     | 10.76 |
| WSW       | 12.89 | 0.14 | 0    | 0     | 0     | 13.03 |
| W         | 8.64  | 0    | 0    | 0     | 0     | 8.64  |
| WNW       | 3.4   | 0    | 0    | 0     | 0     | 3.4   |
| NW        | 2.27  | 0    | 0    | 0     | 0     | 2.27  |
| NNW       | 3.68  | 0.14 | 0    | 0     | 0     | 3.82  |
| Summary   | 97.86 | 2.12 | 0    | 0     | 0     | 100   |



PRAMP-202107

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% Icon Classes (ppm)

98 0-2

2 2-5

0 5-10

0 10-20

0 >20.0



# PEACE RIVER AREA MONITORING PROGRAM

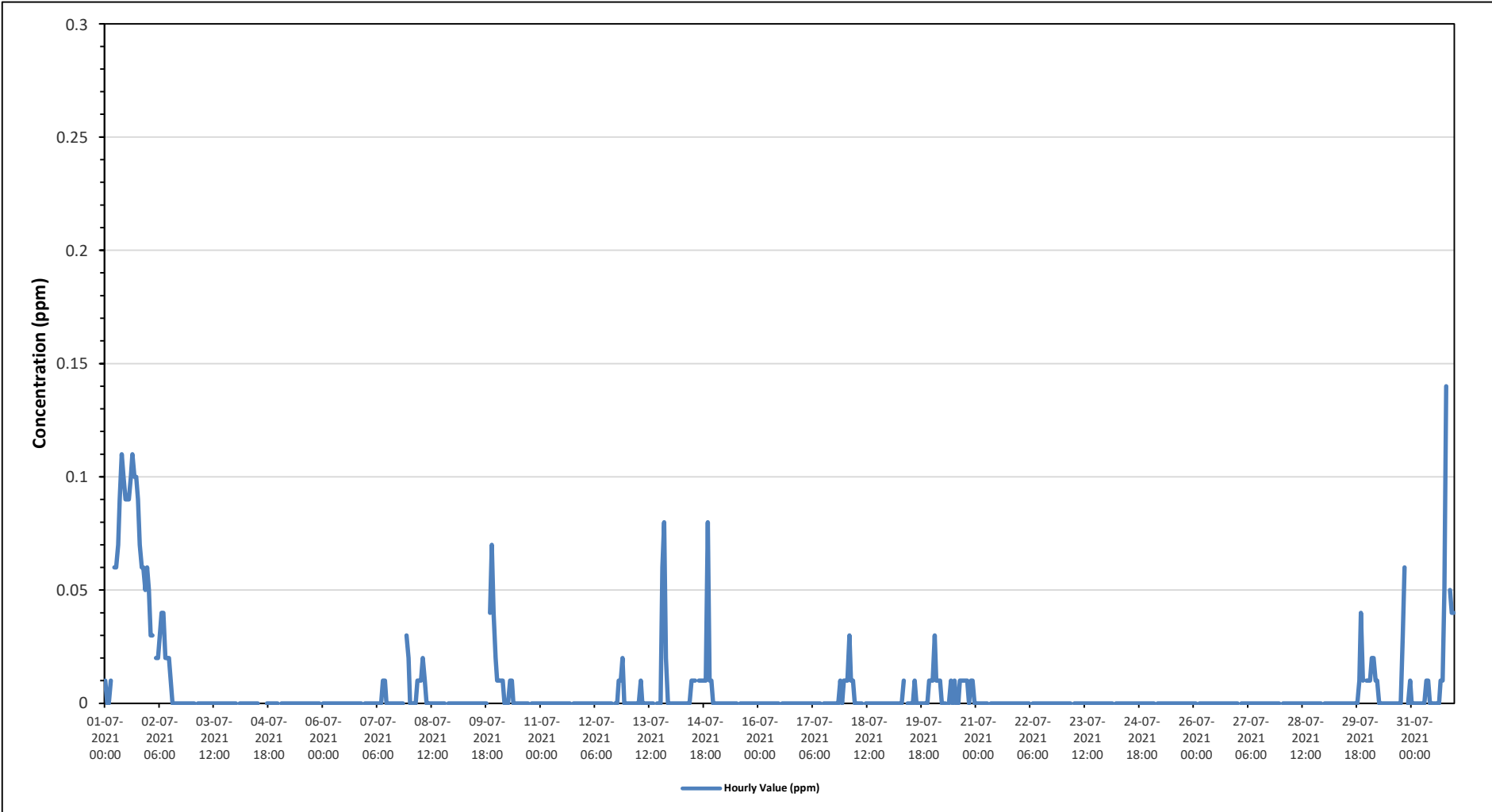
842b Station - July 2021

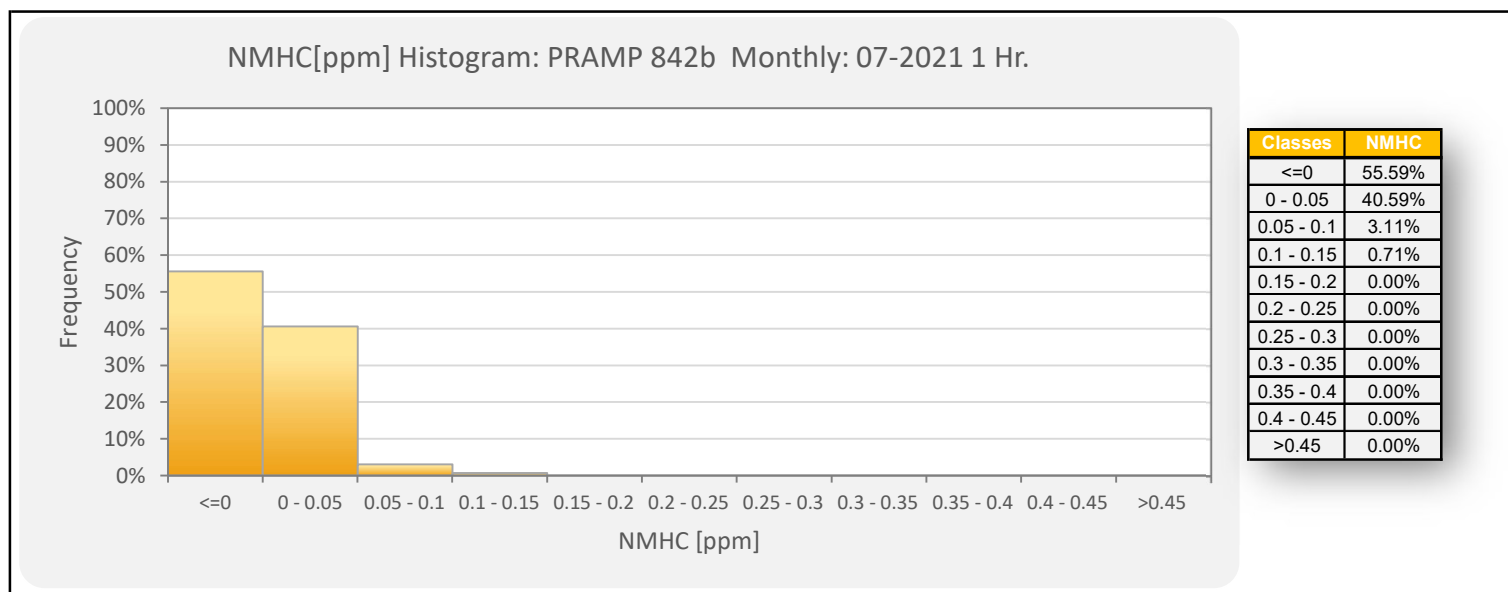
Summary of Hourly Averages

## NON-METHANE HYDROCARBONS (NMHC) in ppm

|                                                                                                         |                                               |      |      |      |      |      |      |      |                                                                                         |                                |      |      |      |      |      |      |                     |      |      |                        |      |      |      |               |               |               |      |  |  |       |  |  |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|--------------------------------|------|------|------|------|------|------|---------------------|------|------|------------------------|------|------|------|---------------|---------------|---------------|------|--|--|-------|--|--|--|--|--|--|--|--|--|
| Maximum Hourly Value:                                                                                   |                                               |      |      |      |      |      |      |      |                                                                                         | 0.14 ppm on July 31 at hour 19 |      |      |      |      |      |      |                     |      |      | Hours in Service:      |      |      |      |               |               |               |      |  |  | 744   |  |  |  |  |  |  |  |  |  |
| Maximum Daily Value:                                                                                    |                                               |      |      |      |      |      |      |      |                                                                                         | 0.07 ppm on July 1             |      |      |      |      |      |      |                     |      |      | Hours of Data:         |      |      |      |               |               |               |      |  |  | 707   |  |  |  |  |  |  |  |  |  |
| Minimum Hourly Value:                                                                                   |                                               |      |      |      |      |      |      |      |                                                                                         | 0.00 ppm on July 1 at hour 1   |      |      |      |      |      |      |                     |      |      | Hours of Missing Data: |      |      |      |               |               |               |      |  |  | 0     |  |  |  |  |  |  |  |  |  |
| Minimum Daily Value:                                                                                    |                                               |      |      |      |      |      |      |      |                                                                                         | 0.00 ppm on July 3             |      |      |      |      |      |      |                     |      |      | Hours of Calibration:  |      |      |      |               |               |               |      |  |  | 37    |  |  |  |  |  |  |  |  |  |
| Monthly Average:                                                                                        |                                               |      |      |      |      |      |      |      |                                                                                         | 0.01 ppm                       |      |      |      |      |      |      |                     |      |      | Operational Uptime:    |      |      |      |               |               |               |      |  |  | 100.0 |  |  |  |  |  |  |  |  |  |
| Day                                                                                                     | Hourly Period Starting at (MST)               |      |      |      |      |      |      |      |                                                                                         |                                |      |      |      |      |      |      |                     |      |      |                        |      |      |      | Daily Minimum | Daily Maximum | Daily Average |      |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 1                                                                                                   | 0.01                                          | 0.00 | 0.00 | 0.01 | S    | 0.06 | 0.06 | 0.07 | 0.09                                                                                    | 0.11                           | 0.10 | 0.09 | 0.09 | 0.09 | 0.10 | 0.11 | 0.10                | 0.10 | 0.09 | 0.07                   | 0.06 | 0.06 | 0.05 | 0.06          | 0.00          | 0.11          | 0.07 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 2                                                                                                   | 0.05                                          | 0.03 | 0.03 | S    | 0.02 | 0.02 | 0.03 | 0.04 | 0.04                                                                                    | 0.02                           | 0.02 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.05          | 0.01 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 3                                                                                                   | 0.00                                          | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 4                                                                                                   | 0.00                                          | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | C    | C    | C    | C                   | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 5                                                                                                   | S                                             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | S             | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 6                                                                                                   | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | S    | 0.00          | 0.00          | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 7                                                                                                   | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.01                           | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | S    | 0.03 | 0.02          | 0.00          | 0.03          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 8                                                                                                   | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | S    | 0.00 | 0.00 | 0.00          | 0.00          | 0.02          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 9                                                                                                   | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | S                      | 0.04 | 0.07 | 0.04 | 0.02          | 0.00          | 0.07          | 0.01 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 10                                                                                                  | 0.01                                          | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | S    | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.01          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 11                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | S    | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 12                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S                   | 0.00 | 0.00 | 0.01                   | 0.01 | 0.02 | 0.00 | 0.00          | 0.00          | 0.02          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 13                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00                | 0.00 | 0.00 | 0.00                   | 0.06 | 0.08 | 0.02 | 0.00          | 0.00          | 0.08          | 0.01 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 14                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.01 | 0.01 | 0.01 | S    | 0.01 | 0.01                | 0.01 | 0.01 | 0.01                   | 0.08 | 0.01 | 0.01 | 0.00          | 0.00          | 0.08          | 0.01 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 15                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 16                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 17                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.01 | 0.00 | 0.01          | 0.00          | 0.01          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 18                                                                                                  | 0.01                                          | 0.01 | 0.03 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.03          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 19                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01                                                                                    | S                              | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.01 | 0.01          | 0.00          | 0.01          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 20                                                                                                  | 0.01                                          | 0.03 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | S                                                                                       | 0.00                           | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.01                | 0.01 | 0.01 | 0.01                   | 0.00 | 0.01 | 0.01 | 0.00          | 0.00          | 0.03          | 0.01 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 21                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 22                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 23                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 24                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 25                                                                                                  | 0.00                                          | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 26                                                                                                  | 0.00                                          | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 27                                                                                                  | 0.00                                          | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 28                                                                                                  | S                                             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | S             | 0.00          | 0.00          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 29                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.01                   | 0.04 | 0.01 | S    | 0.01          | 0.00          | 0.04          | 0.00 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 30                                                                                                  | 0.01                                          | 0.01 | 0.02 | 0.02 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.03                   | 0.06 | S    | 0.00 | 0.01          | 0.00          | 0.06          | 0.01 |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 31                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01                                                                                    | 0.01                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01                | 0.01 | 0.05 | 0.14                   | S    | 0.05 | 0.04 | 0.04          | 0.00          | 0.14          | 0.02 |  |  |       |  |  |  |  |  |  |  |  |  |
| Diurnal Maximum                                                                                         | 0.05                                          | 0.03 | 0.03 | 0.02 | 0.02 | 0.06 | 0.06 | 0.07 | 0.09                                                                                    | 0.11                           | 0.10 | 0.09 | 0.09 | 0.09 | 0.10 | 0.11 | 0.10                | 0.10 | 0.09 | 0.14                   | 0.08 | 0.07 | 0.05 | 0.06          |               |               |      |  |  |       |  |  |  |  |  |  |  |  |  |
| Diurnal Average                                                                                         | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01                                                                                    | 0.01                           | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.01 | 0.01                   | 0.01 | 0.01 | 0.01 |               |               |               |      |  |  |       |  |  |  |  |  |  |  |  |  |
| C                                                                                                       | Monthly Calibration                           |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |                                |      |      |      |      |      | Q    | Quality Assurance   |      |      |                        |      |      |      |               |               |               |      |  |  |       |  |  |  |  |  |  |  |  |  |
| K                                                                                                       | Collection Error                              |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |                                |      |      |      |      |      | Y    | Routine Maintenance |      |      |                        |      |      |      | P             | Power Failure |               |      |  |  |       |  |  |  |  |  |  |  |  |  |
| X                                                                                                       | InValid Data (Equipment Malfunction/Recovery) |      |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |                                |      |      |      |      |      |      |                     |      |      |                        |      |      |      |               |               |               |      |  |  |       |  |  |  |  |  |  |  |  |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                               |      |      |      |      |      |      |      |                                                                                         |                                |      |      |      |      |      |      |                     |      |      |                        |      |      |      |               |               |               |      |  |  |       |  |  |  |  |  |  |  |  |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                               |      |      |      |      |      |      |      |                                                                                         |                                |      |      |      |      |      |      |                     |      |      |                        |      |      |      |               |               |               |      |  |  |       |  |  |  |  |  |  |  |  |  |

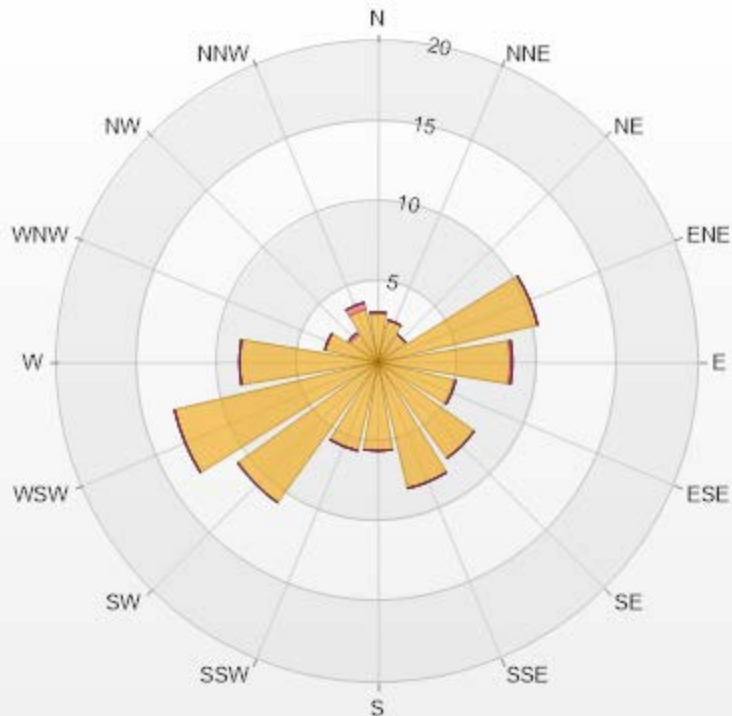
### Timeseries Chart of Hourly Average for NMHC - 842b Station





Wind: PRAMP 842b Poll.: PRAMP 842b-NMHC[ppm] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 94.89% Calm Avg: 0.00 [ppm]

| Direction | 0-0.1 | 0.1-0.3 | 0.3-0.9 | 0.9-2 | >2.0 | Total |
|-----------|-------|---------|---------|-------|------|-------|
| N         | 3.12  | 0       | 0       | 0     | 0    | 3.12  |
| NNE       | 2.69  | 0       | 0       | 0     | 0    | 2.69  |
| NE        | 2.12  | 0       | 0       | 0     | 0    | 2.12  |
| ENE       | 10.2  | 0       | 0       | 0     | 0    | 10.2  |
| E         | 8.22  | 0.14    | 0       | 0     | 0    | 8.36  |
| ESE       | 4.96  | 0       | 0       | 0     | 0    | 4.96  |
| SE        | 7.37  | 0       | 0       | 0     | 0    | 7.37  |
| SSE       | 8.07  | 0       | 0       | 0     | 0    | 8.07  |
| S         | 5.52  | 0       | 0       | 0     | 0    | 5.52  |
| SSW       | 5.67  | 0       | 0       | 0     | 0    | 5.67  |
| SW        | 10.76 | 0       | 0       | 0     | 0    | 10.76 |
| WSW       | 13.03 | 0       | 0       | 0     | 0    | 13.03 |
| W         | 8.64  | 0       | 0       | 0     | 0    | 8.64  |
| WNW       | 3.4   | 0       | 0       | 0     | 0    | 3.4   |
| NW        | 2.12  | 0.14    | 0       | 0     | 0    | 2.26  |
| NNW       | 3.4   | 0.42    | 0       | 0     | 0    | 3.82  |
| Summary   | 99.29 | 0.7     | 0       | 0     | 0    | 100   |



PRAMP-202107

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% Icon Classes (ppm)

99 0-0.1

1 0.1-0.3

0 0.3-0.9

0 0.9-2

0 >2.0





# PEACE RIVER AREA MONITORING PROGRAM

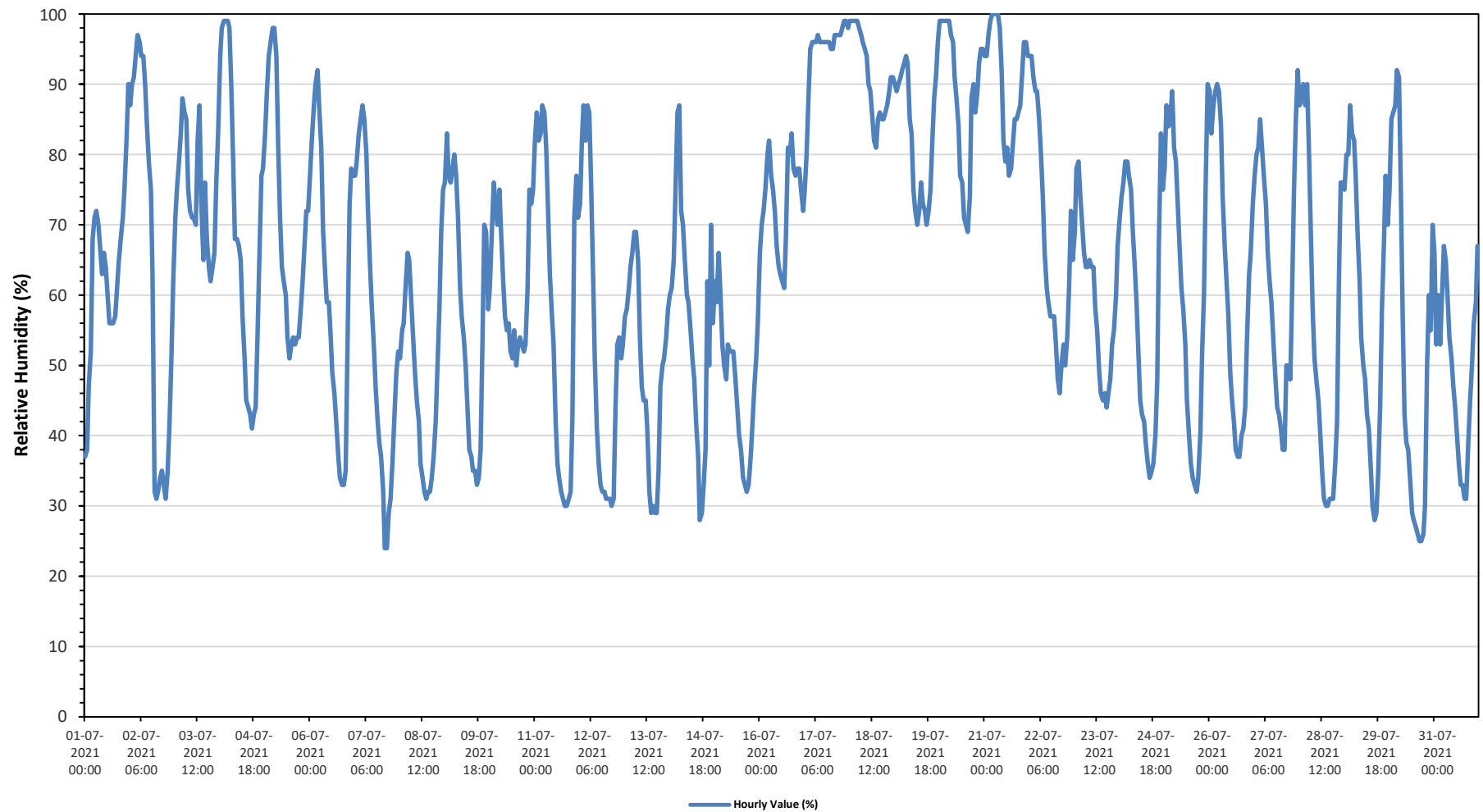
842b Station - July 2021

## Summary of Hourly Averages

### RELATIVE HUMIDITY (RH) in %

|                                                                                                         |                                                |      |      |      |                      |      |      |      |      |                                                                                         |      |      |      |      |                        |      |      |       |                     |      |      |      |      |               |               |               |      |               |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|----------------------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|------------------------|------|------|-------|---------------------|------|------|------|------|---------------|---------------|---------------|------|---------------|--|
| Maximum Hourly Value:                                                                                   |                                                |      | 100  | %    | on July 21 at hour 4 |      |      |      |      |                                                                                         |      |      |      |      | Hours in Service:      |      |      | 744   |                     |      |      |      |      |               |               |               |      |               |  |
| Maximum Daily Value:                                                                                    |                                                |      | 94.7 | %    | on July 17           |      |      |      |      |                                                                                         |      |      |      |      | Hours of Data:         |      |      | 744   |                     |      |      |      |      |               |               |               |      |               |  |
| Minimum Hourly Value:                                                                                   |                                                |      | 24   | %    | on July 7 at hour 16 |      |      |      |      |                                                                                         |      |      |      |      | Hours of Missing Data: |      |      | 0     |                     |      |      |      |      |               |               |               |      |               |  |
| Minimum Daily Value:                                                                                    |                                                |      | 47.5 | %    | on July 15           |      |      |      |      |                                                                                         |      |      |      |      | Hours of Calibration:  |      |      | 0     |                     |      |      |      |      |               |               |               |      |               |  |
| Monthly Average:                                                                                        |                                                |      | 64.5 | %    |                      |      |      |      |      |                                                                                         |      |      |      |      | Operational Uptime:    |      |      | 100.0 |                     |      |      |      |      |               |               |               |      |               |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |                      |      |      |      |      |                                                                                         |      |      |      |      |                        |      |      |       |                     |      |      |      |      | Daily Minimum | Daily Maximum | Daily Average |      |               |  |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4                    | 5    | 6    | 7    | 8    | 9                                                                                       | 10   | 11   | 12   | 13   | 14                     | 15   | 16   | 17    | 18                  | 19   | 20   | 21   | 22   | 23            |               |               |      |               |  |
| Jul 1                                                                                                   | 37                                             | 38   | 47   | 52   | 68                   | 71   | 72   | 70   | 67   | 63                                                                                      | 66   | 64   | 60   | 56   | 56                     | 56   | 57   | 61    | 65                  | 68   | 71   | 75   | 82   | 90            | 37            | 90            | 63.0 |               |  |
| Jul 2                                                                                                   | 87                                             | 90   | 91   | 94   | 97                   | 96   | 94   | 94   | 90   | 84                                                                                      | 79   | 75   | 63   | 32   | 31                     | 32   | 34   | 35    | 33                  | 31   | 35   | 42   | 51   | 62            | 31            | 97            | 64.7 |               |  |
| Jul 3                                                                                                   | 71                                             | 75   | 79   | 83   | 88                   | 86   | 85   | 75   | 72   | 71                                                                                      | 71   | 70   | 82   | 87   | 73                     | 65   | 76   | 68    | 64                  | 62   | 64   | 66   | 76   | 83            | 62            | 88            | 74.7 |               |  |
| Jul 4                                                                                                   | 94                                             | 98   | 99   | 99   | 99                   | 98   | 90   | 78   | 68   | 68                                                                                      | 67   | 65   | 57   | 51   | 45                     | 44   | 43   | 41    | 43                  | 44   | 54   | 65   | 77   | 78            | 41            | 99            | 69.4 |               |  |
| Jul 5                                                                                                   | 83                                             | 89   | 94   | 96   | 98                   | 98   | 94   | 81   | 71   | 64                                                                                      | 62   | 60   | 54   | 51   | 53                     | 54   | 53   | 54    | 54                  | 58   | 62   | 67   | 72   | 72            | 51            | 98            | 70.6 |               |  |
| Jul 6                                                                                                   | 77                                             | 82   | 87   | 90   | 92                   | 86   | 81   | 69   | 63   | 59                                                                                      | 59   | 54   | 49   | 46   | 42                     | 37   | 34   | 33    | 33                  | 35   | 53   | 73   | 78   | 77            | 33            | 92            | 62.0 |               |  |
| Jul 7                                                                                                   | 77                                             | 79   | 83   | 85   | 87                   | 85   | 80   | 72   | 64   | 58                                                                                      | 53   | 47   | 42   | 39   | 37                     | 32   | 24   | 24    | 29                  | 31   | 36   | 43   | 49   | 52            | 24            | 87            | 54.5 |               |  |
| Jul 8                                                                                                   | 51                                             | 55   | 56   | 61   | 66                   | 65   | 59   | 54   | 49   | 45                                                                                      | 42   | 36   | 34   | 32   | 31                     | 32   | 32   | 34    | 37                  | 42   | 49   | 58   | 69   | 75            | 31            | 75            | 48.5 |               |  |
| Jul 9                                                                                                   | 76                                             | 83   | 77   | 76   | 78                   | 80   | 77   | 71   | 61   | 57                                                                                      | 54   | 50   | 44   | 38   | 37                     | 35   | 35   | 33    | 34                  | 38   | 53   | 70   | 69   | 58            | 33            | 83            | 57.7 |               |  |
| Jul 10                                                                                                  | 61                                             | 69   | 76   | 73   | 70                   | 75   | 69   | 62   | 57   | 55                                                                                      | 56   | 52   | 51   | 55   | 50                     | 53   | 54   | 53    | 52                  | 53   | 61   | 75   | 73   | 75            | 50            | 76            | 61.7 |               |  |
| Jul 11                                                                                                  | 82                                             | 86   | 82   | 83   | 87                   | 86   | 81   | 72   | 63   | 57                                                                                      | 53   | 42   | 36   | 34   | 32                     | 31   | 30   | 30    | 31                  | 32   | 43   | 71   | 77   | 71            | 30            | 87            | 58.0 |               |  |
| Jul 12                                                                                                  | 73                                             | 82   | 87   | 82   | 87                   | 86   | 76   | 62   | 51   | 41                                                                                      | 36   | 33   | 32   | 32   | 31                     | 31   | 31   | 30    | 31                  | 44   | 53   | 54   | 51   | 53            | 30            | 87            | 52.9 |               |  |
| Jul 13                                                                                                  | 57                                             | 58   | 61   | 64   | 66                   | 69   | 69   | 65   | 54   | 47                                                                                      | 45   | 45   | 41   | 32   | 29                     | 30   | 29   | 29    | 35                  | 47   | 50   | 51   | 54   | 58            | 29            | 69            | 49.4 |               |  |
| Jul 14                                                                                                  | 60                                             | 61   | 65   | 74   | 86                   | 87   | 72   | 70   | 65   | 60                                                                                      | 59   | 55   | 51   | 48   | 42                     | 37   | 28   | 29    | 33                  | 38   | 62   | 50   | 70   | 56            | 28            | 87            | 56.6 |               |  |
| Jul 15                                                                                                  | 62                                             | 59   | 66   | 60   | 53                   | 50   | 48   | 53   | 52   | 52                                                                                      | 52   | 48   | 44   | 40   | 38                     | 34   | 33   | 32    | 33                  | 37   | 41   | 47   | 51   | 56            | 32            | 66            | 47.5 |               |  |
| Jul 16                                                                                                  | 66                                             | 70   | 72   | 75   | 80                   | 82   | 77   | 75   | 72   | 67                                                                                      | 64   | 63   | 62   | 61   | 68                     | 81   | 80   | 83    | 78                  | 77   | 78   | 78   | 75   | 72            | 61            | 83            | 73.2 |               |  |
| Jul 17                                                                                                  | 75                                             | 80   | 89   | 95   | 96                   | 96   | 96   | 97   | 96   | 96                                                                                      | 96   | 96   | 96   | 96   | 95                     | 95   | 97   | 97    | 97                  | 97   | 98   | 99   | 99   | 98            | 75            | 99            | 94.7 |               |  |
| Jul 18                                                                                                  | 99                                             | 99   | 99   | 99   | 99                   | 98   | 97   | 96   | 95   | 94                                                                                      | 90   | 89   | 85   | 82   | 81                     | 85   | 86   | 85    | 85                  | 86   | 87   | 89   | 91   | 91            | 81            | 99            | 91.1 |               |  |
| Jul 19                                                                                                  | 90                                             | 89   | 90   | 91   | 92                   | 93   | 94   | 93   | 85   | 83                                                                                      | 75   | 72   | 70   | 72   | 76                     | 73   | 72   | 70    | 72                  | 75   | 81   | 88   | 91   | 96            | 70            | 96            | 82.6 |               |  |
| Jul 20                                                                                                  | 99                                             | 99   | 99   | 99   | 99                   | 99   | 97   | 96   | 91   | 88                                                                                      | 84   | 77   | 76   | 71   | 70                     | 69   | 74   | 88    | 90                  | 86   | 89   | 93   | 95   | 95            | 69            | 99            | 88.5 |               |  |
| Jul 21                                                                                                  | 94                                             | 94   | 97   | 99   | 100                  | 100  | 100  | 100  | 98   | 92                                                                                      | 82   | 79   | 81   | 77   | 78                     | 81   | 85   | 85    | 86                  | 87   | 92   | 96   | 96   | 94            | 77            | 100           | 90.5 |               |  |
| Jul 22                                                                                                  | 94                                             | 94   | 91   | 89   | 89                   | 85   | 80   | 74   | 66   | 61                                                                                      | 59   | 57   | 57   | 57   | 53                     | 48   | 46   | 50    | 53                  | 50   | 54   | 61   | 72   | 65            | 46            | 94            | 66.9 |               |  |
| Jul 23                                                                                                  | 69                                             | 78   | 79   | 74   | 70                   | 66   | 64   | 64   | 65   | 64                                                                                      | 64   | 58   | 55   | 49   | 46                     | 45   | 46   | 44    | 46                  | 48   | 53   | 55   | 60   | 67            | 44            | 79            | 59.5 |               |  |
| Jul 24                                                                                                  | 71                                             | 74   | 76   | 79   | 79                   | 77   | 75   | 69   | 65   | 59                                                                                      | 52   | 45   | 43   | 42   | 39                     | 36   | 34   | 35    | 36                  | 40   | 48   | 67   | 83   | 75            | 34            | 83            | 58.3 |               |  |
| Jul 25                                                                                                  | 78                                             | 87   | 84   | 85   | 89                   | 81   | 79   | 73   | 66   | 61                                                                                      | 58   | 53   | 45   | 40   | 36                     | 34   | 33   | 32    | 34                  | 40   | 52   | 60   | 77   | 90            | 32            | 90            | 61.1 |               |  |
| Jul 26                                                                                                  | 89                                             | 83   | 87   | 89   | 90                   | 89   | 84   | 74   | 67   | 62                                                                                      | 57   | 49   | 45   | 42   | 38                     | 37   | 37   | 40    | 41                  | 44   | 54   | 63   | 66   | 73            | 37            | 90            | 62.5 |               |  |
| Jul 27                                                                                                  | 77                                             | 80   | 81   | 85   | 81                   | 77   | 73   | 66   | 62   | 59                                                                                      | 53   | 49   | 44   | 43   | 41                     | 38   | 38   | 50    | 50                  | 48   | 59   | 75   | 85   | 92            | 38            | 92            | 62.8 |               |  |
| Jul 28                                                                                                  | 87                                             | 88   | 90   | 87   | 90                   | 82   | 69   | 58   | 51   | 48                                                                                      | 45   | 41   | 35   | 31   | 30                     | 30   | 31   | 31    | 31                  | 36   | 42   | 62   | 76   | 76            | 30            | 90            | 56.1 |               |  |
| Jul 29                                                                                                  | 75                                             | 80   | 80   | 87   | 83                   | 82   | 77   | 69   | 62   | 54                                                                                      | 50   | 48   | 43   | 41   | 35                     | 30   | 28   | 29    | 35                  | 44   | 58   | 68   | 77   | 70            | 28            | 87            | 58.5 |               |  |
| Jul 30                                                                                                  | 75                                             | 85   | 86   | 87   | 92                   | 91   | 75   | 57   | 43   | 39                                                                                      | 38   | 34   | 29   | 28   | 27                     | 26   | 25   | 25    | 26                  | 30   | 50   | 60   | 55   | 70            | 25            | 92            | 52.2 |               |  |
| Jul 31                                                                                                  | 66                                             | 53   | 60   | 53   | 60                   | 67   | 65   | 59   | 54   | 51                                                                                      | 47   | 44   | 40   | 36   | 33                     | 33   | 31   | 31    | 39                  | 45   | 50   | 56   | 59   | 67            | 31            | 67            | 50.0 |               |  |
| Diurnal Maximum                                                                                         | 99                                             | 99   | 99   | 99   | 100                  | 100  | 100  | 100  | 98   | 96                                                                                      | 96   | 96   | 96   | 96   | 95                     | 95   | 97   | 97    | 97                  | 97   | 98   | 99   | 99   | 98            |               |               |      |               |  |
| Diurnal Average                                                                                         | 75.9                                           | 78.6 | 81.0 | 82.1 | 84.2                 | 83.3 | 79.0 | 73.2 | 67.3 | 63.2                                                                                    | 60.3 | 56.5 | 53.1 | 49.7 | 47.5                   | 46.6 | 46.3 | 47.1  | 48.6                | 51.4 | 59.1 | 67.0 | 72.8 | 74.4          |               |               |      |               |  |
| C                                                                                                       | Monthly Calibration                            |      |      |      |                      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |                        |      |      | Q     | Quality Assurance   |      |      |      |      |               |               |               |      |               |  |
| K                                                                                                       | Collection Error                               |      |      |      |                      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |                        |      |      | Y     | Routine Maintenance |      |      |      |      |               |               |               | P    | Power Failure |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |                      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |                        |      |      |       |                     |      |      |      |      |               |               |               |      |               |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |                      |      |      |      |      |                                                                                         |      |      |      |      |                        |      |      |       |                     |      |      |      |      |               |               |               |      |               |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |                      |      |      |      |      |                                                                                         |      |      |      |      |                        |      |      |       |                     |      |      |      |      |               |               |               |      |               |  |

***Timeseries Chart of Hourly Average for RH - 842b Station***





# PEACE RIVER AREA MONITORING PROGRAM

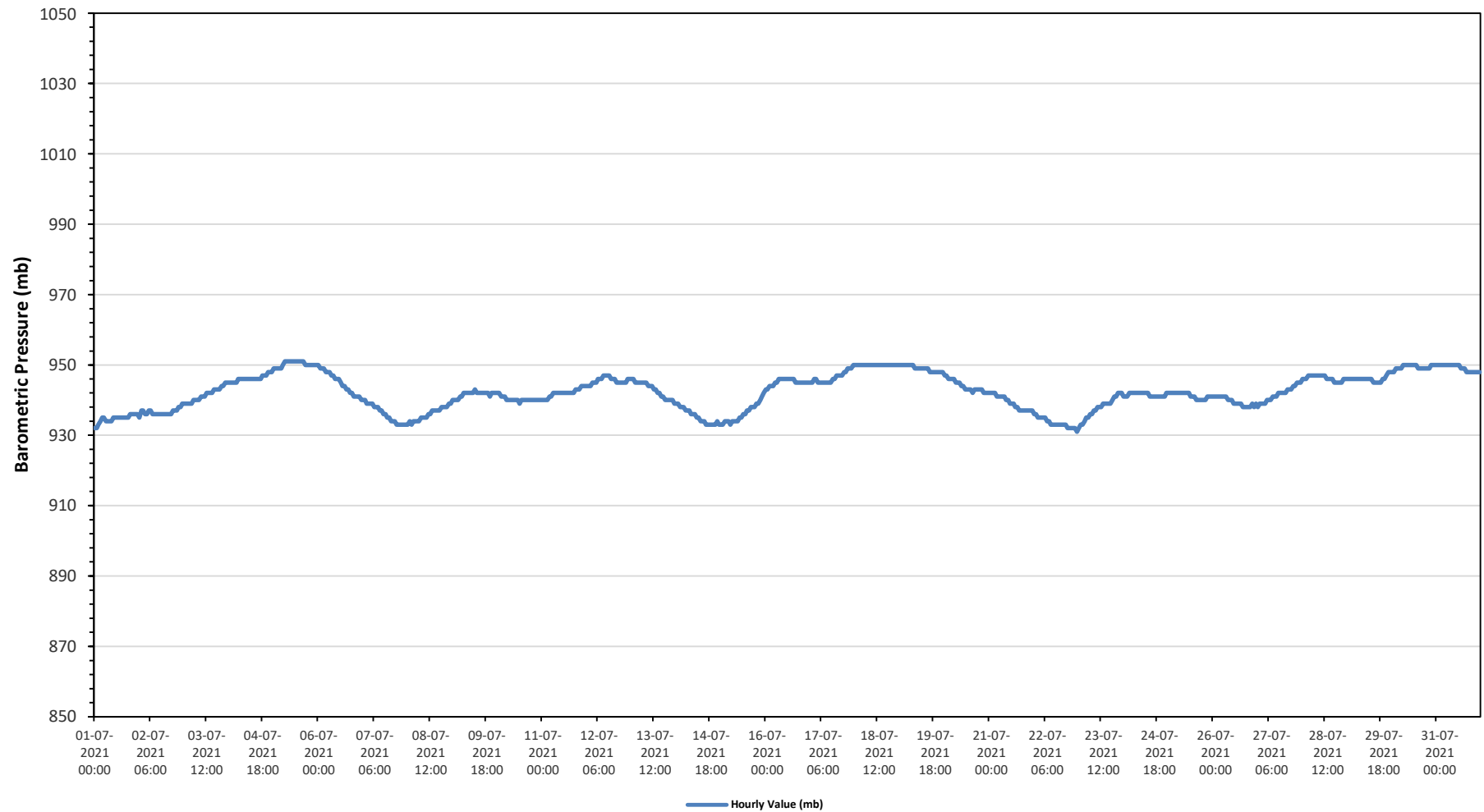
842b Station - July 2021

Summary of Hourly Averages

## BAROMETRIC PRESSURE (BP) in millibar

| Maximum Hourly Value:                                                                                   |                                                |     |     |     |     |     |     |     |                                                                                         | 951 | mb  | on July 5 at hour 6   |     |     |     |     |                     |     |     |     |     | Hours in Service:      |     |     |               |         |         |       |  |       |  | 744   |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----------------------------------------------------------------------------------------|-----|-----|-----------------------|-----|-----|-----|-----|---------------------|-----|-----|-----|-----|------------------------|-----|-----|---------------|---------|---------|-------|--|-------|--|-------|
| Maximum Daily Value:                                                                                    |                                                |     |     |     |     |     |     |     |                                                                                         | 950 | mb  | on July 5             |     |     |     |     |                     |     |     |     |     | Hours of Data:         |     |     |               |         |         |       |  |       |  | 744   |
| Minimum Hourly Value:                                                                                   |                                                |     |     |     |     |     |     |     |                                                                                         | 931 | mb  | on July 22 at hour 23 |     |     |     |     |                     |     |     |     |     | Hours of Missing Data: |     |     |               |         |         |       |  |       |  | 0     |
| Minimum Daily Value:                                                                                    |                                                |     |     |     |     |     |     |     |                                                                                         | 933 | mb  | on July 22            |     |     |     |     |                     |     |     |     |     | Hours of Calibration:  |     |     |               |         |         |       |  |       |  | 0     |
| Monthly Average:                                                                                        |                                                |     |     |     |     |     |     |     |                                                                                         | 942 | mb  |                       |     |     |     |     |                     |     |     |     |     | Operational Uptime:    |     |     |               |         |         |       |  |       |  | 100.0 |
| Day                                                                                                     | Hourly Period Starting at (MST)                |     |     |     |     |     |     |     |                                                                                         |     |     |                       |     |     |     |     |                     |     |     |     |     |                        |     |     |               | Daily   |         | Daily |  | Daily |  |       |
|                                                                                                         | 0                                              | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8                                                                                       | 9   | 10  | 11                    | 12  | 13  | 14  | 15  | 16                  | 17  | 18  | 19  | 20  | 21                     | 22  | 23  | Minimum       | Maximum | Average |       |  |       |  |       |
| Jul 1                                                                                                   | 932                                            | 932 | 933 | 934 | 935 | 935 | 934 | 934 | 934                                                                                     | 934 | 935 | 935                   | 935 | 935 | 935 | 935 | 935                 | 935 | 935 | 936 | 936 | 936                    | 936 | 936 | 932           | 936     | 934.7   |       |  |       |  |       |
| Jul 2                                                                                                   | 935                                            | 937 | 937 | 936 | 936 | 937 | 937 | 936 | 936                                                                                     | 936 | 936 | 936                   | 936 | 936 | 936 | 936 | 936                 | 936 | 937 | 937 | 937 | 938                    | 938 | 939 | 935           | 939     | 936.5   |       |  |       |  |       |
| Jul 3                                                                                                   | 939                                            | 939 | 939 | 939 | 939 | 940 | 940 | 940 | 940                                                                                     | 941 | 941 | 941                   | 942 | 942 | 942 | 942 | 943                 | 943 | 943 | 943 | 944 | 944                    | 945 | 945 | 939           | 945     | 941.5   |       |  |       |  |       |
| Jul 4                                                                                                   | 945                                            | 945 | 945 | 945 | 945 | 946 | 946 | 946 | 946                                                                                     | 946 | 946 | 946                   | 946 | 946 | 946 | 946 | 946                 | 946 | 947 | 947 | 947 | 948                    | 948 | 948 | 945           | 948     | 946.2   |       |  |       |  |       |
| Jul 5                                                                                                   | 949                                            | 949 | 949 | 949 | 949 | 950 | 951 | 951 | 951                                                                                     | 951 | 951 | 951                   | 951 | 951 | 951 | 951 | 951                 | 950 | 950 | 950 | 950 | 950                    | 950 | 950 | 949           | 951     | 950.3   |       |  |       |  |       |
| Jul 6                                                                                                   | 950                                            | 949 | 949 | 949 | 948 | 948 | 948 | 948 | 947                                                                                     | 947 | 946 | 946                   | 946 | 945 | 944 | 944 | 943                 | 943 | 942 | 942 | 941 | 941                    | 941 | 940 | 940           | 950     | 945.0   |       |  |       |  |       |
| Jul 7                                                                                                   | 940                                            | 940 | 939 | 939 | 939 | 939 | 938 | 938 | 938                                                                                     | 937 | 937 | 936                   | 936 | 935 | 935 | 934 | 934                 | 934 | 933 | 933 | 933 | 933                    | 933 | 933 | 933           | 940     | 936.1   |       |  |       |  |       |
| Jul 8                                                                                                   | 933                                            | 934 | 933 | 934 | 934 | 934 | 934 | 935 | 935                                                                                     | 935 | 935 | 936                   | 936 | 937 | 937 | 937 | 937                 | 937 | 938 | 938 | 938 | 938                    | 939 | 939 | 933           | 939     | 936.0   |       |  |       |  |       |
| Jul 9                                                                                                   | 940                                            | 940 | 940 | 940 | 941 | 941 | 942 | 942 | 942                                                                                     | 942 | 942 | 942                   | 943 | 942 | 942 | 942 | 942                 | 942 | 942 | 942 | 941 | 942                    | 942 | 942 | 940           | 943     | 941.6   |       |  |       |  |       |
| Jul 10                                                                                                  | 942                                            | 942 | 941 | 941 | 941 | 940 | 940 | 940 | 940                                                                                     | 940 | 940 | 940                   | 939 | 940 | 940 | 940 | 940                 | 940 | 940 | 940 | 940 | 940                    | 940 | 940 | 939           | 942     | 940.3   |       |  |       |  |       |
| Jul 11                                                                                                  | 940                                            | 940 | 940 | 940 | 941 | 941 | 942 | 942 | 942                                                                                     | 942 | 942 | 942                   | 942 | 942 | 942 | 942 | 942                 | 942 | 943 | 943 | 943 | 944                    | 944 | 944 | 940           | 944     | 942.0   |       |  |       |  |       |
| Jul 12                                                                                                  | 944                                            | 944 | 944 | 945 | 945 | 945 | 946 | 946 | 946                                                                                     | 946 | 947 | 947                   | 947 | 947 | 946 | 946 | 946                 | 945 | 945 | 945 | 945 | 945                    | 946 | 946 | 944           | 947     | 945.5   |       |  |       |  |       |
| Jul 13                                                                                                  | 946                                            | 946 | 945 | 945 | 945 | 945 | 945 | 945 | 945                                                                                     | 944 | 944 | 944                   | 943 | 943 | 942 | 942 | 941                 | 941 | 940 | 940 | 940 | 940                    | 940 | 939 | 939           | 946     | 942.9   |       |  |       |  |       |
| Jul 14                                                                                                  | 939                                            | 939 | 938 | 938 | 938 | 937 | 937 | 937 | 936                                                                                     | 936 | 936 | 935                   | 935 | 935 | 934 | 934 | 933                 | 933 | 933 | 933 | 933 | 933                    | 934 | 933 | 933           | 939     | 935.3   |       |  |       |  |       |
| Jul 15                                                                                                  | 933                                            | 933 | 934 | 934 | 934 | 933 | 934 | 934 | 934                                                                                     | 934 | 935 | 935                   | 936 | 936 | 937 | 937 | 938                 | 938 | 938 | 939 | 939 | 940                    | 941 | 942 | 933           | 942     | 936.2   |       |  |       |  |       |
| Jul 16                                                                                                  | 943                                            | 943 | 944 | 944 | 944 | 945 | 945 | 946 | 946                                                                                     | 946 | 946 | 946                   | 946 | 946 | 946 | 946 | 945                 | 945 | 945 | 945 | 945 | 945                    | 945 | 945 | 943           | 946     | 945.1   |       |  |       |  |       |
| Jul 17                                                                                                  | 945                                            | 945 | 946 | 946 | 945 | 945 | 945 | 945 | 945                                                                                     | 945 | 945 | 945                   | 946 | 946 | 947 | 947 | 947                 | 947 | 948 | 948 | 949 | 949                    | 949 | 950 | 945           | 950     | 946.5   |       |  |       |  |       |
| Jul 18                                                                                                  | 950                                            | 950 | 950 | 950 | 950 | 950 | 950 | 950 | 950                                                                                     | 950 | 950 | 950                   | 950 | 950 | 950 | 950 | 950                 | 950 | 950 | 950 | 950 | 950                    | 950 | 950 | 950           | 950     | 950.0   |       |  |       |  |       |
| Jul 19                                                                                                  | 950                                            | 950 | 950 | 950 | 950 | 950 | 950 | 950 | 949                                                                                     | 949 | 949 | 949                   | 949 | 949 | 949 | 949 | 948                 | 948 | 948 | 948 | 948 | 948                    | 948 | 948 | 948           | 950     | 949.0   |       |  |       |  |       |
| Jul 20                                                                                                  | 947                                            | 947 | 946 | 946 | 946 | 946 | 945 | 945 | 945                                                                                     | 944 | 944 | 943                   | 943 | 943 | 943 | 942 | 943                 | 943 | 943 | 943 | 943 | 942                    | 942 | 942 | 942           | 947     | 944.0   |       |  |       |  |       |
| Jul 21                                                                                                  | 942                                            | 942 | 942 | 942 | 941 | 941 | 941 | 941 | 941                                                                                     | 940 | 940 | 939                   | 939 | 939 | 938 | 938 | 937                 | 937 | 937 | 937 | 937 | 937                    | 937 | 937 | 937           | 942     | 939.3   |       |  |       |  |       |
| Jul 22                                                                                                  | 936                                            | 936 | 935 | 935 | 935 | 935 | 935 | 935 | 934                                                                                     | 934 | 933 | 933                   | 933 | 933 | 933 | 933 | 933                 | 933 | 932 | 932 | 932 | 932                    | 932 | 931 | 931           | 936     | 933.5   |       |  |       |  |       |
| Jul 23                                                                                                  | 932                                            | 933 | 933 | 934 | 935 | 935 | 936 | 936 | 937                                                                                     | 937 | 938 | 938                   | 938 | 939 | 939 | 939 | 939                 | 939 | 940 | 941 | 941 | 942                    | 942 | 942 | 932           | 942     | 937.7   |       |  |       |  |       |
| Jul 24                                                                                                  | 941                                            | 941 | 941 | 942 | 942 | 942 | 942 | 942 | 942                                                                                     | 942 | 942 | 942                   | 942 | 942 | 941 | 941 | 941                 | 941 | 941 | 941 | 941 | 941                    | 941 | 941 | 941           | 942     | 941.5   |       |  |       |  |       |
| Jul 25                                                                                                  | 942                                            | 942 | 942 | 942 | 942 | 942 | 942 | 942 | 942                                                                                     | 942 | 942 | 942                   | 942 | 941 | 941 | 941 | 940                 | 940 | 940 | 940 | 940 | 941                    | 941 | 941 | 940           | 942     | 941.3   |       |  |       |  |       |
| Jul 26                                                                                                  | 941                                            | 941 | 941 | 941 | 941 | 941 | 941 | 941 | 940                                                                                     | 940 | 940 | 939                   | 939 | 939 | 939 | 939 | 938                 | 938 | 938 | 938 | 938 | 939                    | 938 | 939 | 938           | 941     | 939.5   |       |  |       |  |       |
| Jul 27                                                                                                  | 938                                            | 939 | 939 | 939 | 939 | 940 | 940 | 940 | 941                                                                                     | 941 | 941 | 942                   | 942 | 942 | 942 | 942 | 943                 | 943 | 943 | 944 | 944 | 945                    | 945 | 945 | 938           | 945     | 941.6   |       |  |       |  |       |
| Jul 28                                                                                                  | 946                                            | 946 | 946 | 947 | 947 | 947 | 947 | 947 | 947                                                                                     | 947 | 947 | 947                   | 947 | 947 | 946 | 946 | 946                 | 945 | 945 | 945 | 945 | 945                    | 946 | 946 | 945           | 947     | 946.2   |       |  |       |  |       |
| Jul 29                                                                                                  | 946                                            | 946 | 946 | 946 | 946 | 946 | 946 | 946 | 946                                                                                     | 946 | 946 | 946                   | 946 | 946 | 945 | 945 | 945                 | 945 | 945 | 946 | 946 | 947                    | 948 | 948 | 945           | 948     | 946.0   |       |  |       |  |       |
| Jul 30                                                                                                  | 948                                            | 948 | 949 | 949 | 949 | 949 | 950 | 950 | 950                                                                                     | 950 | 950 | 950                   | 950 | 950 | 949 | 949 | 949                 | 949 | 949 | 949 | 949 | 950                    | 950 | 950 | 948           | 950     | 949.4   |       |  |       |  |       |
| Jul 31                                                                                                  | 950                                            | 950 | 950 | 950 | 950 | 950 | 950 | 950 | 950                                                                                     | 950 | 950 | 950                   | 950 | 949 | 949 | 949 | 948                 | 948 | 948 | 948 | 948 | 948                    | 948 | 948 | 948           | 950     | 949.2   |       |  |       |  |       |
| Diurnal Maximum                                                                                         | 950                                            | 950 | 950 | 950 | 950 | 950 | 951 | 951 | 951                                                                                     | 951 | 951 | 951                   | 951 | 951 | 951 | 951 | 951                 | 950 | 950 | 950 | 950 | 950                    | 950 | 950 | 950           | 950     | 950     |       |  |       |  |       |
| Diurnal Average                                                                                         | 942                                            | 942 | 942 | 942 | 942 | 942 | 943 | 943 | 942                                                                                     | 942 | 942 | 942                   | 942 | 942 | 942 | 942 | 942                 | 942 | 942 | 942 | 942 | 942                    | 943 | 943 | 943           | 943     | 943     |       |  |       |  |       |
| C                                                                                                       | Monthly Calibration                            |     |     |     |     |     |     | S   | Daily Zero-Span Check                                                                   |     |     |                       |     |     |     | Q   | Quality Assurance   |     |     |     |     |                        |     |     |               |         |         |       |  |       |  |       |
| K                                                                                                       | Collection Error                               |     |     |     |     |     |     | N   | No Data (Machine Not in Service)                                                        |     |     |                       |     |     |     | Y   | Routine Maintenance |     |     |     |     |                        |     | P   | Power Failure |         |         |       |  |       |  |       |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |     |     |     |     |     |     | NRM | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |     |     |                       |     |     |     |     |                     |     |     |     |     |                        |     |     |               |         |         |       |  |       |  |       |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |     |     |     |     |     |     |     |                                                                                         |     |     |                       |     |     |     |     |                     |     |     |     |     |                        |     |     |               |         |         |       |  |       |  |       |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |     |     |     |     |     |     |     |                                                                                         |     |     |                       |     |     |     |     |                     |     |     |     |     |                        |     |     |               |         |         |       |  |       |  |       |

***Timeseries Chart of Hourly Average for BP - 842b Station***





# PEACE RIVER AREA MONITORING PROGRAM

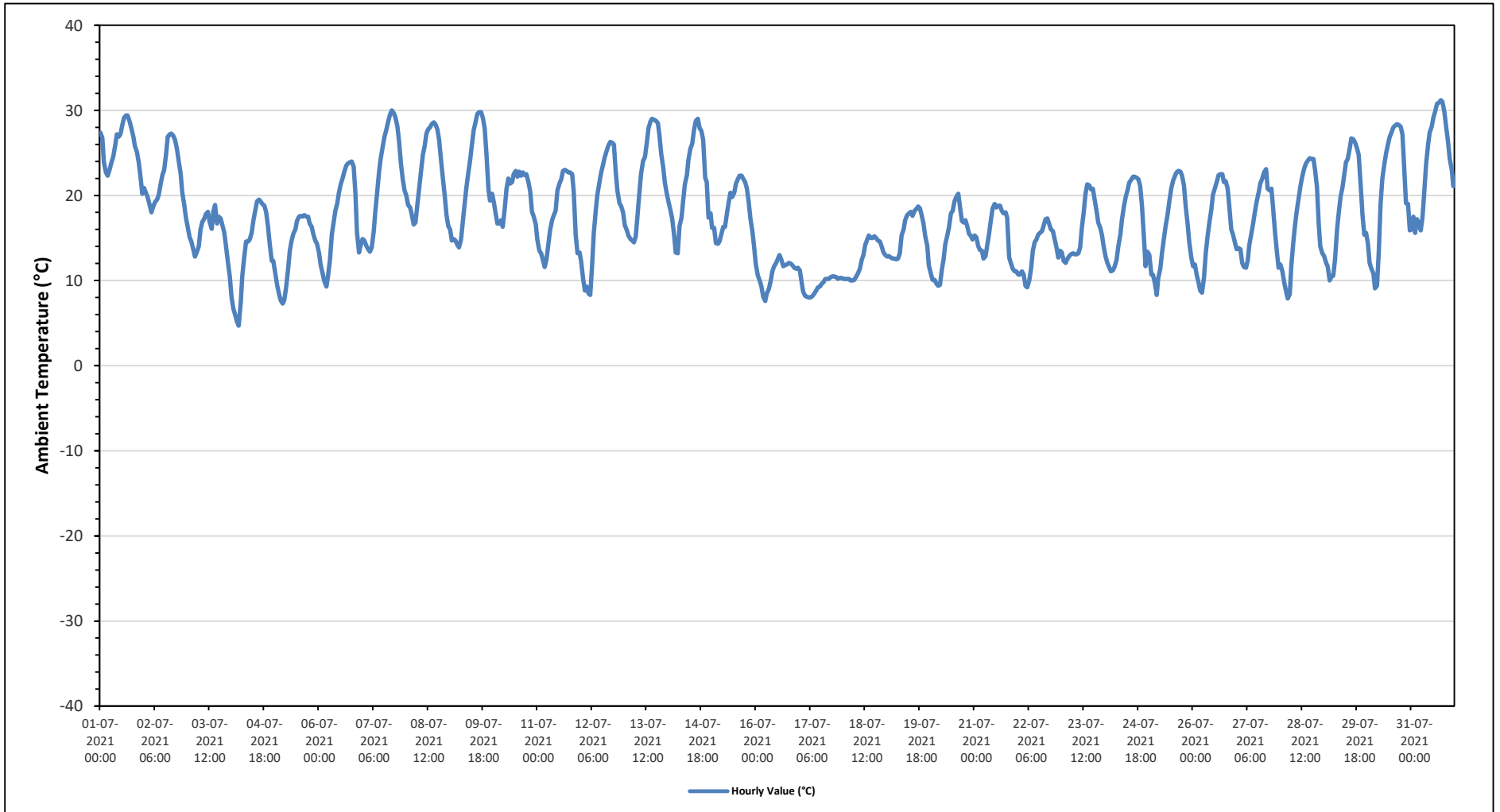
842b Station - July 2021

## Summary of Hourly Averages

### AMBIENT TEMPERATURE (AT) in Degree Celsius

| Maximum Hourly Value:                                                                                   |                                                | 31.2 | °C   | on July 31 at hour 16 |      |      |      |      |      |                                                                                         |      |      |      |      | Hours in Service:      |      | 744   |      |                     |      |      |      |      |       |         |         |         |               |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|-----------------------|------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|------------------------|------|-------|------|---------------------|------|------|------|------|-------|---------|---------|---------|---------------|--|
| Maximum Daily Value:                                                                                    |                                                | 25.8 | °C   | on July 1             |      |      |      |      |      |                                                                                         |      |      |      |      | Hours of Data:         |      | 744   |      |                     |      |      |      |      |       |         |         |         |               |  |
| Minimum Hourly Value:                                                                                   |                                                | 4.7  | °C   | on July 4 at hour 4   |      |      |      |      |      |                                                                                         |      |      |      |      | Hours of Missing Data: |      | 0     |      |                     |      |      |      |      |       |         |         |         |               |  |
| Minimum Daily Value:                                                                                    |                                                | 9.5  | °C   | on July 17            |      |      |      |      |      |                                                                                         |      |      |      |      | Hours of Calibration:  |      | 0     |      |                     |      |      |      |      |       |         |         |         |               |  |
| Monthly Average:                                                                                        |                                                | 17.7 | °C   |                       |      |      |      |      |      |                                                                                         |      |      |      |      | Operational Uptime:    |      | 100.0 |      |                     |      |      |      |      |       |         |         |         |               |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |                       |      |      |      |      |      |                                                                                         |      |      |      |      |                        |      |       |      |                     |      |      |      |      | Daily | Daily   | Daily   |         |               |  |
|                                                                                                         | 0                                              | 1    | 2    | 3                     | 4    | 5    | 6    | 7    | 8    | 9                                                                                       | 10   | 11   | 12   | 13   | 14                     | 15   | 16    | 17   | 18                  | 19   | 20   | 21   | 22   | 23    | Minimum | Maximum | Average |               |  |
| Jul 1                                                                                                   | 27.4                                           | 26.8 | 23.9 | 22.7                  | 22.3 | 23.1 | 23.8 | 24.6 | 25.8 | 27.2                                                                                    | 26.9 | 27.2 | 28.2 | 29.1 | 29.4                   | 29.4 | 28.7  | 27.9 | 26.9                | 25.8 | 25.1 | 23.9 | 22.2 | 20.2  | 20.2    | 29.4    | 25.8    |               |  |
| Jul 2                                                                                                   | 20.9                                           | 20.3 | 19.8 | 18.9                  | 18   | 18.7 | 19.2 | 19.5 | 20   | 21.3                                                                                    | 22.4 | 23   | 24.7 | 26.9 | 27.2                   | 27.3 | 27    | 26.5 | 25.5                | 24.1 | 22.5 | 20.4 | 18.9 | 17.3  | 17.3    | 27.3    | 22.1    |               |  |
| Jul 3                                                                                                   | 16.1                                           | 15.1 | 14.6 | 13.6                  | 12.8 | 13.4 | 14   | 16   | 16.9 | 17.3                                                                                    | 17.8 | 18.1 | 16.9 | 16.1 | 18.1                   | 18.9 | 16.7  | 17.5 | 17.3                | 16.5 | 15.7 | 14.1 | 12.1 | 10.5  | 10.5    | 18.9    | 15.7    |               |  |
| Jul 4                                                                                                   | 8                                              | 6.7  | 5.9  | 5.2                   | 4.7  | 7.4  | 10.5 | 12.8 | 14.6 | 14.6                                                                                    | 14.8 | 15.6 | 17.1 | 18.2 | 19.3                   | 19.5 | 19.3  | 19   | 18.8                | 18   | 16.4 | 14.3 | 12.3 | 12.3  | 4.7     | 19.5    | 13.6    |               |  |
| Jul 5                                                                                                   | 10.8                                           | 9.5  | 8.5  | 7.7                   | 7.3  | 7.7  | 9.1  | 11.3 | 13.5 | 14.7                                                                                    | 15.5 | 16   | 17   | 17.5 | 17.6                   | 17.5 | 17.7  | 17.5 | 17.5                | 16.7 | 16.3 | 15.4 | 14.7 | 14.3  | 7.3     | 17.7    | 13.8    |               |  |
| Jul 6                                                                                                   | 13.2                                           | 11.9 | 10.8 | 9.9                   | 9.3  | 10.5 | 12.5 | 15.4 | 16.6 | 18.2                                                                                    | 19   | 20.3 | 21.3 | 22.1 | 22.9                   | 23.5 | 23.8  | 23.9 | 24                  | 23.4 | 20.2 | 15.7 | 13.3 | 14.2  | 9.3     | 24.0    | 17.3    |               |  |
| Jul 7                                                                                                   | 14.9                                           | 14.7 | 14.1 | 13.7                  | 13.4 | 13.9 | 15.8 | 18.1 | 20.6 | 22.8                                                                                    | 24.3 | 25.7 | 26.9 | 27.8 | 28.6                   | 29.5 | 30    | 29.7 | 29.2                | 28.1 | 26.5 | 23.7 | 21.9 | 20.6  | 13.4    | 30.0    | 22.3    |               |  |
| Jul 8                                                                                                   | 20                                             | 18.9 | 18.6 | 17.8                  | 16.6 | 16.8 | 18.8 | 20.7 | 22.9 | 24.8                                                                                    | 25.8 | 27.3 | 27.8 | 28   | 28.4                   | 28.6 | 28.4  | 27.8 | 26.5                | 24.3 | 22.2 | 20   | 17.7 | 16.4  | 16.4    | 28.6    | 22.7    |               |  |
| Jul 9                                                                                                   | 16                                             | 14.7 | 14.9 | 14.7                  | 14.2 | 13.9 | 14.8 | 16.9 | 19.2 | 20.9                                                                                    | 22.7 | 24.2 | 26   | 27.7 | 28.6                   | 29.6 | 29.8  | 29.8 | 29.1                | 27.9 | 24.9 | 20.7 | 19.4 | 20.2  | 13.9    | 29.8    | 21.7    |               |  |
| Jul 10                                                                                                  | 19.2                                           | 17.9 | 16.7 | 16.7                  | 17.1 | 16.3 | 18.5 | 20.8 | 22   | 21.4                                                                                    | 21.6 | 22.5 | 22.9 | 22.2 | 22.8                   | 22.3 | 22.7  | 22.4 | 22.5                | 21.6 | 20.5 | 18.1 | 17.5 | 16.6  | 16.3    | 22.9    | 20.1    |               |  |
| Jul 11                                                                                                  | 14.8                                           | 13.5 | 13.2 | 12.4                  | 11.6 | 12.5 | 14.4 | 15.9 | 17.1 | 17.7                                                                                    | 18.2 | 20.6 | 21.4 | 21.9 | 22.9                   | 23   | 22.9  | 22.7 | 22.7                | 22.5 | 20.5 | 15.3 | 13.2 | 13.3  | 11.6    | 23.0    | 17.7    |               |  |
| Jul 12                                                                                                  | 12.3                                           | 10.2 | 8.8  | 9.3                   | 8.5  | 8.3  | 11.6 | 15.6 | 18.3 | 20.1                                                                                    | 21.5 | 22.7 | 23.7 | 24.5 | 25.3                   | 25.9 | 26.3  | 26.2 | 26                  | 22.9 | 20.5 | 19.1 | 18.7 | 18    | 8.3     | 26.3    | 18.5    |               |  |
| Jul 13                                                                                                  | 16.5                                           | 15.9 | 15.3 | 14.9                  | 14.7 | 14.5 | 15.2 | 17.7 | 20.6 | 22.6                                                                                    | 24.1 | 24.5 | 26.1 | 27.9 | 28.7                   | 29   | 28.9  | 28.8 | 28.5                | 27.1 | 24.9 | 23.3 | 21.6 | 20.2  | 14.5    | 29.0    | 22.1    |               |  |
| Jul 14                                                                                                  | 19.2                                           | 18.3 | 17.3 | 15.3                  | 13.3 | 13.2 | 16.4 | 17.4 | 19.3 | 21.3                                                                                    | 22.4 | 24.2 | 25.5 | 26.1 | 27.7                   | 28.8 | 29    | 27.9 | 27.6                | 26.5 | 22.1 | 21.6 | 17.4 | 17.9  | 13.2    | 29.0    | 21.5    |               |  |
| Jul 15                                                                                                  | 16.2                                           | 16.2 | 14.4 | 14.3                  | 14.6 | 15.5 | 16.3 | 16.3 | 17.8 | 19.3                                                                                    | 20.3 | 19.8 | 20.3 | 21.4 | 21.9                   | 22.3 | 22.3  | 22   | 21.6                | 20.8 | 19.2 | 17.2 | 15.7 | 14    | 14.0    | 22.3    | 18.3    |               |  |
| Jul 16                                                                                                  | 11.9                                           | 10.6 | 10   | 9.3                   | 8.1  | 7.6  | 8.5  | 9    | 9.9  | 11.1                                                                                    | 11.7 | 12.1 | 12.6 | 13   | 12.4                   | 11.7 | 11.8  | 11.9 | 12.1                | 12   | 11.8 | 11.5 | 11.4 | 11.5  | 7.6     | 13.0    | 11.0    |               |  |
| Jul 17                                                                                                  | 11.2                                           | 9.8  | 8.7  | 8.2                   | 8.1  | 8    | 8    | 8.2  | 8.5  | 8.8                                                                                     | 9.2  | 9.3  | 9.6  | 9.8  | 10.2                   | 10.2 | 10.2  | 10.4 | 10.5                | 10.5 | 10.4 | 10.2 | 10.3 | 10.3  | 8.0     | 11.2    | 9.5     |               |  |
| Jul 18                                                                                                  | 10.2                                           | 10.2 | 10.2 | 10.2                  | 10   | 10   | 10.1 | 10.5 | 10.8 | 11.4                                                                                    | 12.4 | 13   | 14.2 | 14.8 | 15.3                   | 15   | 15    | 15.2 | 15                  | 14.7 | 14.6 | 14.1 | 13.3 | 13    | 10.0    | 15.3    | 12.6    |               |  |
| Jul 19                                                                                                  | 12.8                                           | 12.9 | 12.7 | 12.6                  | 12.6 | 12.5 | 12.6 | 13.2 | 15.3 | 16                                                                                      | 17.1 | 17.7 | 17.9 | 18.1 | 17.6                   | 18.2 | 18.4  | 18.7 | 18.5                | 17.7 | 16.7 | 15.2 | 14.1 | 11.8  | 11.8    | 18.7    | 15.5    |               |  |
| Jul 20                                                                                                  | 10.8                                           | 10.1 | 10.1 | 9.7                   | 9.4  | 9.5  | 11.2 | 12.5 | 14.3 | 15.2                                                                                    | 16.2 | 17.9 | 18.2 | 19.3 | 19.8                   | 20.2 | 18.8  | 17   | 16.8                | 17.1 | 16.4 | 15.5 | 15.2 | 14.8  | 9.4     | 20.2    | 14.8    |               |  |
| Jul 21                                                                                                  | 15.3                                           | 15.1 | 14.1 | 13.6                  | 13.5 | 12.6 | 12.9 | 14.2 | 15.5 | 17.1                                                                                    | 18.5 | 19   | 18.6 | 18.8 | 18.8                   | 18.2 | 17.9  | 18   | 17.4                | 12.7 | 12   | 11.4 | 11.1 | 11.1  | 11.1    | 19.0    | 15.3    |               |  |
| Jul 22                                                                                                  | 10.7                                           | 10.7 | 11.1 | 10.7                  | 9.4  | 9.2  | 10   | 11.4 | 13.5 | 14.5                                                                                    | 14.8 | 15.4 | 15.6 | 15.8 | 16.4                   | 17.2 | 17.3  | 16.6 | 16                  | 15.8 | 14.8 | 13.9 | 12.7 | 13.5  | 9.2     | 17.3    | 13.6    |               |  |
| Jul 23                                                                                                  | 13.3                                           | 12.3 | 12.1 | 12.5                  | 12.9 | 13.1 | 13.2 | 13.1 | 13.1 | 13.2                                                                                    | 13.9 | 16.3 | 18   | 20.2 | 21.3                   | 21.2 | 20.7  | 20.8 | 19.5                | 18.1 | 16.8 | 16.2 | 15.3 | 13.9  | 12.1    | 21.3    | 15.9    |               |  |
| Jul 24                                                                                                  | 12.8                                           | 12.1 | 11.5 | 11.1                  | 11.2 | 11.7 | 12.4 | 14   | 15.4 | 17.1                                                                                    | 18.7 | 19.8 | 20.7 | 21.5 | 21.8                   | 22.2 | 22.2  | 22.1 | 21.9                | 21.1 | 18.8 | 14.9 | 11.7 | 13.4  | 11.1    | 22.2    | 16.7    |               |  |
| Jul 25                                                                                                  | 13                                             | 10.7 | 10.7 | 9.8                   | 8.3  | 10.3 | 11.4 | 13.3 | 14.9 | 16.4                                                                                    | 17.8 | 19.4 | 20.8 | 21.7 | 22.3                   | 22.7 | 22.9  | 22.8 | 22.4                | 21.2 | 18.7 | 16.5 | 14.5 | 12.7  | 8.3     | 22.9    | 16.5    |               |  |
| Jul 26                                                                                                  | 11.7                                           | 11.9 | 10.7 | 9.7                   | 8.8  | 8.6  | 10.4 | 13.3 | 15.2 | 16.8                                                                                    | 18.4 | 20.1 | 20.9 | 21.6 | 22.4                   | 22.5 | 22.5  | 21.6 | 21.7                | 20.8 | 18.5 | 16   | 15.4 | 14.4  | 8.6     | 22.5    | 16.4    |               |  |
| Jul 27                                                                                                  | 13.7                                           | 13.8 | 13.7 | 12.1                  | 11.6 | 11.5 | 12.4 | 14.2 | 15.5 | 16.7                                                                                    | 18.1 | 19.3 | 20.4 | 21.4 | 22                     | 22.7 | 23.1  | 20.8 | 20.6                | 20.8 | 18.7 | 15.7 | 13.5 | 11.5  | 11.5    | 23.1    | 16.8    |               |  |
| Jul 28                                                                                                  | 11.9                                           | 11.1 | 9.8  | 8.8                   | 7.9  | 8.4  | 11.7 | 14.5 | 16.6 | 18.1                                                                                    | 19.7 | 21.1 | 22.2 | 23.1 | 23.8                   | 24.1 | 24.4  | 24.3 | 24.3                | 23.1 | 21   | 16.6 | 14   | 13.2  | 7.9     | 24.4    | 17.2    |               |  |
| Jul 29                                                                                                  | 12.9                                           | 12.1 | 11.7 | 10                    | 10.5 | 10.6 | 12.5 | 16   | 17.8 | 19.9                                                                                    | 20.9 | 22.4 | 23.9 | 24.3 | 25.6                   | 26.7 | 26.6  | 26.2 | 25.6                | 24.8 | 21.1 | 17.7 | 15.4 | 15.6  | 10.0    | 26.7    | 18.8    |               |  |
| Jul 30                                                                                                  | 14.4                                           | 12.1 | 11.4 | 10.8                  | 9.1  | 9.4  | 13.4 | 19   | 22   | 23.7                                                                                    | 25   | 26   | 26.9 | 27.4 | 28                     | 28.2 | 28.4  | 28.3 | 28.1                | 27.2 | 22.6 | 19.1 | 19   | 15.9  | 9.1     | 28.4    | 20.6    |               |  |
| Jul 31                                                                                                  | 16                                             | 17.5 | 15.6 | 17.2                  | 16.7 | 15.9 | 17.5 | 20.5 | 23.7 | 26                                                                                      | 27.4 | 28.1 | 29.2 | 29.9 | 30.8                   | 30.9 | 31.2  | 31   | 29.8                | 28   | 26.4 | 24.3 | 23   | 21.1  | 15.6    | 31.2    | 24.1    |               |  |
| Diurnal Maximum                                                                                         | 27.4                                           | 26.8 | 23.9 | 22.7                  | 22.3 | 23.1 | 23.8 | 24.6 | 25.8 | 27.2                                                                                    | 27.4 | 28.1 | 29.2 | 29.9 | 30.8                   | 30.9 | 31.2  | 31.0 | 29.8                | 28.1 | 26.5 | 24.3 | 23.0 | 21.1  |         |         |         |               |  |
| Diurnal Average                                                                                         | 14.5                                           | 13.7 | 12.9 | 12.4                  | 11.8 | 12.1 | 13.5 | 15.4 | 17.0 | 18.3                                                                                    | 19.3 | 20.3 | 21.1 | 21.9 | 22.5                   | 22.8 | 22.7  | 22.4 | 22.1                | 21.0 | 19.3 | 17.1 | 15.7 | 15.0  |         |         |         |               |  |
| C                                                                                                       | Monthly Calibration                            |      |      |                       |      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |                        |      |       | Q    | Quality Assurance   |      |      |      |      |       |         |         |         |               |  |
| K                                                                                                       | Collection Error                               |      |      |                       |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |                        |      |       | Y    | Routine Maintenance |      |      |      |      |       |         |         | P       | Power Failure |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |                       |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |                        |      |       |      |                     |      |      |      |      |       |         |         |         |               |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |                       |      |      |      |      |      |                                                                                         |      |      |      |      |                        |      |       |      |                     |      |      |      |      |       |         |         |         |               |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |                       |      |      |      |      |      |                                                                                         |      |      |      |      |                        |      |       |      |                     |      |      |      |      |       |         |         |         |               |  |

***Timeseries Chart of Hourly Average for AT - 842b Station***





# PEACE RIVER AREA MONITORING PROGRAM

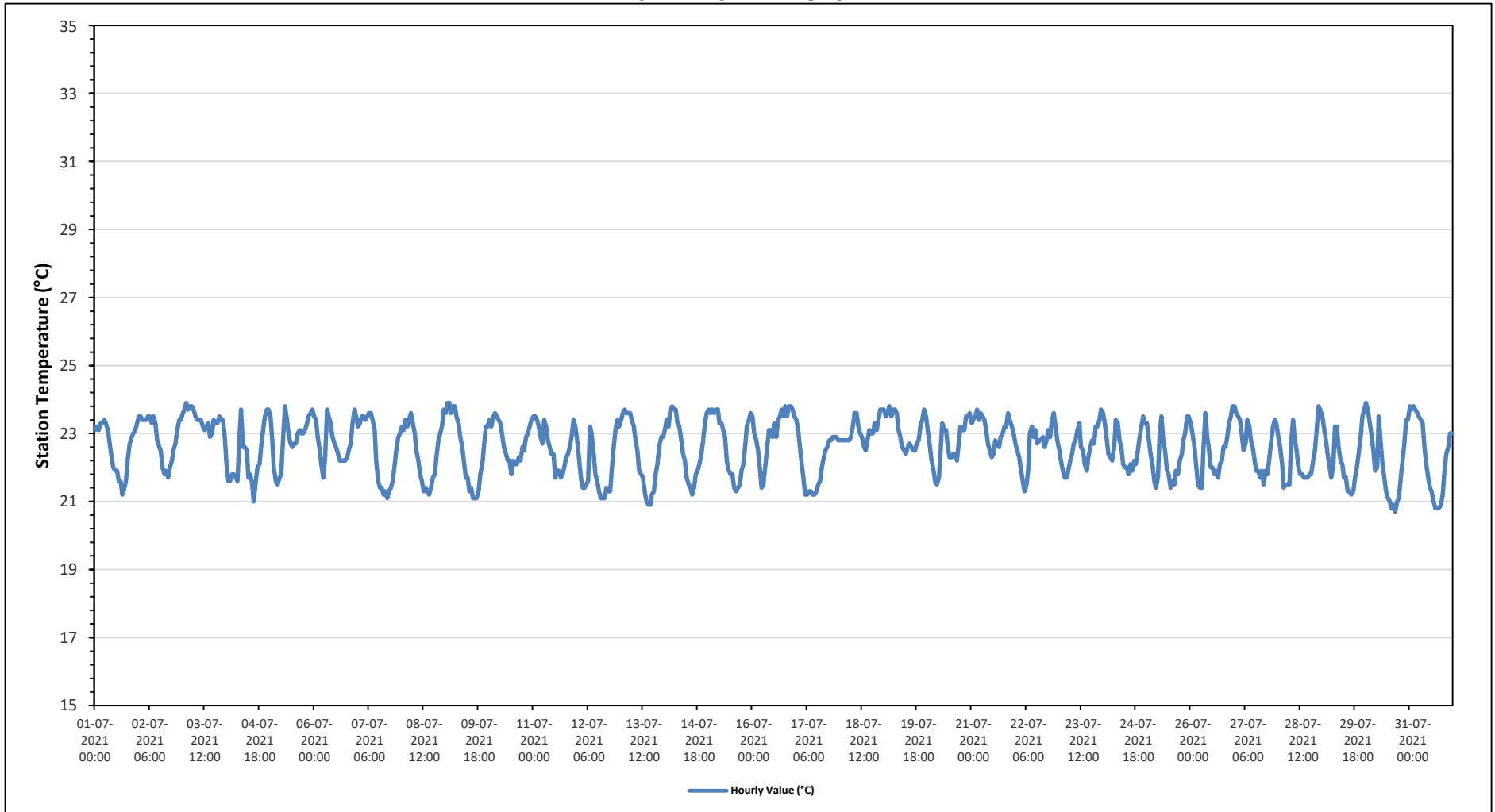
842b Station - July 2021

Summary of Hourly Averages

## STATION TEMPERATURE (ST) in Degree Celsius

|                                                                                                         |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |                       |      |      |      |      |                        |      |      |      |      |      |      |       |               |         |         |  |  |  |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|-----------------------|------|------|------|------|------------------------|------|------|------|------|------|------|-------|---------------|---------|---------|--|--|--|--|
| Maximum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |                                                                                         | 23.9 | °C   | on July 3 at hour 2   |      |      |      |      | Hours in Service:      |      |      |      |      |      |      |       |               |         | 744     |  |  |  |  |
| Maximum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | 23.4 | °C   | on July 3             |      |      |      |      | Hours of Data:         |      |      |      |      |      |      |       |               |         | 744     |  |  |  |  |
| Minimum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |                                                                                         | 20.7 | °C   | on July 30 at hour 16 |      |      |      |      | Hours of Missing Data: |      |      |      |      |      |      |       |               |         | 0       |  |  |  |  |
| Minimum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | 22.0 | °C   | on July 12            |      |      |      |      | Hours of Calibration:  |      |      |      |      |      |      |       |               |         | 0       |  |  |  |  |
| Monthly Average:                                                                                        |                                                |      |      |      |      |      |      |      |                                                                                         | 22.6 | °C   |                       |      |      |      |      | Operational Uptime:    |      |      |      |      |      |      |       |               |         | 100.0   |  |  |  |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |      |      |      |      |                                                                                         |      |      |                       |      |      |      |      |                        |      |      |      |      |      |      | Daily | Daily         | Daily   |         |  |  |  |  |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8                                                                                       | 9    | 10   | 11                    | 12   | 13   | 14   | 15   | 16                     | 17   | 18   | 19   | 20   | 21   | 22   | 23    | Minimum       | Maximum | Average |  |  |  |  |
| Jul 1                                                                                                   | 23.1                                           | 23.2 | 23.1 | 23.3 | 23.3 | 23.4 | 23.3 | 23.1 | 22.7                                                                                    | 22.3 | 22.0 | 21.9                  | 21.9 | 21.6 | 21.6 | 21.2 | 21.4                   | 21.6 | 22.3 | 22.7 | 22.9 | 23.0 | 23.1 | 23.3  | 21.2          | 23.4    | 22.6    |  |  |  |  |
| Jul 2                                                                                                   | 23.5                                           | 23.5 | 23.4 | 23.4 | 23.4 | 23.5 | 23.5 | 23.3 | 23.5                                                                                    | 23.3 | 22.8 | 22.6                  | 22.5 | 22.0 | 21.8 | 21.9 | 21.7                   | 22.0 | 22.2 | 22.5 | 22.7 | 23.1 | 23.4 | 23.4  | 21.7          | 23.5    | 22.9    |  |  |  |  |
| Jul 3                                                                                                   | 23.6                                           | 23.7 | 23.9 | 23.7 | 23.8 | 23.8 | 23.7 | 23.5 | 23.4                                                                                    | 23.4 | 23.4 | 23.2                  | 23.1 | 23.2 | 23.3 | 22.9 | 23.0                   | 23.4 | 23.3 | 23.3 | 23.5 | 23.4 | 23.4 | 22.9  | 22.9          | 23.9    | 23.4    |  |  |  |  |
| Jul 4                                                                                                   | 22.1                                           | 21.6 | 21.6 | 21.8 | 21.8 | 21.7 | 21.6 | 22.9 | 23.7                                                                                    | 22.6 | 22.6 | 22.5                  | 21.7 | 21.8 | 21.5 | 21.0 | 21.6                   | 22.0 | 22.1 | 22.6 | 23.1 | 23.5 | 23.7 | 23.7  | 21.0          | 23.7    | 22.3    |  |  |  |  |
| Jul 5                                                                                                   | 23.5                                           | 22.8 | 22.0 | 21.6 | 21.5 | 21.7 | 21.8 | 22.9 | 23.8                                                                                    | 23.4 | 23.0 | 22.7                  | 22.6 | 22.7 | 22.7 | 23.0 | 23.1                   | 23.0 | 23.0 | 23.1 | 23.3 | 23.5 | 23.6 | 23.7  | 21.5          | 23.8    | 22.8    |  |  |  |  |
| Jul 6                                                                                                   | 23.5                                           | 23.4 | 22.9 | 22.5 | 22.1 | 21.7 | 22.3 | 23.7 | 23.5                                                                                    | 23.3 | 22.9 | 22.7                  | 22.6 | 22.4 | 22.2 | 22.2 | 22.2                   | 22.2 | 22.3 | 22.5 | 22.7 | 23.3 | 23.7 | 23.5  | 21.7          | 23.7    | 22.8    |  |  |  |  |
| Jul 7                                                                                                   | 23.2                                           | 23.3 | 23.5 | 23.5 | 23.4 | 23.5 | 23.6 | 23.6 | 23.4                                                                                    | 23.1 | 22.2 | 21.6                  | 21.4 | 21.4 | 21.2 | 21.3 | 21.1                   | 21.3 | 21.4 | 21.6 | 22.1 | 22.5 | 22.9 | 23.0  | 21.1          | 23.6    | 22.5    |  |  |  |  |
| Jul 8                                                                                                   | 23.2                                           | 23.1 | 23.4 | 23.2 | 23.4 | 23.6 | 23.3 | 23.0 | 22.5                                                                                    | 22.2 | 21.8 | 21.6                  | 21.3 | 21.4 | 21.3 | 21.2 | 21.4                   | 21.7 | 21.8 | 22.3 | 22.8 | 23.0 | 23.2 | 23.7  | 21.2          | 23.7    | 22.5    |  |  |  |  |
| Jul 9                                                                                                   | 23.6                                           | 23.9 | 23.9 | 23.6 | 23.8 | 23.8 | 23.5 | 23.3 | 22.9                                                                                    | 22.6 | 22.2 | 21.7                  | 21.7 | 21.3 | 21.4 | 21.1 | 21.1                   | 21.1 | 21.3 | 21.8 | 22.1 | 22.6 | 23.2 | 23.2  | 21.1          | 23.9    | 22.5    |  |  |  |  |
| Jul 10                                                                                                  | 23.4                                           | 23.2 | 23.5 | 23.6 | 23.5 | 23.4 | 23.3 | 22.9 | 22.6                                                                                    | 22.4 | 22.2 | 22.2                  | 21.8 | 22.2 | 22.1 | 22.1 | 22.3                   | 22.2 | 22.6 | 22.5 | 22.9 | 23.0 | 23.2 | 23.4  | 21.8          | 23.6    | 22.8    |  |  |  |  |
| Jul 11                                                                                                  | 23.5                                           | 23.5 | 23.4 | 23.2 | 22.9 | 22.7 | 23.4 | 23.2 | 22.8                                                                                    | 22.6 | 22.4 | 22.4                  | 21.7 | 21.9 | 21.9 | 21.7 | 21.8                   | 22.0 | 22.3 | 22.4 | 22.6 | 22.9 | 23.4 | 23.2  | 21.7          | 23.5    | 22.7    |  |  |  |  |
| Jul 12                                                                                                  | 22.8                                           | 22.3 | 21.7 | 21.4 | 21.4 | 21.5 | 21.6 | 23.2 | 23.0                                                                                    | 22.4 | 21.8 | 21.6                  | 21.3 | 21.1 | 21.1 | 21.1 | 21.4                   | 21.3 | 21.3 | 21.9 | 22.6 | 23.1 | 23.4 | 23.2  | 21.1          | 23.4    | 22.0    |  |  |  |  |
| Jul 13                                                                                                  | 23.4                                           | 23.6 | 23.7 | 23.6 | 23.6 | 23.6 | 23.4 | 23.2 | 22.8                                                                                    | 22.5 | 21.9 | 21.8                  | 21.7 | 21.3 | 21.0 | 20.9 | 20.9                   | 21.2 | 21.3 | 21.8 | 22.1 | 22.6 | 22.9 | 22.9  | 20.9          | 23.7    | 22.4    |  |  |  |  |
| Jul 14                                                                                                  | 23.1                                           | 23.4 | 23.2 | 23.7 | 23.8 | 23.7 | 23.7 | 23.3 | 23.2                                                                                    | 22.8 | 22.4 | 22.2                  | 21.7 | 21.5 | 21.4 | 21.2 | 21.4                   | 21.8 | 21.9 | 22.1 | 22.4 | 22.8 | 23.3 | 23.6  | 21.2          | 23.8    | 22.7    |  |  |  |  |
| Jul 15                                                                                                  | 23.7                                           | 23.6 | 23.7 | 23.6 | 23.7 | 23.7 | 23.3 | 23.3 | 23.1                                                                                    | 22.9 | 22.2 | 21.9                  | 21.8 | 21.8 | 21.4 | 21.3 | 21.4                   | 21.5 | 21.9 | 22.1 | 22.6 | 23.2 | 23.4 | 23.6  | 21.3          | 23.7    | 22.7    |  |  |  |  |
| Jul 16                                                                                                  | 23.5                                           | 23.0 | 22.8 | 22.5 | 22.0 | 21.4 | 21.5 | 22.0 | 22.5                                                                                    | 23.1 | 23.1 | 22.9                  | 23.3 | 22.9 | 23.4 | 23.5 | 23.7                   | 23.5 | 23.8 | 23.5 | 23.8 | 23.8 | 23.7 | 23.5  | 21.4          | 23.8    | 23.0    |  |  |  |  |
| Jul 17                                                                                                  | 23.4                                           | 23.1 | 22.6 | 22.1 | 21.6 | 21.2 | 21.2 | 21.3 | 21.3                                                                                    | 21.2 | 21.2 | 21.3                  | 21.5 | 21.6 | 22.0 | 22.3 | 22.5                   | 22.6 | 22.8 | 22.8 | 22.9 | 22.9 | 22.9 | 22.8  | 21.2          | 23.4    | 22.1    |  |  |  |  |
| Jul 18                                                                                                  | 22.8                                           | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.9 | 23.2 | 23.6                                                                                    | 23.6 | 23.2 | 23.0                  | 22.9 | 22.6 | 22.5 | 22.8 | 23.1                   | 23.0 | 23.0 | 23.3 | 23.1 | 23.4 | 23.7 | 23.7  | 22.5          | 23.7    | 23.1    |  |  |  |  |
| Jul 19                                                                                                  | 23.7                                           | 23.5 | 23.6 | 23.8 | 23.5 | 23.7 | 23.7 | 23.6 | 23.1                                                                                    | 22.9 | 22.6 | 22.5                  | 22.4 | 22.6 | 22.7 | 22.6 | 22.5                   | 22.5 | 22.7 | 22.8 | 23.2 | 23.4 | 23.7 | 23.5  | 22.4          | 23.8    | 23.1    |  |  |  |  |
| Jul 20                                                                                                  | 23.1                                           | 22.7 | 22.2 | 22.0 | 21.6 | 21.5 | 21.7 | 22.4 | 23.3                                                                                    | 23.1 | 23.1 | 22.6                  | 22.3 | 22.3 | 22.4 | 22.4 | 22.2                   | 22.8 | 23.2 | 23.1 | 23.1 | 23.5 | 23.5 | 23.6  | 21.5          | 23.6    | 22.7    |  |  |  |  |
| Jul 21                                                                                                  | 23.3                                           | 23.4 | 23.5 | 23.7 | 23.4 | 23.6 | 23.5 | 23.4 | 23.1                                                                                    | 22.7 | 22.5 | 22.3                  | 22.4 | 22.8 | 22.7 | 22.6 | 22.9                   | 23.0 | 23.2 | 23.2 | 23.6 | 23.4 | 23.2 | 23.0  | 22.3          | 23.7    | 23.1    |  |  |  |  |
| Jul 22                                                                                                  | 22.7                                           | 22.5 | 22.3 | 22.0 | 21.6 | 21.3 | 21.5 | 21.9 | 23.0                                                                                    | 23.2 | 22.9 | 23.1                  | 22.7 | 22.8 | 22.8 | 22.9 | 22.6                   | 22.8 | 23.1 | 22.9 | 23.4 | 23.6 | 23.2 | 22.8  | 21.3          | 23.6    | 22.7    |  |  |  |  |
| Jul 23                                                                                                  | 22.5                                           | 22.2 | 21.9 | 21.7 | 21.7 | 21.9 | 22.2 | 22.4 | 22.7                                                                                    | 22.8 | 23.1 | 23.3                  | 22.6 | 22.5 | 22.1 | 21.9 | 22.3                   | 22.6 | 22.8 | 22.7 | 23.2 | 23.2 | 23.4 | 23.7  | 21.7          | 23.7    | 22.6    |  |  |  |  |
| Jul 24                                                                                                  | 23.6                                           | 23.3 | 22.8 | 22.4 | 22.3 | 22.2 | 22.6 | 23.4 | 23.3                                                                                    | 22.8 | 22.6 | 22.1                  | 22.0 | 22.0 | 21.8 | 22.1 | 21.9                   | 22.2 | 22.1 | 22.5 | 22.9 | 23.2 | 23.5 | 23.3  | 21.8          | 23.6    | 22.6    |  |  |  |  |
| Jul 25                                                                                                  | 23.3                                           | 22.9 | 22.4 | 22.1 | 21.6 | 21.4 | 21.7 | 23.0 | 23.5                                                                                    | 22.8 | 22.5 | 21.9                  | 21.8 | 21.4 | 21.6 | 21.5 | 21.9                   | 21.8 | 22.2 | 22.4 | 22.8 | 23.0 | 23.5 | 23.5  | 21.4          | 23.5    | 22.4    |  |  |  |  |
| Jul 26                                                                                                  | 23.3                                           | 23.0 | 22.6 | 22.1 | 21.5 | 21.4 | 21.4 | 22.5 | 23.6                                                                                    | 22.9 | 22.6 | 22.0                  | 22.0 | 21.8 | 21.9 | 21.7 | 22.1                   | 22.2 | 22.6 | 22.6 | 22.9 | 23.3 | 23.5 | 23.8  | 21.4          | 23.8    | 22.5    |  |  |  |  |
| Jul 27                                                                                                  | 23.8                                           | 23.6 | 23.5 | 23.4 | 22.9 | 22.5 | 22.7 | 23.4 | 23.2                                                                                    | 22.8 | 22.6 | 22.2                  | 21.9 | 21.9 | 21.7 | 21.9 | 21.5                   | 21.9 | 21.8 | 22.3 | 22.7 | 23.2 | 23.4 | 23.3  | 21.5          | 23.8    | 22.7    |  |  |  |  |
| Jul 28                                                                                                  | 22.9                                           | 22.6 | 22.1 | 21.4 | 21.5 | 21.5 | 21.5 | 22.7 | 23.4                                                                                    | 22.8 | 22.5 | 22.0                  | 21.8 | 21.8 | 21.7 | 21.7 | 21.7                   | 21.8 | 21.8 | 22.2 | 22.5 | 23.1 | 23.8 | 23.7  | 21.4          | 23.8    | 22.3    |  |  |  |  |
| Jul 29                                                                                                  | 23.5                                           | 23.2 | 22.8 | 22.4 | 22.0 | 21.7 | 22.0 | 23.2 | 23.2                                                                                    | 22.6 | 22.2 | 22.1                  | 21.7 | 21.7 | 21.3 | 21.3 | 21.2                   | 21.3 | 21.7 | 22.0 | 22.4 | 22.9 | 23.5 | 23.7  | 21.2          | 23.7    | 22.3    |  |  |  |  |
| Jul 30                                                                                                  | 23.9                                           | 23.7 | 23.3 | 23.0 | 22.5 | 21.9 | 22.0 | 23.5 | 22.7                                                                                    | 22.1 | 21.7 | 21.3                  | 21.1 | 21.0 | 20.8 | 20.9 | 20.7                   | 21.0 | 21.1 | 21.7 | 22.2 | 22.7 | 23.4 | 23.4  | 20.7          | 23.9    | 22.2    |  |  |  |  |
| Jul 31                                                                                                  | 23.8                                           | 23.7 | 23.8 | 23.7 | 23.6 | 23.5 | 23.4 | 23.3 | 22.6                                                                                    | 22.1 | 21.7 | 21.4                  | 21.3 | 21.0 | 20.8 | 20.8 | 20.8                   | 20.9 | 21.2 | 21.9 | 22.4 | 22.6 | 23.0 | 23.0  | 20.8          | 23.8    | 22.3    |  |  |  |  |
| Diurnal Maximum                                                                                         | 23.9                                           | 23.9 | 23.9 | 23.8 | 23.8 | 23.8 | 23.7 | 23.7 | 23.8                                                                                    | 23.6 | 23.4 | 23.3                  | 23.3 | 23.2 | 23.4 | 23.5 | 23.7                   | 23.5 | 23.8 | 23.8 | 23.8 | 23.8 | 23.8 |       |               |         |         |  |  |  |  |
| Diurnal Average                                                                                         | 23.3                                           | 23.1 | 23.0 | 22.8 | 22.6 | 22.5 | 22.6 | 23.0 | 23.1                                                                                    | 22.8 | 22.4 | 22.2                  | 22.0 | 21.9 | 21.9 | 21.8 | 21.9                   | 22.1 | 22.3 | 22.5 | 22.8 | 23.1 | 23.4 | 23.4  |               |         |         |  |  |  |  |
| C                                                                                                       | Monthly Calibration                            |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |                       |      |      |      | Q    | Quality Assurance      |      |      |      |      |      |      |       |               |         |         |  |  |  |  |
| K                                                                                                       | Collection Error                               |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |                       |      |      |      | Y    | Routine Maintenance    |      |      |      |      |      |      | P     | Power Failure |         |         |  |  |  |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |      |      |      | NR   | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |                       |      |      |      |      |                        |      |      |      |      |      |      |       |               |         |         |  |  |  |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |                       |      |      |      |      |                        |      |      |      |      |      |      |       |               |         |         |  |  |  |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |                       |      |      |      |      |                        |      |      |      |      |      |      |       |               |         |         |  |  |  |  |

***Timeseries Chart of Hourly Average for ST - 842b Station***







# PEACE RIVER AREA MONITORING PROGRAM

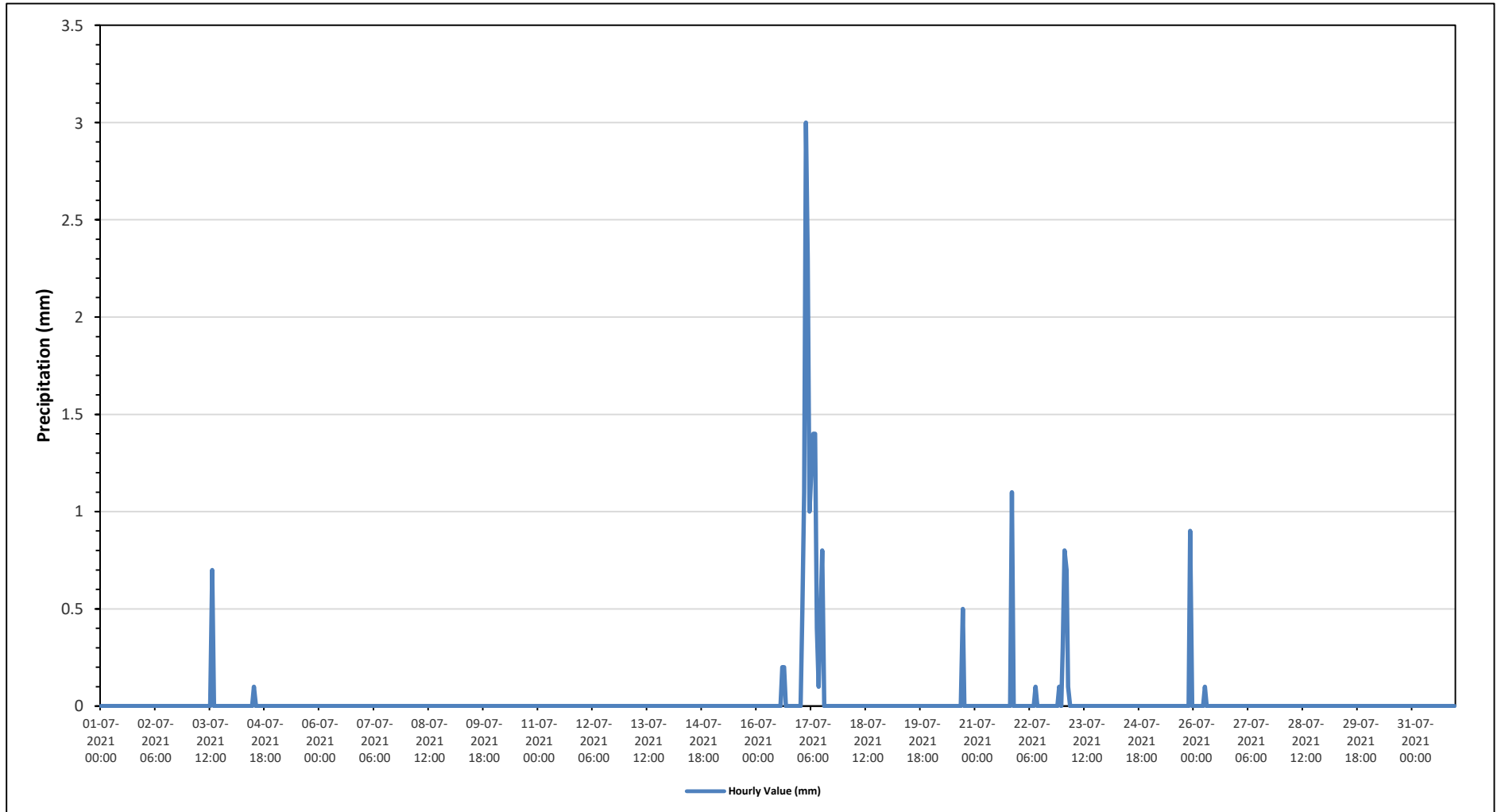
842b Station - July 2021

Summary of Hourly Averages

## PRECIPITATION in mm

|                                                                                                         |                                                |     |     |     |     |     |     |     |                                                                                         |         |     |                      |     |     |     |     |                     |     |     |     |     |                        |     |     |               |               |             |      |  |  |  |       |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----------------------------------------------------------------------------------------|---------|-----|----------------------|-----|-----|-----|-----|---------------------|-----|-----|-----|-----|------------------------|-----|-----|---------------|---------------|-------------|------|--|--|--|-------|--|
| Maximum Hourly Value:                                                                                   |                                                |     |     |     |     |     |     |     |                                                                                         | 3.0 mm  |     | on July 17 at hour 3 |     |     |     |     |                     |     |     |     |     | Hours in Service:      |     |     |               |               |             |      |  |  |  | 744   |  |
| Maximum Daily Value:                                                                                    |                                                |     |     |     |     |     |     |     |                                                                                         | 13.7 mm |     | on July 17           |     |     |     |     |                     |     |     |     |     | Hours of Data:         |     |     |               |               |             |      |  |  |  | 744   |  |
| Minimum Hourly Value:                                                                                   |                                                |     |     |     |     |     |     |     |                                                                                         | 0.0 mm  |     | on July 1 at hour 0  |     |     |     |     |                     |     |     |     |     | Hours of Missing Data: |     |     |               |               |             |      |  |  |  | 0     |  |
| Minimum Daily Value:                                                                                    |                                                |     |     |     |     |     |     |     |                                                                                         | 0.0 mm  |     | on July 1            |     |     |     |     |                     |     |     |     |     | Hours of Calibration:  |     |     |               |               |             |      |  |  |  | 0     |  |
| Monthly Total:                                                                                          |                                                |     |     |     |     |     |     |     |                                                                                         | 19.6 mm |     |                      |     |     |     |     |                     |     |     |     |     | Operational Uptime:    |     |     |               |               |             |      |  |  |  | 100.0 |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |     |     |     |     |     |     |     |                                                                                         |         |     |                      |     |     |     |     |                     |     |     |     |     |                        |     |     | Daily Minimum | Daily Maximum | Daily Total |      |  |  |  |       |  |
|                                                                                                         | 0                                              | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8                                                                                       | 9       | 10  | 11                   | 12  | 13  | 14  | 15  | 16                  | 17  | 18  | 19  | 20  | 21                     | 22  | 23  |               |               |             |      |  |  |  |       |  |
| Jul 1                                                                                                   | 0                                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0       | 0   | 0                    | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0                      | 0   | 0   | 0             | 0.0           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 2                                                                                                   | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 3                                                                                                   | 0                                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0       | 0   | 0                    | 0   | 0.7 | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0                      | 0   | 0   | 0             | 0.0           | 0.7         | 0.7  |  |  |  |       |  |
| Jul 4                                                                                                   | 0                                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0       | 0   | 0                    | 0.1 | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0                      | 0   | 0   | 0             | 0.0           | 0.1         | 0.1  |  |  |  |       |  |
| Jul 5                                                                                                   | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 6                                                                                                   | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 7                                                                                                   | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 8                                                                                                   | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 9                                                                                                   | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 10                                                                                                  | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 11                                                                                                  | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 12                                                                                                  | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 13                                                                                                  | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 14                                                                                                  | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 15                                                                                                  | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 16                                                                                                  | 0                                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0       | 0   | 0                    | 0   | 0   | 0.2 | 0.2 | 0                   | 0   | 0   | 0   | 0   | 0                      | 0   | 0   | 0             | 0.0           | 0.2         | 0.4  |  |  |  |       |  |
| Jul 17                                                                                                  | 0                                              | 0.5 | 1.1 | 3   | 2.3 | 1   | 1.2 | 1.4 | 1.4                                                                                     | 0.4     | 0.1 | 0.5                  | 0.8 | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0                      | 0   | 0   | 0             | 0.0           | 3.0         | 13.7 |  |  |  |       |  |
| Jul 18                                                                                                  | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 19                                                                                                  | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 20                                                                                                  | 0                                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0       | 0   | 0                    | 0   | 0   | 0   | 0   | 0                   | 0.5 | 0   | 0   | 0   | 0                      | 0   | 0   | 0             | 0.0           | 0.5         | 0.5  |  |  |  |       |  |
| Jul 21                                                                                                  | 0                                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0       | 0   | 0                    | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 1.1 | 0                      | 0   | 0   | 0             | 0.0           | 1.1         | 1.1  |  |  |  |       |  |
| Jul 22                                                                                                  | 0                                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0.1     | 0   | 0                    | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0                      | 0.1 | 0   | 0             | 0.0           | 0.1         | 0.2  |  |  |  |       |  |
| Jul 23                                                                                                  | 0.3                                            | 0.8 | 0.7 | 0.1 | 0   | 0   | 0   | 0   | 0                                                                                       | 0       | 0   | 0                    | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0                      | 0   | 0   | 0             | 0.0           | 0.8         | 1.9  |  |  |  |       |  |
| Jul 24                                                                                                  | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 25                                                                                                  | 0                                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0       | 0   | 0                    | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0                      | 0.9 | 0   | 0             | 0.0           | 0.9         | 0.9  |  |  |  |       |  |
| Jul 26                                                                                                  | 0                                              | 0   | 0   | 0   | 0   | 0   | 0.1 | 0   | 0                                                                                       | 0       | 0   | 0                    | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0                      | 0   | 0   | 0             | 0.0           | 0.1         | 0.1  |  |  |  |       |  |
| Jul 27                                                                                                  | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 28                                                                                                  | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 29                                                                                                  | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 30                                                                                                  | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Jul 31                                                                                                  | 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           | 0.0         | 0.0  |  |  |  |       |  |
| Diurnal Maximum                                                                                         | 0.3                                            | 0.8 | 1.1 | 3.0 | 2.3 | 1.0 | 1.2 | 1.4 | 1.4                                                                                     | 0.4     | 0.1 | 0.5                  | 0.8 | 0.7 | 0.2 | 0.2 | 0.0                 | 0.5 | 0.0 | 0.0 | 1.1 | 0.0                    | 0.9 | 0.0 |               |               |             |      |  |  |  |       |  |
| Diurnal Average                                                                                         | 0.0                                            | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0                                                                                     | 0.0     | 0.0 | 0.0                  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0                    | 0.0 |     |               |               |             |      |  |  |  |       |  |
| C                                                                                                       | Monthly Calibration                            |     |     |     |     |     |     | S   | Daily Zero-Span Check                                                                   |         |     |                      |     |     |     | Q   | Quality Assurance   |     |     |     |     |                        |     |     |               |               |             |      |  |  |  |       |  |
| K                                                                                                       | Collection Error                               |     |     |     |     |     |     | N   | No Data (Machine Not in Service)                                                        |         |     |                      |     |     |     | Y   | Routine Maintenance |     |     |     |     |                        |     | P   | Power Failure |               |             |      |  |  |  |       |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |     |     |     |     |     |     | NRM | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |         |     |                      |     |     |     |     |                     |     |     |     |     |                        |     |     |               |               |             |      |  |  |  |       |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |     |     |     |     |     |     |     |                                                                                         |         |     |                      |     |     |     |     |                     |     |     |     |     |                        |     |     |               |               |             |      |  |  |  |       |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |     |     |     |     |     |     |     |                                                                                         |         |     |                      |     |     |     |     |                     |     |     |     |     |                        |     |     |               |               |             |      |  |  |  |       |  |

***Timeseries Chart of Hourly Average for Precipitation - 842b Station***





# PEACE RIVER AREA MONITORING PROGRAM

842b Station - July 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

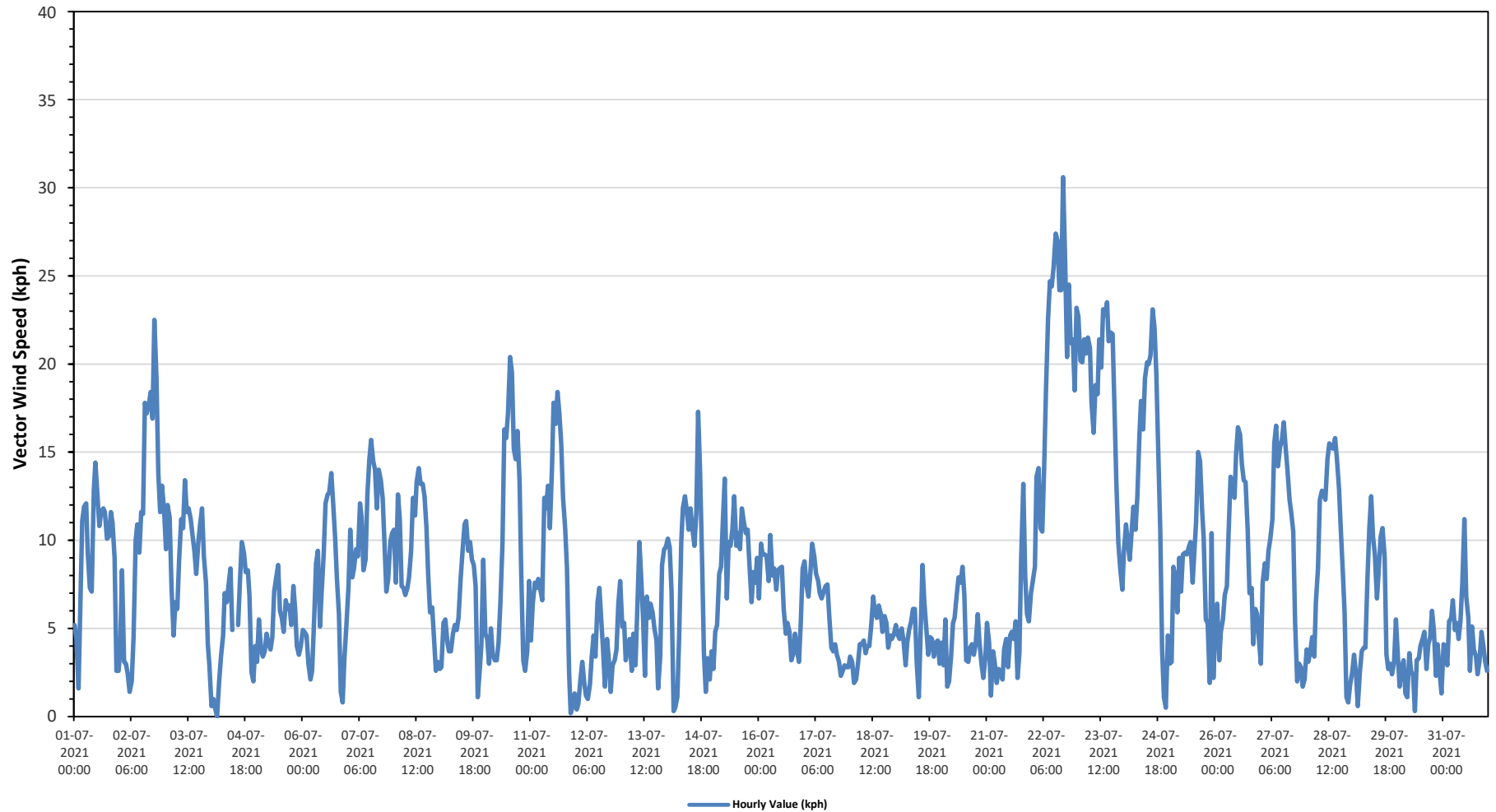
|                       |      |     |                       |                        |       |
|-----------------------|------|-----|-----------------------|------------------------|-------|
| Maximum Hourly Value: | 30.6 | kph | on July 22 at hour 16 | Hours in Service:      | 744   |
| Maximum Daily Value:  | 19.3 | kph | on July 22            | Hours of Data:         | 742   |
| Minimum Hourly Value: | 0.0  | kph | on July 4 at hour 3   | Hours of Missing Data: | 0     |
| Minimum Daily Value:  | 0.8  | kph | on July 12            | Hours of Calibration:  | 2     |
| Monthly Average:      | 3.3  | kph |                       | Operational Uptime:    | 100.0 |

| Day             | Hourly Period Starting at (MST) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | Daily Minimum | Daily Maximum | Daily Average |      |
|-----------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|---------------|---------------|------|
|                 | 0                               | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23            |               |               |      |
| Jul 1           | 5.2                             | 4.4  | 1.6  | 5.7  | 11.1 | 11.9 | 12.1 | 9.3  | 7.3  | 7.1  | 12.8 | 14.4 | 12.5 | 10.8 | 11.6 | 11.8 | 11.6 | 10.1 | 10.2 | 11.6 | 11.0 | 9.0  | 2.6  | 2.6           | 1.6           | 14.4          | 7.7  |
| Jul 2           | 3.7                             | 8.3  | 3.1  | 3.0  | 2.4  | 1.4  | 2.0  | 4.5  | 10.0 | 10.9 | 9.3  | 11.6 | 11.5 | 17.8 | 17.2 | 17.7 | 18.4 | 16.9 | 22.5 | 19.2 | 13.8 | 11.6 | 13.1 | 11.7          | 1.4           | 22.5          | 10.1 |
| Jul 3           | 9.5                             | 12.0 | 11.3 | 7.4  | 4.6  | 6.5  | 6.1  | 8.9  | 11.2 | 10.7 | 13.4 | 11.6 | 11.8 | 11.2 | 10.4 | 9.4  | 8.1  | 9.9  | 10.8 | 11.8 | 9.1  | 7.6  | 4.1  | 2.9           | 2.9           | 13.4          | 7.8  |
| Jul 4           | 0.6                             | 1.0  | 0.4  | 0.0  | 2.0  | 3.4  | 4.6  | 7.0  | 6.5  | 7.5  | 8.4  | 4.9  | C    | C    | 5.2  | 7.7  | 9.9  | 9.3  | 8.2  | 8.3  | 6.9  | 2.5  | 2.0  | 4.0           | 0.0           | 9.9           | 4.1  |
| Jul 5           | 3.1                             | 5.5  | 3.8  | 3.4  | 3.7  | 4.7  | 4.1  | 3.8  | 4.5  | 7.1  | 7.8  | 8.6  | 6.0  | 5.6  | 4.8  | 6.6  | 6.1  | 6.3  | 5.2  | 7.4  | 6.0  | 4.0  | 3.5  | 4.0           | 3.1           | 8.6           | 5.0  |
| Jul 6           | 4.9                             | 4.8  | 4.6  | 3.0  | 2.1  | 2.6  | 5.6  | 8.7  | 9.4  | 5.1  | 7.0  | 9.2  | 12.1 | 12.6 | 12.7 | 13.8 | 12.1 | 10.0 | 7.9  | 5.8  | 1.4  | 0.8  | 3.4  | 5.1           | 0.8           | 13.8          | 4.6  |
| Jul 7           | 7.3                             | 10.6 | 7.9  | 8.4  | 9.5  | 9.1  | 12.1 | 11.3 | 8.3  | 8.9  | 12.6 | 14.5 | 15.7 | 14.5 | 14.0 | 11.8 | 14.0 | 13.4 | 12.4 | 9.8  | 7.1  | 7.8  | 9.9  | 10.4          | 7.1           | 15.7          | 9.7  |
| Jul 8           | 10.6                            | 7.6  | 12.6 | 11.2 | 7.4  | 7.3  | 6.9  | 7.3  | 7.9  | 9.4  | 12.4 | 11.4 | 13.3 | 14.1 | 13.2 | 13.2 | 12.5 | 10.8 | 8.0  | 5.9  | 6.2  | 4.7  | 2.6  | 3.1           | 2.6           | 14.1          | 7.8  |
| Jul 9           | 2.7                             | 2.8  | 5.3  | 5.5  | 4.2  | 3.7  | 3.7  | 4.7  | 5.2  | 4.9  | 5.6  | 7.8  | 9.3  | 10.9 | 11.1 | 9.4  | 9.9  | 8.9  | 8.6  | 7.4  | 1.1  | 2.5  | 4.1  | 8.9           | 1.1           | 11.1          | 5.3  |
| Jul 10          | 4.7                             | 4.4  | 3.0  | 5.0  | 3.5  | 3.2  | 3.2  | 4.2  | 6.4  | 9.8  | 16.3 | 15.8 | 17.2 | 20.4 | 19.5 | 15.2 | 14.6 | 16.2 | 13.3 | 8.3  | 3.2  | 2.6  | 3.7  | 7.7           | 2.6           | 20.4          | 7.6  |
| Jul 11          | 4.3                             | 6.4  | 7.6  | 7.3  | 7.8  | 7.2  | 6.6  | 12.4 | 11.8 | 13.1 | 10.7 | 14.1 | 17.8 | 16.6 | 18.4 | 17.2 | 15.5 | 12.4 | 10.7 | 8.4  | 2.5  | 0.2  | 0.6  | 1.3           | 0.2           | 18.4          | 9.0  |
| Jul 12          | 0.4                             | 0.7  | 2.1  | 3.1  | 2.0  | 1.2  | 1.0  | 1.8  | 3.4  | 4.6  | 3.4  | 6.5  | 7.3  | 5.5  | 3.8  | 1.7  | 4.4  | 3.2  | 1.4  | 2.9  | 3.2  | 3.8  | 6.4  | 7.7           | 0.4           | 7.7           | 0.8  |
| Jul 13          | 5.1                             | 5.3  | 3.2  | 3.9  | 4.4  | 2.6  | 4.7  | 2.9  | 6.1  | 9.9  | 7.8  | 5.5  | 2.3  | 6.8  | 5.6  | 6.4  | 5.9  | 5.0  | 4.3  | 1.6  | 3.4  | 8.6  | 9.5  | 9.6           | 1.6           | 9.9           | 3.8  |
| Jul 14          | 10.1                            | 9.6  | 7.1  | 0.3  | 0.5  | 1.1  | 4.6  | 9.9  | 11.8 | 12.5 | 11.7 | 10.6 | 11.8 | 10.7 | 9.7  | 11.5 | 17.3 | 14.1 | 8.9  | 3.6  | 1.4  | 3.3  | 2.1  | 3.7           | 0.3           | 17.3          | 6.1  |
| Jul 15          | 2.7                             | 4.8  | 5.2  | 8.1  | 8.5  | 11.1 | 13.5 | 6.7  | 9.9  | 9.7  | 10.6 | 12.5 | 9.7  | 10.4 | 9.5  | 11.8 | 11.0 | 10.4 | 10.6 | 8.6  | 6.5  | 8.2  | 7.6  | 9.0           | 2.7           | 13.5          | 3.9  |
| Jul 16          | 6.7                             | 9.8  | 9.2  | 9.2  | 9.1  | 7.7  | 10.3 | 8.0  | 8.4  | 7.2  | 8.3  | 8.4  | 8.5  | 6.1  | 4.7  | 5.3  | 4.8  | 3.2  | 3.6  | 4.7  | 3.7  | 3.1  | 5.4  | 8.4           | 3.1           | 10.3          | 6.4  |
| Jul 17          | 8.8                             | 7.4  | 6.8  | 8.1  | 9.8  | 9.1  | 8.1  | 7.7  | 7.0  | 6.7  | 7.1  | 7.4  | 7.5  | 5.7  | 3.9  | 3.7  | 4.1  | 3.5  | 3.1  | 2.3  | 2.6  | 2.9  | 2.8  | 2.8           | 2.3           | 9.8           | 5.7  |
| Jul 18          | 3.4                             | 3.1  | 1.9  | 2.1  | 3.0  | 4.1  | 4.1  | 4.3  | 3.6  | 4.0  | 4.0  | 5.1  | 6.8  | 5.9  | 5.6  | 6.3  | 5.8  | 4.8  | 5.7  | 5.3  | 3.9  | 4.6  | 4.4  | 4.7           | 1.9           | 6.8           | 4.3  |
| Jul 19          | 5.2                             | 4.6  | 4.4  | 5.0  | 4.3  | 2.9  | 4.2  | 4.9  | 5.4  | 6.1  | 6.1  | 3.1  | 1.1  | 4.8  | 8.6  | 6.5  | 4.9  | 3.5  | 4.5  | 4.4  | 3.4  | 4.2  | 4.3  | 3.0           | 1.1           | 8.6           | 3.2  |
| Jul 20          | 4.2                             | 2.9  | 5.5  | 1.7  | 2.0  | 3.5  | 5.3  | 5.6  | 6.9  | 7.9  | 7.6  | 8.5  | 6.9  | 3.2  | 3.1  | 3.9  | 4.1  | 3.5  | 4.1  | 5.8  | 4.3  | 3.0  | 2.2  | 3.4           | 1.7           | 8.5           | 3.8  |
| Jul 21          | 5.3                             | 4.2  | 1.2  | 3.7  | 3.1  | 1.9  | 2.7  | 2.5  | 2.1  | 3.8  | 4.4  | 2.8  | 4.6  | 4.8  | 4.4  | 5.4  | 2.2  | 3.6  | 9.1  | 13.2 | 8.0  | 5.8  | 5.4  | 7.0           | 1.2           | 13.2          | 2.8  |
| Jul 22          | 7.7                             | 8.5  | 13.6 | 14.1 | 10.7 | 10.5 | 14.1 | 18.5 | 22.6 | 24.7 | 24.4 | 25.5 | 27.4 | 27.0 | 24.2 | 24.2 | 30.6 | 25.7 | 20.4 | 24.5 | 21.2 | 21.4 | 18.5 | 23.2          | 7.7           | 30.6          | 19.3 |
| Jul 23          | 22.7                            | 20.2 | 20.1 | 21.4 | 20.6 | 21.5 | 20.9 | 17.8 | 16.1 | 18.8 | 18.3 | 21.4 | 19.8 | 23.1 | 22.8 | 23.5 | 21.3 | 21.8 | 21.7 | 17.0 | 13.4 | 9.8  | 8.4  | 7.2           | 7.2           | 23.5          | 18.6 |
| Jul 24          | 9.4                             | 10.9 | 9.8  | 8.9  | 10.4 | 11.9 | 10.6 | 12.5 | 16.0 | 17.9 | 16.3 | 19.2 | 20.1 | 20.0 | 20.5 | 23.1 | 22.1 | 19.5 | 15.3 | 10.6 | 3.8  | 1.1  | 0.5  | 4.6           | 0.5           | 23.1          | 12.1 |
| Jul 25          | 3.0                             | 3.1  | 8.5  | 7.9  | 5.9  | 9.0  | 7.1  | 9.2  | 9.3  | 9.2  | 9.6  | 9.9  | 7.6  | 9.5  | 11.0 | 15.0 | 14.5 | 11.7 | 10.1 | 5.5  | 5.3  | 1.9  | 10.4 | 2.2           | 1.9           | 15.0          | 6.1  |
| Jul 26          | 5.6                             | 6.4  | 3.2  | 4.8  | 5.5  | 6.9  | 7.4  | 10.2 | 13.6 | 13.2 | 12.4 | 14.9 | 16.4 | 16.0 | 14.3 | 13.4 | 13.3 | 10.6 | 7.0  | 7.3  | 4.1  | 6.1  | 5.8  | 4.3           | 3.2           | 16.4          | 8.2  |
| Jul 27          | 3.0                             | 7.6  | 8.7  | 7.8  | 9.4  | 10.1 | 11.2 | 15.5 | 16.5 | 14.2 | 15.3 | 15.7 | 16.7 | 15.3 | 14.0 | 12.3 | 11.5 | 10.5 | 5.4  | 2.0  | 3.0  | 2.8  | 1.7  | 2.1           | 1.7           | 16.7          | 7.3  |
| Jul 28          | 3.8                             | 3.1  | 3.7  | 4.5  | 3.4  | 6.5  | 8.4  | 12.3 | 12.8 | 12.6 | 12.3 | 14.6 | 15.5 | 15.3 | 15.2 | 15.8 | 14.6 | 12.9 | 10.8 | 8.3  | 5.9  | 1.1  | 0.8  | 1.8           | 0.8           | 15.8          | 7.3  |
| Jul 29          | 2.5                             | 3.5  | 2.3  | 0.6  | 2.5  | 3.7  | 3.9  | 3.9  | 7.9  | 10.7 | 12.5 | 10.2 | 9.2  | 6.7  | 8.4  | 10.2 | 10.7 | 9.1  | 3.5  | 2.7  | 3.0  | 2.4  | 3.1  | 5.5           | 0.6           | 12.5          | 3.5  |
| Jul 30          | 3.5                             | 1.7  | 2.8  | 3.2  | 1.3  | 1.1  | 3.6  | 2.5  | 2.4  | 0.3  | 3.2  | 3.3  | 4.0  | 4.4  | 4.8  | 2.7  | 4.1  | 4.5  | 6.0  | 4.9  | 2.3  | 4.1  | 2.5  | 1.3           | 0.3           | 6.0           | 1.4  |
| Jul 31          | 4.1                             | 4.0  | 2.9  | 5.4  | 5.6  | 6.6  | 4.9  | 5.3  | 4.4  | 5.4  | 7.5  | 11.2 | 6.8  | 5.6  | 2.6  | 5.1  | 3.8  | 3.4  | 2.4  | 3.1  | 4.8  | 4.0  | 3.1  | 2.6           | 2.4           | 11.2          | 4.3  |
| Diurnal Maximum | 23                              | 20   | 20   | 21   | 21   | 22   | 21   | 19   | 23   | 25   | 24   | 26   | 27   | 27   | 24   | 24   | 31   | 26   | 23   | 25   | 21   | 21   | 19   | 23            |               |               |      |
| Diurnal Average | 5.6                             | 6.1  | 5.9  | 5.9  | 5.8  | 6.3  | 7.0  | 7.9  | 8.9  | 9.5  | 10.3 | 11.0 | 11.2 | 11.4 | 10.8 | 11.0 | 11.1 | 10.0 | 8.9  | 7.8  | 5.7  | 5.0  | 5.0  | 5.7           |               |               |      |

|          |                                                |            |                                                                                         |          |                     |
|----------|------------------------------------------------|------------|-----------------------------------------------------------------------------------------|----------|---------------------|
| <b>C</b> | Monthly Calibration                            | <b>S</b>   | Daily Zero-Span Check                                                                   | <b>Q</b> | Quality Assurance   |
| <b>K</b> | Collection Error                               | <b>N</b>   | No Data (Machine Not in Service)                                                        | <b>Y</b> | Routine Maintenance |
| <b>X</b> | InValid Data (Equipment Malfunction /Recovery) | <b>NRM</b> | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) | <b>P</b> | Power Failure       |

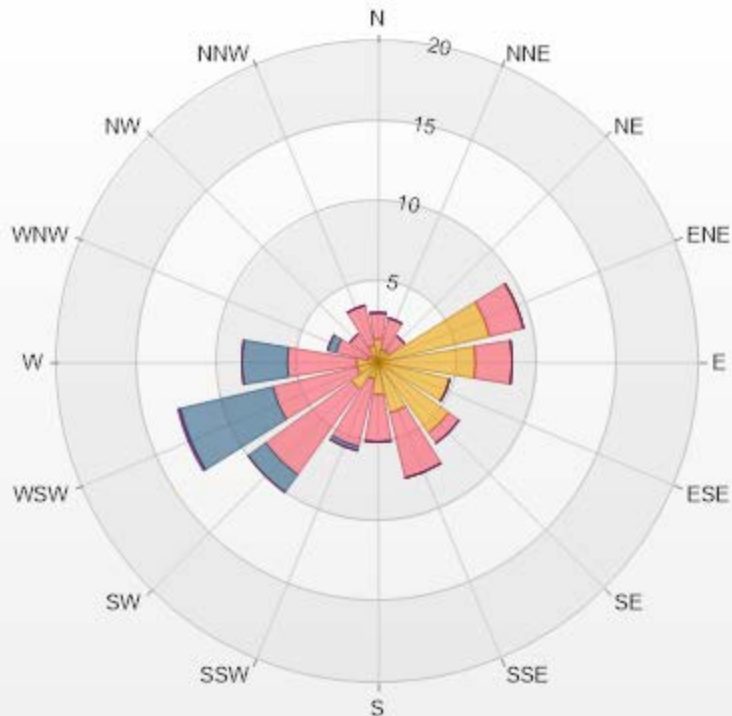
Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.  
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

***Timeseries Chart of Hourly Average for VWS - 842b Station***



Wind: PRAMP 842b Monitor: WDS [KPH] Monthly: 07-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 5.26% Valid Data: 99.73%

| Direction | 1.8-6.0 | 6.0-15.0 | 15.0-29.0 | 29.0-39.0 | >39.0 | Total |
|-----------|---------|----------|-----------|-----------|-------|-------|
| N         | 1.48    | 1.62     | 0         | 0         | 0     | 3.1   |
| NNE       | 0.81    | 2.02     | 0         | 0         | 0     | 2.83  |
| NE        | 0.81    | 1.21     | 0         | 0         | 0     | 2.02  |
| ENE       | 7.14    | 2.16     | 0         | 0         | 0     | 9.3   |
| E         | 6.06    | 2.29     | 0         | 0         | 0     | 8.35  |
| ESE       | 4.58    | 0        | 0         | 0         | 0     | 4.58  |
| SE        | 5.39    | 0.81     | 0         | 0         | 0     | 6.2   |
| SSE       | 3.23    | 4.18     | 0         | 0         | 0     | 7.41  |
| S         | 2.02    | 2.96     | 0         | 0         | 0     | 4.98  |
| SSW       | 1.08    | 4.31     | 0.27      | 0         | 0     | 5.66  |
| SW        | 2.02    | 6.6      | 1.35      | 0         | 0     | 9.97  |
| WSW       | 1.35    | 5.39     | 5.93      | 0.13      | 0     | 12.8  |
| W         | 1.35    | 4.31     | 2.83      | 0         | 0     | 8.49  |
| WNW       | 0.67    | 2.02     | 0.54      | 0         | 0     | 3.23  |
| NW        | 0.27    | 1.89     | 0         | 0         | 0     | 2.16  |
| NNW       | 1.08    | 2.56     | 0         | 0         | 0     | 3.64  |
| Summary   | 39.34   | 44.33    | 10.92     | 0.13      | 0     | 94.72 |



PRAMP-202107

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% Icon Classes (KPH)

39

1.8-6.0

44

6.0-15.0

11

15.0-29.0

0

29.0-39.0

0

>39.0



# PEACE RIVER AREA MONITORING PROGRAM

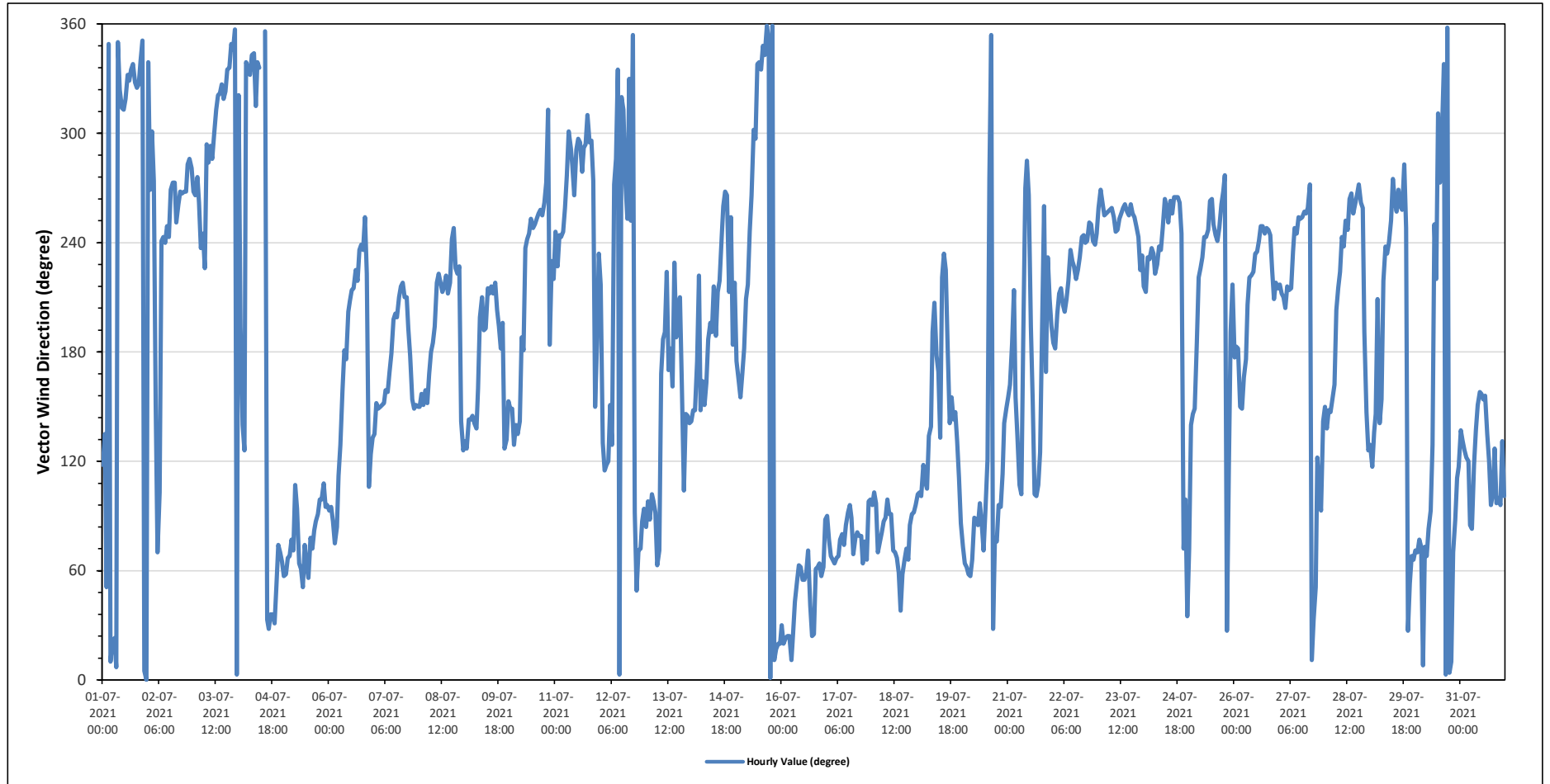
842b Station - July 2021

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

|                                                                                                         |                                              |     |     |     |     |     |     |                                                                                         |     |                 |     |     |     |     |                     |     |     |     |     |                        |     |               |     |               |        |          |  |  |  |       |  |  |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------|-----|-----|-----|-----|-----|-----|-----------------------------------------------------------------------------------------|-----|-----------------|-----|-----|-----|-----|---------------------|-----|-----|-----|-----|------------------------|-----|---------------|-----|---------------|--------|----------|--|--|--|-------|--|--|--|--|--|--|--|--|--|
| Monthly Average:                                                                                        |                                              |     |     |     |     |     |     |                                                                                         |     | 236 (SW) degree |     |     |     |     |                     |     |     |     |     | Hours in Service:      |     |               |     |               |        |          |  |  |  | 744   |  |  |  |  |  |  |  |  |  |
|                                                                                                         |                                              |     |     |     |     |     |     |                                                                                         |     |                 |     |     |     |     |                     |     |     |     |     | Hours of Data:         |     |               |     |               |        |          |  |  |  | 742   |  |  |  |  |  |  |  |  |  |
|                                                                                                         |                                              |     |     |     |     |     |     |                                                                                         |     |                 |     |     |     |     |                     |     |     |     |     | Hours of Missing Data: |     |               |     |               |        |          |  |  |  | 0     |  |  |  |  |  |  |  |  |  |
|                                                                                                         |                                              |     |     |     |     |     |     |                                                                                         |     |                 |     |     |     |     |                     |     |     |     |     | Hours of Calibration:  |     |               |     |               |        |          |  |  |  | 2     |  |  |  |  |  |  |  |  |  |
|                                                                                                         |                                              |     |     |     |     |     |     |                                                                                         |     |                 |     |     |     |     |                     |     |     |     |     | Operational Uptime:    |     |               |     |               |        |          |  |  |  | 100.0 |  |  |  |  |  |  |  |  |  |
| Day                                                                                                     | Hourly Period Starting at (MST)              |     |     |     |     |     |     |                                                                                         |     |                 |     |     |     |     |                     |     |     |     |     |                        |     |               |     | Daily Average |        |          |  |  |  |       |  |  |  |  |  |  |  |  |  |
|                                                                                                         | 0                                            | 1   | 2   | 3   | 4   | 5   | 6   | 7                                                                                       | 8   | 9               | 10  | 11  | 12  | 13  | 14                  | 15  | 16  | 17  | 18  | 19                     | 20  | 21            | 22  | 23            | Degree | Quadrant |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 1                                                                                                   | ESE                                          | SE  | NE  | NNW | N   | NNE | NNE | N                                                                                       | N   | NW              | NW  | NW  | NW  | NNW | NNW                 | NNW | NNW | NNW | NW  | NW                     | NNW | N             | N   | N             | 342    | NNW      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 2                                                                                                   | NNW                                          | W   | WNW | W   | SSE | ENE | ESE | WSW                                                                                     | WSW | WSW             | WSW | WSW | W   | W   | W                   | WSW | W   | W   | W   | W                      | W   | W             | WNW | W             | 266    | W        |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 3                                                                                                   | W                                            | W   | W   | W   | SW  | WSW | SW  | WNW                                                                                     | WNW | WNW             | WNW | WNW | NW  | NW  | NW                  | NW  | NW  | NW  | NNW | NNW                    | NNW | NNW           | N   | N             | 302    | WNW      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 4                                                                                                   | NW                                           | SSW | SE  | SE  | NNW | NNW | NNW | NNW                                                                                     | NNW | NW              | NNW | NNW | C   | C   | N                   | NNE | NNE | NE  | NE  | NNE                    | NE  | ENE           | ENE | ENE           | 11     | NNE      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 5                                                                                                   | ENE                                          | ENE | ENE | ENE | ENE | ENE | ESE | E                                                                                       | ENE | ENE             | NE  | ENE | ENE | NE  | ENE                 | ENE | E   | E   | E   | E                      | E   | ESE           | E   | E             | 77     | ENE      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 6                                                                                                   | E                                            | E   | E   | ENE | E   | ESE | SE  | SSE                                                                                     | S   | S               | SSW | SSW | SSW | SSW | SW                  | SW  | SW  | WSW | SW  | WSW                    | SW  | ESE           | ESE | SE            | 198    | SSW      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 7                                                                                                   | SE                                           | SSE | SSE | SSE | SSE | SSE | SSE | SSE                                                                                     | SSE | S               | SSW | SSW | SSW | SSW | SW                  | SW  | SSW | SSW | S   | S                      | SSE | SSE           | SSE | SSE           | 180    | S        |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 8                                                                                                   | SSE                                          | SSE | SSE | SSE | SSE | SSE | S   | S                                                                                       | SSW | SW              | SW  | SW  | SSW | SW  | SW                  | SSW | SW  | WSW | WSW | SW                     | SW  | SW            | SE  | SE            | 200    | SSW      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 9                                                                                                   | SE                                           | SE  | SE  | SE  | SE  | SE  | SE  | SSE                                                                                     | SSW | SSW             | S   | S   | SSW | SSW | SW                  | SSW | SW  | SSW | SSW | S                      | SSW | SE            | SE  | SSE           | 186    | S        |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 10                                                                                                  | SSE                                          | SSE | SE  | SE  | SE  | SE  | S   | S                                                                                       | SW  | WSW             | WSW | WSW | WSW | WSW | WSW                 | WSW | WSW | WSW | W   | W                      | NW  | S             | SW  | SW            | 242    | WSW      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 11                                                                                                  | WSW                                          | SW  | WSW | WSW | WSW | WSW | W   | WNW                                                                                     | WNW | W               | W   | WNW | WNW | WNW | W                   | WNW | WNW | NW  | WNW | WNW                    | W   | SSE           | S   | SW            | 283    | W        |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 12                                                                                                  | SW                                           | SE  | ESE | ESE | ESE | SSE | SE  | W                                                                                       | WNW | NNW             | N   | NW  | NW  | W   | WSW                 | NNW | WSW | N   | E   | NE                     | ENE | ENE           | E   | E             | 4      | N        |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 13                                                                                                  | E                                            | E   | E   | E   | E   | E   | ENE | ENE                                                                                     | SSE | S               | S   | SW  | SSE | S   | SSE                 | SW  | S   | SSW | SSW | SSE                    | ESE | SE            | SE  | SE            | 155    | SSE      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 14                                                                                                  | SE                                           | SE  | SE  | S   | SW  | SE  | SSE | SSE                                                                                     | SSE | S               | SSW | S   | SW  | S   | SSW                 | SW  | WSW | WSW | W   | W                      | SSW | WSW           | S   | SW            | 200    | SSW      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 15                                                                                                  | S                                            | SSE | SSE | SSE | S   | SSW | SW  | WSW                                                                                     | W   | WNW             | WNW | NNW | NNW | NNW | NNW                 | NNW | N   | N   | N   | N                      | NNE | NNE           | NNE | NNE           | 326    | NW       |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 16                                                                                                  | NNE                                          | NNE | NNE | NNE | NNE | NNE | NNE | NE                                                                                      | NE  | ENE             | ENE | NE  | NE  | ENE | ENE                 | NE  | NNE | NNE | ENE | ENE                    | ENE | ENE           | ENE | E             | 44     | NE       |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 17                                                                                                  | E                                            | ENE | ENE | ENE | ENE | ENE | ENE | ENE                                                                                     | E   | ENE             | E   | E   | E   | E   | ENE                 | ENE | E   | ENE | ENE | ENE                    | ENE | E             | E   | E             | 78     | ENE      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 18                                                                                                  | E                                            | ESE | E   | ENE | ENE | E   | E   | E                                                                                       | E   | E               | E   | ENE | ENE | ENE | ENE                 | NE  | ENE | ENE | ENE | ENE                    | E   | E             | E   | E             | 77     | ENE      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 19                                                                                                  | E                                            | ESE | E   | ESE | ESE | ESE | SE  | SE                                                                                      | S   | SSW             | S   | SSE | SE  | SW  | SW                  | SW  | S   | SE  | SSE | SE                     | SE  | SE            | ESE | E             | 155    | SSE      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 20                                                                                                  | ENE                                          | ENE | ENE | ENE | ENE | ENE | E   | E                                                                                       | E   | E               | ENE | E   | ESE | W   | N                   | NNE | ENE | ENE | E   | E                      | ESE | SE            | SSE | SSE           | 82     | E        |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 21                                                                                                  | SSE                                          | SSE | S   | SSW | SSE | SE  | ESE | E                                                                                       | S   | W               | WNW | W   | SSW | SSE | E                   | E   | ESE | SE  | S   | WSW                    | SSE | SW            | SSW | SSW           | 187    | S        |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 22                                                                                                  | S                                            | S   | SSW | SSW | SSW | SSW | SSW | SSW                                                                                     | SW  | SW              | SW  | SW  | SW  | SW  | SW                  | WSW | WSW | WSW | WSW | WSW                    | WSW | WSW           | WSW | WSW           | 230    | SW       |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 23                                                                                                  | WSW                                          | W   | W   | WSW | WSW | WSW | WSW | WSW                                                                                     | WSW | WSW             | WSW | WSW | WSW | WSW | W                   | WSW | WSW | W   | WSW | WSW                    | WSW | WSW           | SW  | SW            | 255    | WSW      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 24                                                                                                  | SW                                           | SSW | SW  | SW  | SW  | SW  | SW  | SW                                                                                      | SW  | SW              | WSW | W   | WSW | WSW | W                   | WSW | W   | W   | W   | W                      | WSW | ENE           | E   | NE            | 249    | WSW      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 25                                                                                                  | ENE                                          | SE  | SE  | SSE | S   | SW  | SW  | SW                                                                                      | WSW | WSW             | WSW | W   | W   | WSW | WSW                 | WSW | WSW | W   | W   | W                      | NNE | ESE           | S   | SW            | 235    | SW       |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 26                                                                                                  | S                                            | S   | S   | SSE | SSE | SSE | S   | SSW                                                                                     | SW  | SW              | SW  | SW  | SW  | WSW | WSW                 | WSW | WSW | WSW | WSW | WSW                    | SW  | SSW           | SW  | SSW           | 223    | SW       |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 27                                                                                                  | SW                                           | SSW | SSW | SSW | SW  | SSW | SSW | SW                                                                                      | WSW | WSW             | WSW | WSW | WSW | WSW | WSW                 | WSW | W   | NNE | NNE | NE                     | ESE | ESE           | E   | SE            | 243    | SW       |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 28                                                                                                  | SSE                                          | SE  | SE  | SE  | SSE | SSE | SSW | SSW                                                                                     | SW  | WSW             | SW  | WSW | WSW | W   | W                   | WSW | W   | W   | W   | W                      | WSW | S             | SE  | SE            | 241    | WSW      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 29                                                                                                  | SE                                           | ESE | SE  | SE  | SSW | SE  | SSE | SW                                                                                      | SW  | SW              | WSW | WSW | W   | W   | WSW                 | W   | WSW | WSW | W   | WSW                    | NNE | NE            | ENE | ENE           | 245    | WSW      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 30                                                                                                  | ENE                                          | ENE | ENE | ENE | N   | ENE | ENE | E                                                                                       | E   | SE              | WSW | SW  | NW  | W   | WNW                 | NNW | N   | N   | N   | N                      | ENE | E             | ESE | ESE           | 25     | NNE      |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Jul 31                                                                                                  | SE                                           | SE  | SE  | ESE | ESE | E   | E   | ESE                                                                                     | SE  | SSE             | SSE | SSE | SSE | SSE | SE                  | ESE | E   | E   | SE  | E                      | E   | E             | SE  | E             | 126    | SE       |  |  |  |       |  |  |  |  |  |  |  |  |  |
| C                                                                                                       | Monthly Calibration                          |     |     |     |     |     | S   | Daily Zero-Span Check                                                                   |     |                 |     |     |     | Q   | Quality Assurance   |     |     |     |     |                        | P   | Power Failure |     |               |        |          |  |  |  |       |  |  |  |  |  |  |  |  |  |
| K                                                                                                       | Collection Error                             |     |     |     |     |     | N   | No Data (Machine Not in Service)                                                        |     |                 |     |     |     | Y   | Routine Maintenance |     |     |     |     |                        |     |               |     |               |        |          |  |  |  |       |  |  |  |  |  |  |  |  |  |
| X                                                                                                       | Invalid Data (Machine Malfunction /Recovery) |     |     |     |     |     | NRM | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |     |                 |     |     |     |     |                     |     |     |     |     |                        |     |               |     |               |        |          |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                              |     |     |     |     |     |     |                                                                                         |     |                 |     |     |     |     |                     |     |     |     |     |                        |     |               |     |               |        |          |  |  |  |       |  |  |  |  |  |  |  |  |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                              |     |     |     |     |     |     |                                                                                         |     |                 |     |     |     |     |                     |     |     |     |     |                        |     |               |     |               |        |          |  |  |  |       |  |  |  |  |  |  |  |  |  |

***Timeseries Chart of Hourly Average for VWD - 842b Station***







# PEACE RIVER AREA MONITORING PROGRAM

842b Station - July 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr & WIND DIRECTION (VWD) in sector

| WIND SPEED            |                                 |                                |      |      |      |      |      |      |      |      |      |      |      |      |                        |      |      |      |      |      |      |      |      |               |               |               |      |
|-----------------------|---------------------------------|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------------------------|------|------|------|------|------|------|------|------|---------------|---------------|---------------|------|
| Maximum Hourly Value: |                                 | 30.6 kph on July 22 at hour 16 |      |      |      |      |      |      |      |      |      |      |      |      | Hours in Service:      |      | 744  |      |      |      |      |      |      |               |               |               |      |
| Maximum Daily Value:  |                                 | 19.3 kph on July 22            |      |      |      |      |      |      |      |      |      |      |      |      | Hours of Data:         |      | 742  |      |      |      |      |      |      |               |               |               |      |
| Minimum Hourly Value: |                                 | 0.0 kph on July 4 at hour 3    |      |      |      |      |      |      |      |      |      |      |      |      | Hours of Missing Data: |      | 0    |      |      |      |      |      |      |               |               |               |      |
| Minimum Daily Value:  |                                 | 0.8 kph on July 12             |      |      |      |      |      |      |      |      |      |      |      |      | Hours of Calibration:  |      | 2    |      |      |      |      |      |      |               |               |               |      |
| Monthly Average:      |                                 | 3.3 kph                        |      |      |      |      |      |      |      |      |      |      |      |      | Operational Uptime:    |      | 100  |      |      |      |      |      |      |               |               |               |      |
| WIND DIRECTION        |                                 |                                |      |      |      |      |      |      |      |      |      |      |      |      |                        |      |      |      |      |      |      |      |      |               |               |               |      |
| Monthly Average:      |                                 | 236 (SW) degree                |      |      |      |      |      |      |      |      |      |      |      |      |                        |      |      |      |      |      |      |      |      |               |               |               |      |
| Day                   | Hourly Period Starting at (MST) |                                |      |      |      |      |      |      |      |      |      |      |      |      |                        |      |      |      |      |      |      |      |      | Daily Minimum | Daily Maximum | Daily Average |      |
| Jul 1                 | 5.2                             | 4.4                            | 1.6  | 5.7  | 11.1 | 11.9 | 12.1 | 9.3  | 7.3  | 7.1  | 12.8 | 14.4 | 12.5 | 10.8 | 11.6                   | 11.8 | 11.6 | 10.1 | 10.2 | 11.6 | 11.0 | 9.0  | 2.6  | 2.6           | 1.6           | 14.4          | 7.7  |
| Jul 2                 | ESE                             | SE                             | NE   | NNW  | N    | NNE  | NNE  | N    | N    | NW   | NW   | NW   | NNW  | NNW  | NNW                    | NNW  | NNW  | NNW  | NW   | NW   | NNW  | N    | N    | N             | 1.4           | 22.5          | 10.1 |
|                       | 3.7                             | 8.3                            | 3.1  | 3.0  | 2.4  | 1.4  | 2.0  | 4.5  | 10.0 | 10.9 | 9.3  | 11.6 | 11.5 | 17.8 | 17.2                   | 17.7 | 18.4 | 16.9 | 22.5 | 19.2 | 13.8 | 11.6 | 13.1 | 11.7          |               |               |      |
| Jul 3                 | NNW                             | W                              | WNW  | W    | SSE  | ENE  | ESE  | WSW  | WSW  | WSW  | WSW  | WSW  | W    | W    | WSW                    | W    | W    | W    | W    | W    | W    | WNW  | W    | W             | 1.4           | 22.5          | 10.1 |
|                       | 9.5                             | 12.0                           | 11.3 | 7.4  | 4.6  | 6.5  | 6.1  | 8.9  | 11.2 | 10.7 | 13.4 | 11.6 | 11.8 | 11.2 | 10.4                   | 9.4  | 8.1  | 9.9  | 10.8 | 11.8 | 9.1  | 7.6  | 4.1  | 2.9           | 2.9           | 13.4          | 7.8  |
| Jul 4                 | W                               | W                              | W    | SW   | WSW  | SW   | WNW  | WNW  | WNW  | WNW  | WNW  | WNW  | NNW  | NNW  | NNW                    | NNW  | NNW  | NNW  | NNW  | NNW  | NNW  | NNW  | N    | N             | 2.9           | 13.4          | 7.8  |
|                       | 0.6                             | 1.0                            | 0.4  | 0.0  | 2.0  | 3.4  | 4.6  | 7.0  | 6.5  | 7.5  | 8.4  | 4.9  | C    | C    | 5.2                    | 7.7  | 9.9  | 9.3  | 8.2  | 8.3  | 6.9  | 2.5  | 2.0  | 4.0           | 0.0           | 9.9           | 4.1  |
| Jul 5                 | NW                              | SSW                            | SE   | SE   | NNW  | NNW  | NNW  | NNW  | NNW  | NW   | NNW  | NNW  | C    | C    | N                      | NNE  | NNE  | NE   | NE   | NNE  | NE   | ENE  | ENE  | ENE           | 3.1           | 8.6           | 5.0  |
|                       | 3.1                             | 5.5                            | 3.8  | 3.4  | 3.7  | 4.7  | 4.1  | 3.8  | 4.5  | 7.1  | 7.8  | 8.6  | 6.0  | 5.6  | 4.8                    | 6.6  | 6.1  | 6.3  | 5.2  | 7.4  | 6.0  | 4.0  | 3.5  | 4.0           | 3.1           | 8.6           | 5.0  |
| Jul 6                 | ENE                             | ENE                            | ENE  | ENE  | ENE  | ESE  | E    | ENE  | ENE  | NE   | ENE  | ENE  | NE   | ENE  | ENE                    | E    | E    | E    | E    | E    | ESE  | E    | E    | 0.8           | 13.8          | 4.6           |      |
|                       | 4.9                             | 4.8                            | 4.6  | 3.0  | 2.1  | 2.6  | 5.6  | 8.7  | 9.4  | 5.1  | 7.0  | 9.2  | 12.1 | 12.6 | 12.7                   | 13.8 | 12.1 | 10.0 | 7.9  | 5.8  | 1.4  | 0.8  | 3.4  | 5.1           | 0.8           | 13.8          | 4.6  |
| Jul 7                 | E                               | E                              | E    | ENE  | E    | ESE  | SE   | SSE  | S    | S    | SSW  | SSW  | SSW  | SSW  | SW                     | SW   | SW   | WSW  | SW   | WSW  | SW   | ESE  | ESE  | ESE           | 7.1           | 15.7          | 9.7  |
|                       | 7.3                             | 10.6                           | 7.9  | 8.4  | 9.5  | 9.1  | 12.1 | 11.3 | 8.3  | 8.9  | 12.6 | 14.5 | 15.7 | 14.5 | 14.0                   | 11.8 | 14.0 | 13.4 | 12.4 | 9.8  | 7.1  | 7.8  | 9.9  | 10.4          | 7.1           | 15.7          | 9.7  |
| Jul 8                 | SE                              | SSE                            | SSE  | SSE  | SSE  | SSE  | SSE  | SSE  | SSE  | S    | SSW  | SSW  | SSW  | SSW  | SW                     | SW   | SSW  | SSW  | S    | S    | SSE  | SSE  | SSE  | SSE           | 2.6           | 14.1          | 7.8  |
|                       | 10.6                            | 7.6                            | 12.6 | 11.2 | 7.4  | 7.3  | 6.9  | 7.3  | 7.9  | 9.4  | 12.4 | 11.4 | 13.3 | 14.1 | 13.2                   | 13.2 | 12.5 | 10.8 | 8.0  | 5.9  | 6.2  | 4.7  | 2.6  | 3.1           | 2.6           | 14.1          | 7.8  |
| Jul 9                 | SSE                             | SSE                            | SSE  | SSE  | SSE  | SSE  | S    | S    | SSW  | SW   | SW   | SW   | SSW  | SW   | SW                     | SSW  | SW   | WSW  | WSW  | SW   | SW   | SE   | SE   | SE            | 2.6           | 20.4          | 7.6  |
|                       | 2.7                             | 2.8                            | 5.3  | 5.5  | 4.2  | 3.7  | 3.7  | 4.7  | 5.2  | 4.9  | 5.6  | 7.8  | 9.3  | 10.9 | 11.1                   | 9.4  | 9.9  | 8.9  | 8.6  | 7.4  | 1.1  | 2.5  | 4.1  | 8.9           | 1.1           | 11.1          | 5.3  |
| Jul 10                | SE                              | SE                             | SE   | SE   | SE   | SE   | SSE  | SSE  | SSW  | SSW  | S    | S    | SSW  | SSW  | SW                     | SSW  | SSW  | S    | SSW  | SSW  | S    | SSW  | SE   | SE            | 2.6           | 20.4          | 7.6  |
|                       | 4.7                             | 4.4                            | 3.0  | 5.0  | 3.5  | 3.2  | 3.2  | 4.2  | 6.4  | 9.8  | 16.3 | 15.8 | 17.2 | 20.4 | 19.5                   | 15.2 | 14.6 | 16.2 | 13.3 | 8.3  | 3.2  | 2.6  | 3.7  | 7.7           | 2.6           | 20.4          | 7.6  |
| Jul 11                | SSE                             | SSE                            | SE   | SE   | SE   | SE   | S    | S    | SW   | WSW  | WSW  | WSW  | WSW  | WSW  | WSW                    | WSW  | WSW  | WSW  | W    | W    | NW   | S    | SW   | SW            | 0.2           | 18.4          | 9.0  |
|                       | 4.3                             | 6.4                            | 7.6  | 7.3  | 7.8  | 7.2  | 6.6  | 12.4 | 11.8 | 13.1 | 10.7 | 14.1 | 17.8 | 16.6 | 18.4                   | 17.2 | 15.5 | 12.4 | 10.7 | 8.4  | 2.5  | 0.2  | 0.6  | 1.3           | 0.2           | 18.4          | 9.0  |
| Jul 12                | WSW                             | SW                             | WSW  | WSW  | WSW  | WSW  | W    | WNW  | WNW  | W    | WNW  | WNW  | WNW  | WNW  | W                      | WNW  | WNW  | NW   | WNW  | WNW  | W    | SSE  | S    | SW            | 0.4           | 7.7           | 0.8  |
|                       | 0.4                             | 0.7                            | 2.1  | 3.1  | 2.0  | 1.2  | 1.0  | 1.8  | 3.4  | 4.6  | 3.4  | 6.5  | 7.3  | 5.5  | 3.8                    | 1.7  | 4.4  | 3.2  | 1.4  | 2.9  | 3.2  | 3.8  | 6.4  | 7.7           | 0.4           | 7.7           | 0.8  |
| Jul 13                | SW                              | SE                             | ESE  | ESE  | ESE  | SSE  | SE   | W    | WNW  | NNW  | N    | NNW  | NNW  | W    | WSW                    | NNW  | WSW  | N    | E    | NE   | ENE  | ENE  | E    | E             | 0.4           | 7.7           | 0.8  |
|                       | 5.1                             | 5.3                            | 3.2  | 3.9  | 4.4  | 2.6  | 4.7  | 2.9  | 6.1  | 9.9  | 7.8  | 5.5  | 2.3  | 6.8  | 5.6                    | 6.4  | 5.9  | 5.0  | 4.3  | 1.6  | 3.4  | 8.6  | 9.5  | 9.6           | 1.6           | 9.9           | 3.8  |
| Jul 14                | E                               | E                              | E    | E    | E    | E    | ENE  | ENE  | SSE  | S    | S    | SW   | SSE  | S    | SSE                    | SW   | S    | SSW  | SSW  | SSE  | ESE  | SE   | SE   | SE            | 0.3           | 17.3          | 6.1  |
|                       | 10.1                            | 9.6                            | 7.1  | 0.3  | 0.5  | 1.1  | 4.6  | 9.9  | 11.8 | 12.5 | 11.7 | 10.6 | 11.8 | 10.7 | 9.7                    | 11.5 | 17.3 | 14.1 | 8.9  | 3.6  | 1.4  | 3.3  | 2.1  | 3.7           | 0.3           | 17.3          | 6.1  |
| Jul 15                | SE                              | SE                             | SE   | S    | SW   | SE   | SSE  | SSE  | S    | SSW  | S    | SW   | S    | SSW  | SW                     | WSW  | WSW  | W    | W    | SSW  | WSW  | S    | SW   | SW            | 2.7           | 13.5          | 3.9  |
|                       | 2.7                             | 4.8                            | 5.2  | 8.1  | 8.5  | 11.1 | 13.5 | 6.7  | 9.9  | 9.7  | 10.6 | 12.5 | 9.7  | 10.4 | 9.5                    | 11.8 | 11.0 | 10.4 | 10.6 | 8.6  | 6.5  | 8.2  | 7.6  | 9.0           | 2.7           | 13.5          | 3.9  |
| Jul 16                | S                               | SSE                            | SSE  | SSE  | S    | SSW  | SW   | WSW  | W    | WNW  | WNW  | NNW  | NNW  | NNW  | NNW                    | NNW  | N    | N    | N    | N    | NNE  | NNE  | NNE  | NNE           | 3.1           | 10.3          | 6.4  |
|                       | 6.7                             | 9.8                            | 9.2  | 9.2  | 9.1  | 7.7  | 10.3 | 8.0  | 8.4  | 7.2  | 8.3  | 8.4  | 8.5  | 6.1  | 4.7                    | 5.3  | 4.8  | 3.2  | 3.6  | 4.7  | 3.7  | 3.1  | 5.4  | 8.4           | 3.1           | 10.3          | 6.4  |
| Jul 17                | NNE                             | NNE                            | NNE  | NNE  | NNE  | NNE  | NNE  | NE   | ENE  | ENE  | NE   | ENE  | NE   | ENE  | ENE                    | NE   | NNE  | NNE  | ENE  | ENE  | ENE  | ENE  | E    | E             | 2.3           | 9.8           | 5.7  |
|                       | 8.8                             | 7.4                            | 6.8  | 8.1  | 9.8  | 9.1  | 8.1  | 7.7  | 7.0  | 6.7  | 7.1  | 7.4  | 7.5  | 5.7  | 3.9                    | 3.7  | 4.1  | 3.5  | 3.1  | 2.3  | 2.6  | 2.9  | 2.8  | 2.8           | 2.3           | 9.8           | 5.7  |
| Jul 18                | E                               | ENE                            | ENE  | ENE  | ENE  | ENE  | ENE  | E    | ENE  | E    | E    | E    | E    | E    | ENE                    | ENE  | E    | ENE  | ENE  | ENE  | ENE  | ENE  | E    | E             | 1.9           | 6.8           | 4.3  |
|                       | 3.4                             | 3.1                            | 1.9  | 2.1  | 3.0  | 4.1  | 4.1  | 4.3  | 3.6  | 4.0  | 4.0  | 5.1  | 6.8  | 5.9  | 5.6                    | 6.3  | 5.8  | 4.8  | 5.7  | 5.3  | 3.9  | 4.6  | 4.4  | 4.7           | 1.9           | 6.8           | 4.3  |
| Jul 19                | E                               | ESE                            | E    | ENE  | ENE  | E    | E    | E    | E    | E    | E    | ENE  | ENE  | ENE  | ENE                    | NE   | ENE  | ENE  | ENE  | ENE  | E    | E    | E    | E             | 1.1           | 8.6           | 3.2  |
|                       | 5.2                             | 4.6                            | 4.4  | 5.0  | 4.3  | 2.9  | 4.2  | 4.9  | 5.4  | 6.1  | 6.1  | 3.1  | 1.1  | 4.8  | 8.6                    | 6.5  | 4.9  | 3.5  | 4.5  | 4.4  | 3.4  | 4.2  | 4.3  | 3.0           | 1.1           | 8.6           | 3.2  |
| Jul 20                | E                               | ESE                            | E    | ESE  | ESE  | ESE  | SE   | S    | SSW  | S    | SSE  | SE   | SW   | SW   | SW                     | S    | SE   | SSE  | SE   | SE   | SE   | ESE  | E    | E             | 1.7           | 8.5           | 3.8  |
|                       | 4.2                             | 2.9                            | 5.5  | 1.7  | 2.0  | 3.5  | 5.3  | 5.6  | 6.9  | 7.9  | 7.6  | 8.5  | 6.9  | 3.2  | 3.1                    | 3.9  | 4.1  | 3.5  | 4.1  | 5.8  | 4.3  | 3.0  | 2.2  | 3.4           | 1.7           | 8.5           | 3.8  |
|                       | ENE                             | ENE                            | ENE  | ENE  | ENE  | ENE  | E    | E    | E    | E    | E    | ENE  | E    | ESE  | W                      | N    | NNE  | ENE  | ENE  | E    | E    | ESE  | SE   | SSE           | 1.7           | 8.5           | 3.8  |



# PEACE RIVER AREA MONITORING PROGRAM

842b Station - July 2021

## Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr & WIND DIRECTION (VWD) in sector

| WIND SPEED                                                                                              |                                               |      |      |      |      |      |      |      |      |      |                                 |      |                                                                                          |      |      |      |                       |      |      |      |      |     |      |               |                     |               |                        |     |     |  |     |  |  |  |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------|------|------|------|------|------|------|------|------|------|---------------------------------|------|------------------------------------------------------------------------------------------|------|------|------|-----------------------|------|------|------|------|-----|------|---------------|---------------------|---------------|------------------------|-----|-----|--|-----|--|--|--|
| Maximum Hourly Value:                                                                                   |                                               |      |      |      |      |      |      |      |      |      |                                 |      | 30.6                                                                                     |      | kph  |      | on July 22 at hour 16 |      |      |      |      |     |      |               |                     |               | Hours in Service:      |     |     |  | 744 |  |  |  |
| Maximum Daily Value:                                                                                    |                                               |      |      |      |      |      |      |      |      |      |                                 |      | 19.3                                                                                     |      | kph  |      | on July 22            |      |      |      |      |     |      |               |                     |               | Hours of Data:         |     |     |  | 742 |  |  |  |
| Minimum Hourly Value:                                                                                   |                                               |      |      |      |      |      |      |      |      |      |                                 |      | 0.0                                                                                      |      | kph  |      | on July 4 at hour 3   |      |      |      |      |     |      |               |                     |               | Hours of Missing Data: |     |     |  | 0   |  |  |  |
| Minimum Daily Value:                                                                                    |                                               |      |      |      |      |      |      |      |      |      |                                 |      | 0.8                                                                                      |      | kph  |      | on July 12            |      |      |      |      |     |      |               |                     |               | Hours of Calibration:  |     |     |  | 2   |  |  |  |
| Monthly Average:                                                                                        |                                               |      |      |      |      |      |      |      |      |      |                                 |      | 3.3                                                                                      |      | kph  |      |                       |      |      |      |      |     |      |               |                     |               | Operational Uptime:    |     |     |  | 100 |  |  |  |
| WIND DIRECTION                                                                                          |                                               |      |      |      |      |      |      |      |      |      |                                 |      |                                                                                          |      |      |      |                       |      |      |      |      |     |      |               |                     |               |                        |     |     |  |     |  |  |  |
| Monthly Average:                                                                                        |                                               |      |      |      |      |      |      |      |      |      |                                 |      | 236                                                                                      |      | (SW) |      | degree                |      |      |      |      |     |      |               |                     |               |                        |     |     |  |     |  |  |  |
| Day                                                                                                     | 0                                             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | Hourly Period Starting at (MST) |      |                                                                                          |      |      |      |                       |      |      |      |      |     |      | Daily Minimum | Daily Maximum       | Daily Average |                        |     |     |  |     |  |  |  |
| Jul 21                                                                                                  | 5.3                                           | 4.2  | 1.2  | 3.7  | 3.1  | 1.9  | 2.7  | 2.5  | 2.1  | 3.8  | 4.4                             | 2.8  | 4.6                                                                                      | 4.8  | 4.4  | 5.4  | 2.2                   | 3.6  | 9.1  | 13.2 | 8.0  | 5.8 | 5.4  | 7.0           | 1.2                 | 13.2          | 2.8                    |     |     |  |     |  |  |  |
| Jul 22                                                                                                  | SSE                                           | SSE  | S    | SSW  | SSE  | SE   | ESE  | E    | S    | W    | WNW                             | W    | SSW                                                                                      | SSE  | E    | E    | ESE                   | SE   | S    | WSW  | SSE  | SW  | SSW  | SSW           | 7.7                 | 30.6          | 19.3                   |     |     |  |     |  |  |  |
|                                                                                                         | S                                             | S    | SSW  | SSW  | SSW  | SSW  | SSW  | SSW  | SW   | SW   | SW                              | SW   | SW                                                                                       | SW   | SW   | WSW  | WSW                   | WSW  | WSW  | WSW  | WSW  | WSW | WSW  | WSW           |                     |               |                        | WSW | WSW |  |     |  |  |  |
| Jul 23                                                                                                  | 22.7                                          | 20.2 | 20.1 | 21.4 | 20.6 | 21.5 | 20.9 | 17.8 | 16.1 | 18.8 | 18.3                            | 21.4 | 19.8                                                                                     | 23.1 | 22.8 | 23.5 | 21.3                  | 21.8 | 21.7 | 17.0 | 13.4 | 9.8 | 8.4  | 7.2           | 7.2                 | 23.5          | 18.6                   |     |     |  |     |  |  |  |
|                                                                                                         | WSW                                           | W    | W    | WSW  | WSW  | WSW  | WSW  | WSW  | WSW  | WSW  | WSW                             | WSW  | WSW                                                                                      | WSW  | W    | WSW  | WSW                   | W    | WSW  | WSW  | WSW  | WSW | SW   | SW            |                     |               |                        | WSW | WSW |  |     |  |  |  |
| Jul 24                                                                                                  | 9.4                                           | 10.9 | 9.8  | 8.9  | 10.4 | 11.9 | 10.6 | 12.5 | 16.0 | 17.9 | 16.3                            | 19.2 | 20.1                                                                                     | 20.0 | 20.5 | 23.1 | 22.1                  | 19.5 | 15.3 | 10.6 | 3.8  | 1.1 | 0.5  | 4.6           | 0.5                 | 23.1          | 12.1                   |     |     |  |     |  |  |  |
|                                                                                                         | SW                                            | SSW  | SW   | SW   | SW   | SW   | SW   | SW   | SW   | WSW  | W                               | WSW  | WSW                                                                                      | W    | WSW  | WSW  | W                     | W    | W    | WSW  | ENE  | E   | NE   | WSW           |                     |               |                        | WSW | WSW |  |     |  |  |  |
| Jul 25                                                                                                  | 3.0                                           | 3.1  | 8.5  | 7.9  | 5.9  | 9.0  | 7.1  | 9.2  | 9.3  | 9.2  | 9.6                             | 9.9  | 7.6                                                                                      | 9.5  | 11.0 | 15.0 | 14.5                  | 11.7 | 10.1 | 5.5  | 5.3  | 1.9 | 10.4 | 2.2           | 1.9                 | 15.0          | 6.1                    |     |     |  |     |  |  |  |
|                                                                                                         | ENE                                           | SE   | SE   | SSE  | S    | SW   | SW   | SW   | WSW  | WSW  | WSW                             | W    | W                                                                                        | WSW  | WSW  | WSW  | WSW                   | W    | W    | W    | NNE  | ESE | S    | SW            |                     |               |                        | WSW | WSW |  |     |  |  |  |
| Jul 26                                                                                                  | 5.6                                           | 6.4  | 3.2  | 4.8  | 5.5  | 6.9  | 7.4  | 10.2 | 13.6 | 13.2 | 12.4                            | 14.9 | 16.4                                                                                     | 16.0 | 14.3 | 13.4 | 13.3                  | 10.6 | 7.0  | 7.3  | 4.1  | 6.1 | 5.8  | 4.3           | 3.2                 | 16.4          | 8.2                    |     |     |  |     |  |  |  |
|                                                                                                         | S                                             | S    | S    | SSE  | SSE  | S    | SSW  | SW   | SW   | SW   | SW                              | SW   | WSW                                                                                      | WSW  | WSW  | WSW  | WSW                   | WSW  | WSW  | WSW  | SW   | SSW | SW   | SSW           |                     |               |                        | WSW | WSW |  |     |  |  |  |
| Jul 27                                                                                                  | 3.0                                           | 7.6  | 8.7  | 7.8  | 9.4  | 10.1 | 11.2 | 15.5 | 16.5 | 14.2 | 15.3                            | 15.7 | 16.7                                                                                     | 15.3 | 14.0 | 12.3 | 11.5                  | 10.5 | 5.4  | 2.0  | 3.0  | 2.8 | 1.7  | 2.1           | 1.7                 | 16.7          | 7.3                    |     |     |  |     |  |  |  |
|                                                                                                         | SW                                            | SSW  | SSW  | SSW  | SW   | SSW  | SSW  | SW   | WSW  | WSW  | WSW                             | WSW  | WSW                                                                                      | WSW  | WSW  | WSW  | W                     | NNE  | NNE  | NE   | ESE  | ESE | E    | SE            |                     |               |                        | WSW | WSW |  |     |  |  |  |
| Jul 28                                                                                                  | 3.8                                           | 3.1  | 3.7  | 4.5  | 3.4  | 6.5  | 8.4  | 12.3 | 12.8 | 12.6 | 12.3                            | 14.6 | 15.5                                                                                     | 15.3 | 15.2 | 15.8 | 14.6                  | 12.9 | 10.8 | 8.3  | 5.9  | 1.1 | 0.8  | 1.8           | 0.8                 | 15.8          | 7.3                    |     |     |  |     |  |  |  |
|                                                                                                         | SSE                                           | SE   | SE   | SE   | SSE  | SSE  | SSW  | SSW  | SW   | WSW  | SW                              | WSW  | WSW                                                                                      | W    | W    | WSW  | W                     | W    | W    | W    | WSW  | S   | SE   | SE            |                     |               |                        | WSW | WSW |  |     |  |  |  |
| Jul 29                                                                                                  | 2.5                                           | 3.5  | 2.3  | 0.6  | 2.5  | 3.7  | 3.9  | 3.9  | 7.9  | 10.7 | 12.5                            | 10.2 | 9.2                                                                                      | 6.7  | 8.4  | 10.2 | 10.7                  | 9.1  | 3.5  | 2.7  | 3.0  | 2.4 | 3.1  | 5.5           | 0.6                 | 12.5          | 3.5                    |     |     |  |     |  |  |  |
|                                                                                                         | SE                                            | ESE  | SE   | SE   | SSW  | SE   | SSE  | SW   | SW   | SW   | WSW                             | WSW  | W                                                                                        | W    | WSW  | W    | WSW                   | WSW  | W    | WSW  | NNE  | NE  | ENE  | ENE           |                     |               |                        | WSW | WSW |  |     |  |  |  |
| Jul 30                                                                                                  | 3.5                                           | 1.7  | 2.8  | 3.2  | 1.3  | 1.1  | 3.6  | 2.5  | 2.4  | 0.3  | 3.2                             | 3.3  | 4.0                                                                                      | 4.4  | 4.8  | 2.7  | 4.1                   | 4.5  | 6.0  | 4.9  | 2.3  | 4.1 | 2.5  | 1.3           | 0.3                 | 6.0           | 1.4                    |     |     |  |     |  |  |  |
|                                                                                                         | ENE                                           | ENE  | ENE  | ENE  | N    | ENE  | ENE  | E    | E    | SE   | WSW                             | SW   | NW                                                                                       | W    | WNW  | NNW  | N                     | N    | N    | N    | ENE  | E   | ESE  | ESE           |                     |               |                        | WSW | WSW |  |     |  |  |  |
| Jul 31                                                                                                  | 4.1                                           | 4.0  | 2.9  | 5.4  | 5.6  | 6.6  | 4.9  | 5.3  | 4.4  | 5.4  | 7.5                             | 11.2 | 6.8                                                                                      | 5.6  | 2.6  | 5.1  | 3.8                   | 3.4  | 2.4  | 3.1  | 4.8  | 4.0 | 3.1  | 2.6           | 2.4                 | 11.2          | 4.3                    |     |     |  |     |  |  |  |
|                                                                                                         | SE                                            | SE   | SE   | ESE  | ESE  | E    | E    | ESE  | SE   | SSE  | SSE                             | SSE  | SE                                                                                       | SE   | ESE  | E    | E                     | SE   | E    | E    | E    | E   | SE   | E             |                     |               |                        | WSW | WSW |  |     |  |  |  |
| C                                                                                                       | Monthly Calibration                           |      |      |      |      |      |      |      |      |      | S                               |      | Daily Zero-Span Check                                                                    |      |      |      |                       |      |      |      |      |     | Q    |               | Quality Assurance   |               |                        |     |     |  |     |  |  |  |
| K                                                                                                       | Collection Error                              |      |      |      |      |      |      |      |      |      | N                               |      | No Data (Machine Not in Service)                                                         |      |      |      |                       |      |      |      |      |     | Y    |               | Routine Maintenance |               |                        |     |     |  |     |  |  |  |
| X                                                                                                       | Invalid Data (Equipment Malfunction/Recovery) |      |      |      |      |      |      |      |      |      | NRM                             |      | Unit/Maint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |                       |      |      |      |      |     |      |               | P Power Failure     |               |                        |     |     |  |     |  |  |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                               |      |      |      |      |      |      |      |      |      |                                 |      |                                                                                          |      |      |      |                       |      |      |      |      |     |      |               |                     |               |                        |     |     |  |     |  |  |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                               |      |      |      |      |      |      |      |      |      |                                 |      |                                                                                          |      |      |      |                       |      |      |      |      |     |      |               |                     |               |                        |     |     |  |     |  |  |  |

## RENO STATION



# PEACE RIVER AREA MONITORING PROGRAM

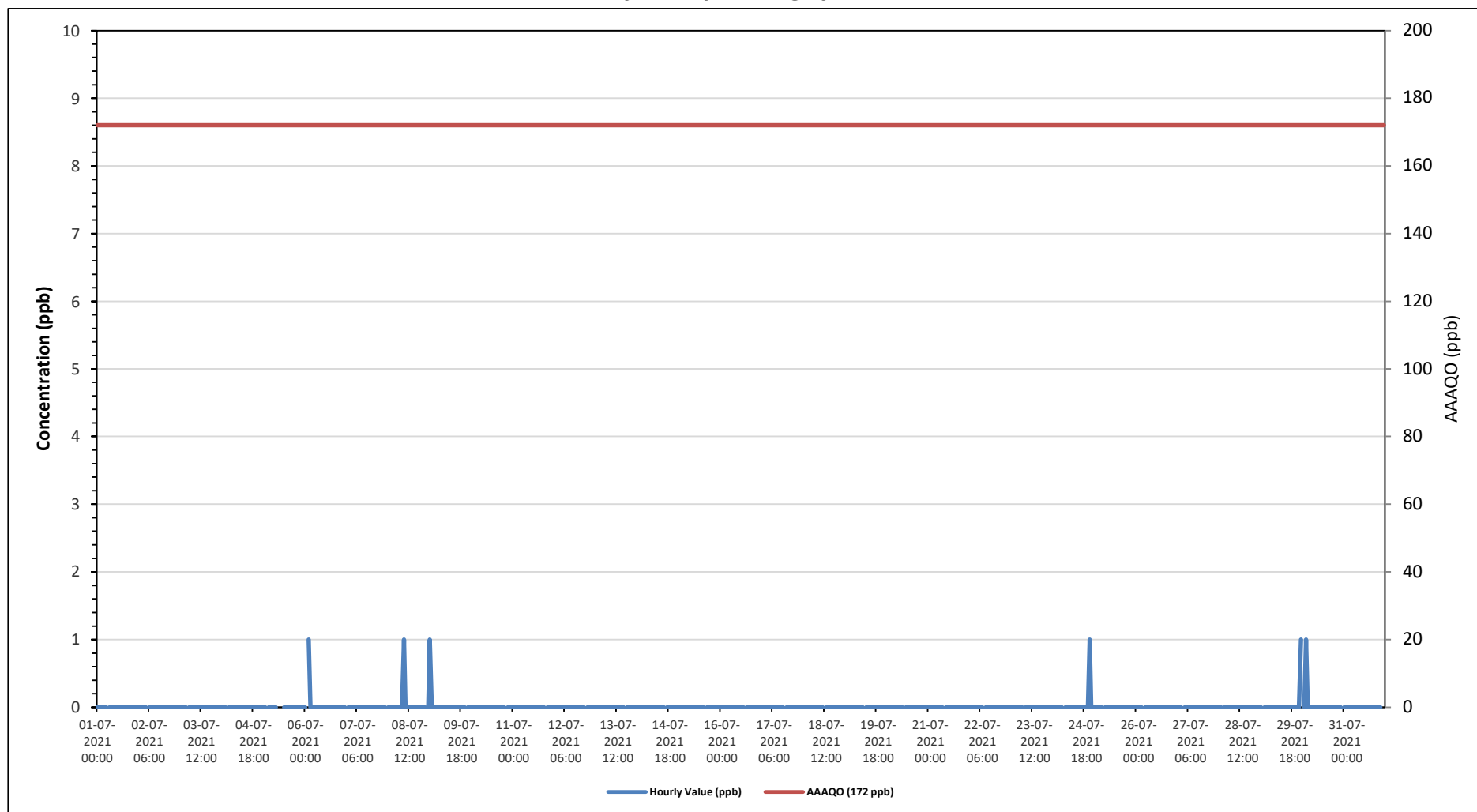
Reno Station - July 2021

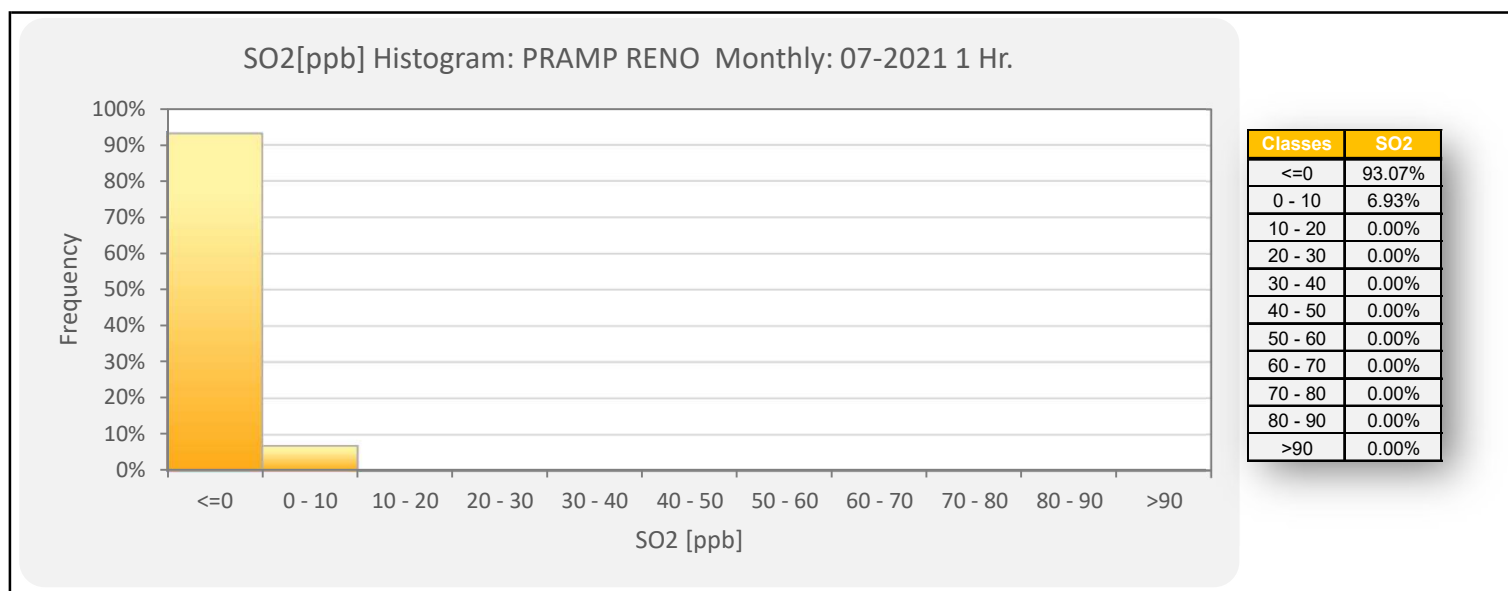
Summary of Hourly Averages

SULPHUR DIOXIDE (SO<sub>2</sub>) in ppb

| Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb           |                                                |     |     |                           |     |     |     |                                |                                                                                         |     |     |       |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |     |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|-----|-----|---------------------------|-----|-----|-----|--------------------------------|-----------------------------------------------------------------------------------------|-----|-----|-------|-----|-----|-----|--------------------|---------------------|-----|-----|-----|-----|-----|-----|---------------|---------------|---------------|-----|-----|
| Number of 1-Hour Exceedances:                                                                           |                                                |     |     | 0                         |     |     |     | Number of 24-Hour Exceedances: |                                                                                         |     |     | 0     |     |     |     | 30-Day Exceedance: |                     |     |     | 0   |     |     |     |               |               |               |     |     |
| Maximum Hourly Value:                                                                                   |                                                |     |     | 1 ppb on July 6 at hour 2 |     |     |     | Hours in Service:              |                                                                                         |     |     | 744   |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |     |
| Maximum Daily Value:                                                                                    |                                                |     |     | 0.0 ppb on July 30        |     |     |     | Hours of Data:                 |                                                                                         |     |     | 707   |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |     |
| Minimum Hourly Value:                                                                                   |                                                |     |     | 0 ppb on July 1 at hour 0 |     |     |     | Hours of Missing Data:         |                                                                                         |     |     | 0     |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |     |
| Minimum Daily Value:                                                                                    |                                                |     |     | 0.0 ppb on July 1         |     |     |     | Hours of Calibration:          |                                                                                         |     |     | 37    |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |     |
| Monthly Average:                                                                                        |                                                |     |     | 0.0 ppb                   |     |     |     | Operational Uptime:            |                                                                                         |     |     | 100.0 |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |     |
| Day                                                                                                     | Hourly Period Starting at (MST)                |     |     |                           |     |     |     |                                |                                                                                         |     |     |       |     |     |     |                    |                     |     |     |     |     |     |     | Daily Minimum | Daily Maximum | Daily Average |     |     |
|                                                                                                         | 0                                              | 1   | 2   | 3                         | 4   | 5   | 6   | 7                              | 8                                                                                       | 9   | 10  | 11    | 12  | 13  | 14  | 15                 | 16                  | 17  | 18  | 19  | 20  | 21  | 22  | 23            |               |               |     |     |
| Jul 1                                                                                                   | 0                                              | 0   | 0   | 0                         | 0   | 0   | S   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 2                                                                                                   | 0                                              | 0   | 0   | 0                         | 0   | S   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 3                                                                                                   | 0                                              | 0   | 0   | 0                         | S   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 4                                                                                                   | 0                                              | 0   | 0   | S                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 5                                                                                                   | 0                                              | 0   | S   | 0                         | 0   | 0   | 0   | 0                              | C                                                                                       | C   | C   | C     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 6                                                                                                   | 0                                              | S   | 1   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 1             | 0.0 |     |
| Jul 7                                                                                                   | S                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | S             | 0             | 0.0 |     |
| Jul 8                                                                                                   | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 1   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | S   | 0             | 0             | 1             | 0.0 |     |
| Jul 9                                                                                                   | 1                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | S   | 0   | 0             | 0             | 1             | 0.0 |     |
| Jul 10                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | S   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 11                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | S   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 12                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | S   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 13                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | S   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 14                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | S                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 15                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | S                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 16                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | S   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 17                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | S   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 18                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | S   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 19                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | S     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 20                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | S   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 21                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | S   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 22                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | S                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 23                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | S                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 24                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | S   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 1   | 0   | 0             | 0             | 1             | 0.0 |     |
| Jul 25                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | S   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 26                                                                                                  | 0                                              | 0   | 0   | 0                         | S   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 27                                                                                                  | 0                                              | 0   | 0   | S                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0.0 |     |
| Jul 28                                                                                                  | 0                                              | 0   | S   | 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 |     |
| Jul 29                                                                                                  | 0                                              | S   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 1             | 0             | 1   | 0.0 |
| Jul 30                                                                                                  | S                                              | 0   | 1   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | S             | 0             | 1             | 0.0 |     |
| Jul 31                                                                                                  | 0                                              | 0   | 0   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 0   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | S   | 0   | 0             | 0             | 0             | 0.0 |     |
| Diurnal Maximum                                                                                         | 1                                              | 0   | 1   | 0                         | 0   | 0   | 0   | 0                              | 0                                                                                       | 1   | 0   | 0     | 0   | 0   | 0   | 0                  | 0                   | 0   | 0   | 0   | 0   | 1   | 0   | 1             |               |               |     |     |
| Diurnal Average                                                                                         | 0.0                                            | 0.0 | 0.1 | 0.0                       | 0.0 | 0.0 | 0.0 | 0.0                            | 0.0                                                                                     | 0.0 | 0.0 | 0.0   | 0.0 | 0.0 | 0.0 | 0.0                | 0.0                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0           |               |               |     |     |
| C                                                                                                       | Monthly Calibration                            |     |     |                           |     |     |     | S                              | Daily Zero-Span Check                                                                   |     |     |       |     |     |     | Q                  | Quality Assurance   |     |     |     |     |     |     |               |               |               |     |     |
| K                                                                                                       | Collection Error                               |     |     |                           |     |     |     | N                              | No Data (Machine Not in Service)                                                        |     |     |       |     |     |     | Y                  | Routine Maintenance |     |     |     |     |     |     |               |               |               |     |     |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |     |     |                           |     |     |     | NRM                            | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |     |     |       |     |     |     | P                  | Power Failure       |     |     |     |     |     |     |               |               |               |     |     |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |     |     |                           |     |     |     |                                |                                                                                         |     |     |       |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |     |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |     |     |                           |     |     |     |                                |                                                                                         |     |     |       |     |     |     |                    |                     |     |     |     |     |     |     |               |               |               |     |     |

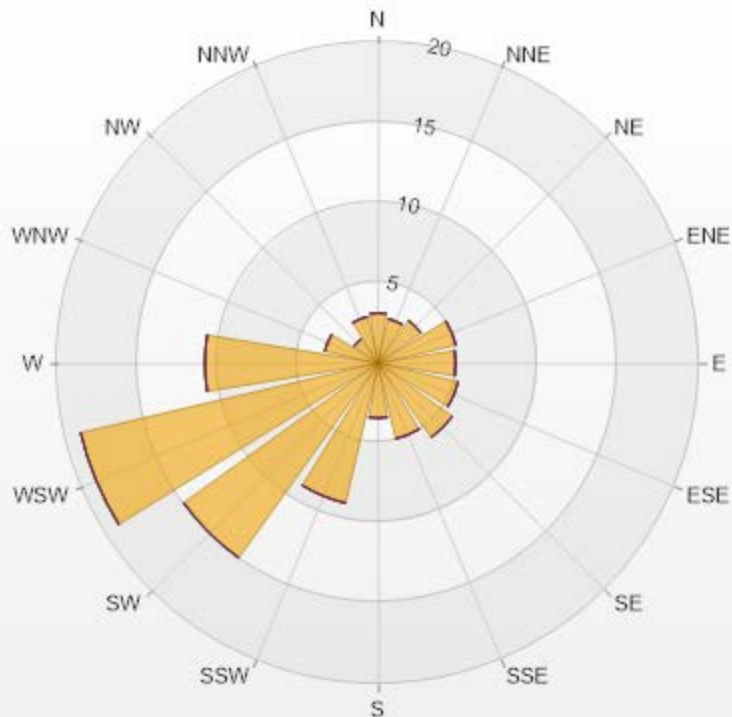
***Timeseries Chart of Hourly Average for SO2 - Reno Station***





Wind: PRAMP RENO Poll.: PRAMP RENO-SO2[ppb] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 94.62% Calm Avg: 0.00 [ppb]

| Direction | 0-10  | 10-50 | 50-100 | 100-172 | >172.0 | Total |
|-----------|-------|-------|--------|---------|--------|-------|
| N         | 3.13  | 0     | 0      | 0       | 0      | 3.13  |
| NNE       | 2.84  | 0     | 0      | 0       | 0      | 2.84  |
| NE        | 3.27  | 0     | 0      | 0       | 0      | 3.27  |
| ENE       | 4.97  | 0     | 0      | 0       | 0      | 4.97  |
| E         | 4.83  | 0     | 0      | 0       | 0      | 4.83  |
| ESE       | 5.11  | 0     | 0      | 0       | 0      | 5.11  |
| SE        | 5.68  | 0     | 0      | 0       | 0      | 5.68  |
| SSE       | 4.83  | 0     | 0      | 0       | 0      | 4.83  |
| S         | 3.41  | 0     | 0      | 0       | 0      | 3.41  |
| SSW       | 8.95  | 0     | 0      | 0       | 0      | 8.95  |
| SW        | 14.91 | 0     | 0      | 0       | 0      | 14.91 |
| WSW       | 19.03 | 0     | 0      | 0       | 0      | 19.03 |
| W         | 10.8  | 0     | 0      | 0       | 0      | 10.8  |
| WNW       | 3.41  | 0     | 0      | 0       | 0      | 3.41  |
| NW        | 1.85  | 0     | 0      | 0       | 0      | 1.85  |
| NNW       | 2.98  | 0     | 0      | 0       | 0      | 2.98  |
| Summary   | 100   | 0     | 0      | 0       | 0      | 100   |



PRAMP-202107

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% Icon Classes (ppb)

100 0-10

0 10-50

0 50-100

0 100-172

0 >172.0





# PEACE RIVER AREA MONITORING PROGRAM

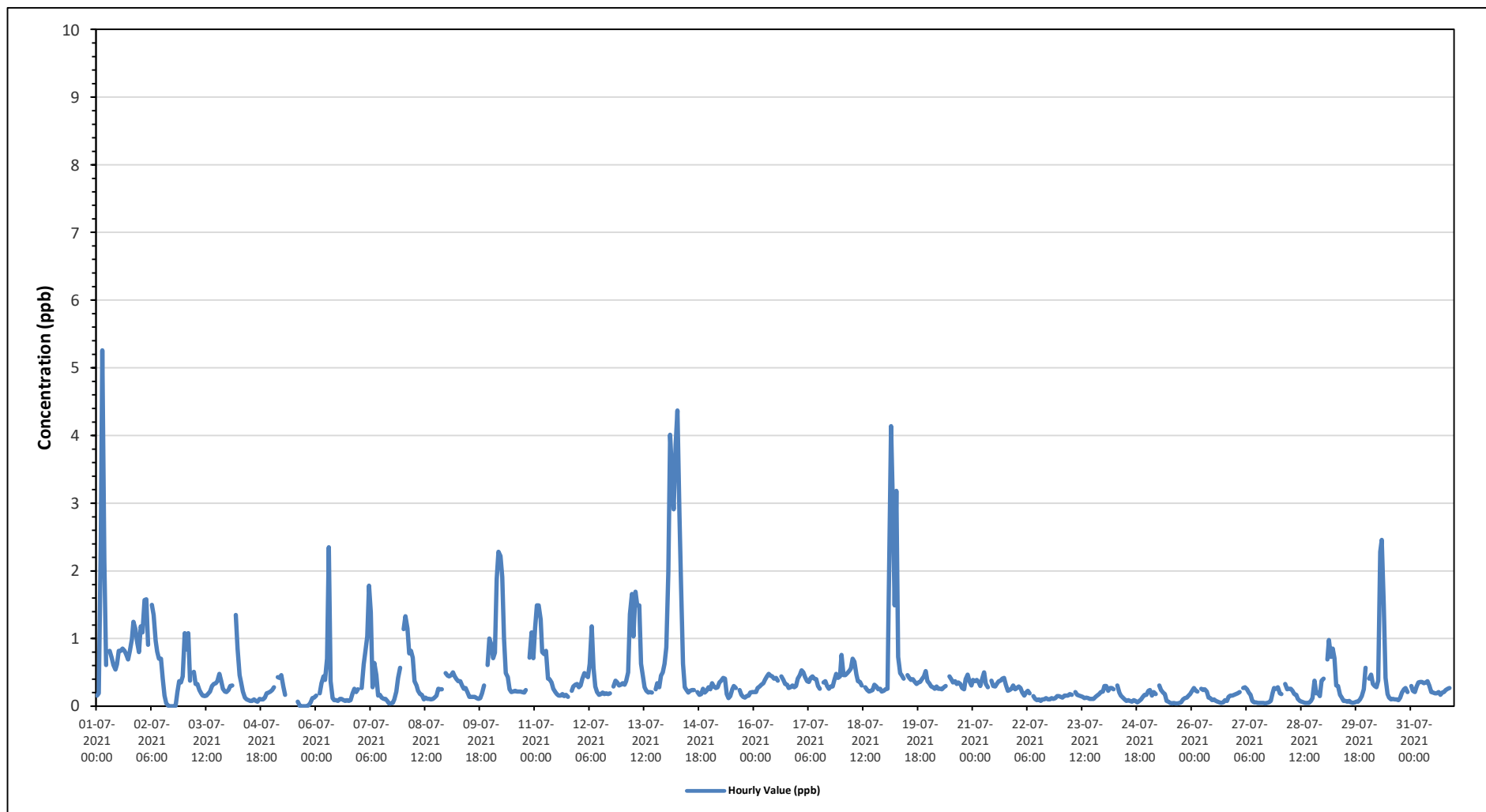
Reno Station - July 2021

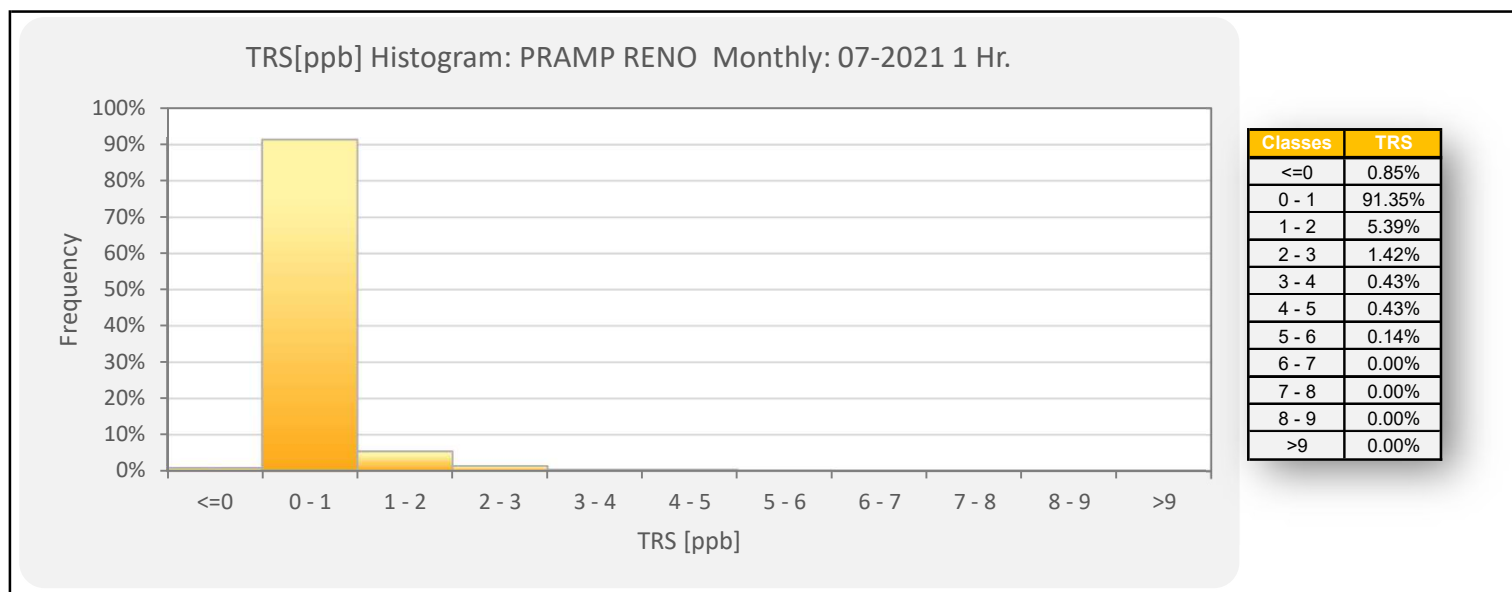
Summary of Hourly Averages

## TOTAL REDUCED SULPHUR (TRS) in ppb

|                                                                                                         |                                                |      |      |      |      |                      |      |                                                                                         |      |                        |      |      |      |       |                     |      |      |      |      |      |      |               |      |               |               |               |      |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|------|----------------------|------|-----------------------------------------------------------------------------------------|------|------------------------|------|------|------|-------|---------------------|------|------|------|------|------|------|---------------|------|---------------|---------------|---------------|------|
| Maximum Hourly Value:                                                                                   |                                                |      |      | 5.26 | ppb  | on July 1 at hour 3  |      |                                                                                         |      | Hours in Service:      |      |      |      | 744   |                     |      |      |      |      |      |      |               |      |               |               |               |      |
| Maximum Daily Value:                                                                                    |                                                |      |      | 1.29 | ppb  | on July 14           |      |                                                                                         |      | Hours of Data:         |      |      |      | 705   |                     |      |      |      |      |      |      |               |      |               |               |               |      |
| Minimum Hourly Value:                                                                                   |                                                |      |      | 0.00 | ppb  | on July 2 at hour 16 |      |                                                                                         |      | Hours of Missing Data: |      |      |      | 0     |                     |      |      |      |      |      |      |               |      |               |               |               |      |
| Minimum Daily Value:                                                                                    |                                                |      |      | 0.14 | ppb  | on July 25           |      |                                                                                         |      | Hours of Calibration:  |      |      |      | 39    |                     |      |      |      |      |      |      |               |      |               |               |               |      |
| Monthly Average:                                                                                        |                                                |      |      | 0.41 | ppb  |                      |      |                                                                                         |      | Operational Uptime:    |      |      |      | 100.0 |                     |      |      |      |      |      |      |               |      |               |               |               |      |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |      |                      |      |                                                                                         |      |                        |      |      |      |       |                     |      |      |      |      |      |      |               |      | Daily Minimum | Daily Maximum | Daily Average |      |
| Jul 1                                                                                                   | 0.16                                           | 0.19 | 2.43 | 5.26 | 2.14 | 0.61                 | S    | 0.82                                                                                    | 0.72 | 0.61                   | 0.54 | 0.62 | 0.82 | 0.82  | 0.85                | 0.82 | 0.77 | 0.69 | 0.82 | 0.99 | 1.25 | 1.14          | 0.94 | 0.8           | 0.16          | 5.26          | 1.08 |
| Jul 2                                                                                                   | 1.18                                           | 1.09 | 1.57 | 1.58 | 0.91 | S                    | 1.5  | 1.35                                                                                    | 0.97 | 0.81                   | 0.7  | 0.7  | 0.41 | 0.16  | 0.04                | 0.01 | 0    | 0    | 0    | 0.01 | 0.21 | 0.37          | 0.35 | 0.44          | 0.00          | 1.58          | 0.62 |
| Jul 3                                                                                                   | 1.08                                           | 0.84 | 1.08 | 0.38 | S    | 0.51                 | 0.33 | 0.33                                                                                    | 0.24 | 0.19                   | 0.16 | 0.15 | 0.16 | 0.19  | 0.22                | 0.3  | 0.33 | 0.34 | 0.37 | 0.48 | 0.38 | 0.26          | 0.22 | 0.21          | 0.15          | 1.08          | 0.38 |
| Jul 4                                                                                                   | 0.24                                           | 0.3  | 0.31 | S    | 1.35 | 0.85                 | 0.46 | 0.35                                                                                    | 0.22 | 0.13                   | 0.1  | 0.09 | 0.08 | 0.08  | 0.1                 | 0.08 | 0.07 | 0.11 | 0.1  | 0.1  | 0.13 | 0.19          | 0.2  | 0.22          | 0.07          | 1.35          | 0.25 |
| Jul 5                                                                                                   | 0.24                                           | 0.28 | S    | 0.43 | 0.42 | 0.46                 | 0.29 | 0.17                                                                                    | C    | C                      | C    | C    | C    | C     | 0.07                | 0.01 | 0    | 0    | 0    | 0    | 0.02 | 0.05          | 0.12 | 0.13          | 0.00          | 0.46          | -    |
| Jul 6                                                                                                   | 0.16                                           | S    | 0.19 | 0.34 | 0.44 | 0.39                 | 0.7  | 2.35                                                                                    | 0.37 | 0.12                   | 0.09 | 0.09 | 0.08 | 0.11  | 0.11                | 0.09 | 0.08 | 0.09 | 0.08 | 0.09 | 0.19 | 0.26          | 0.21 | 0.25          | 0.08          | 2.35          | 0.30 |
| Jul 7                                                                                                   | S                                              | 0.27 | 0.62 | 0.79 | 1.03 | 1.78                 | 1.39 | 0.28                                                                                    | 0.64 | 0.46                   | 0.16 | 0.17 | 0.13 | 0.11  | 0.11                | 0.08 | 0.04 | 0.04 | 0.05 | 0.1  | 0.22 | 0.42          | 0.57 | S             | 0.04          | 1.78          | 0.43 |
| Jul 8                                                                                                   | 1.14                                           | 1.33 | 1.15 | 0.78 | 0.82 | 0.72                 | 0.37 | 0.31                                                                                    | 0.23 | 0.18                   | 0.17 | 0.1  | 0.13 | 0.11  | 0.11                | 0.1  | 0.11 | 0.13 | 0.16 | 0.26 | 0.25 | 0.25          | S    | 0.49          | 0.10          | 1.33          | 0.41 |
| Jul 9                                                                                                   | 0.45                                           | 0.44 | 0.46 | 0.5  | 0.44 | 0.4                  | 0.37 | 0.37                                                                                    | 0.31 | 0.26                   | 0.27 | 0.2  | 0.14 | 0.14  | 0.14                | 0.14 | 0.12 | 0.11 | 0.12 | 0.19 | 0.31 | S             | 0.61 | 1             | 0.11          | 1.00          | 0.33 |
| Jul 10                                                                                                  | 0.91                                           | 0.71 | 0.79 | 1.88 | 2.28 | 2.22                 | 1.91 | 1                                                                                       | 0.49 | 0.43                   | 0.25 | 0.21 | 0.22 | 0.23  | 0.22                | 0.22 | 0.22 | 0.21 | 0.2  | 0.24 | S    | 0.72          | 1.09 | 0.71          | 0.20          | 2.28          | 0.75 |
| Jul 11                                                                                                  | 1.16                                           | 1.49 | 1.49 | 1.28 | 0.8  | 0.77                 | 0.82 | 0.41                                                                                    | 0.4  | 0.35                   | 0.26 | 0.21 | 0.18 | 0.16  | 0.16                | 0.18 | 0.15 | 0.17 | 0.14 | S    | 0.23 | 0.29          | 0.32 | 0.33          | 0.14          | 1.49          | 0.51 |
| Jul 12                                                                                                  | 0.28                                           | 0.31 | 0.41 | 0.49 | 0.46 | 0.43                 | 0.63 | 1.18                                                                                    | 0.57 | 0.29                   | 0.21 | 0.17 | 0.18 | 0.2   | 0.18                | 0.19 | 0.18 | 0.19 | S    | 0.29 | 0.38 | 0.35          | 0.31 | 0.32          | 0.17          | 1.18          | 0.36 |
| Jul 13                                                                                                  | 0.34                                           | 0.32 | 0.37 | 0.5  | 1.36 | 1.66                 | 1.03 | 1.69                                                                                    | 1.49 | 1.49                   | 0.63 | 0.48 | 0.28 | 0.23  | 0.2                 | 0.21 | 0.2  | S    | 0.25 | 0.34 | 0.28 | 0.45          | 0.5  | 0.63          | 0.20          | 1.69          | 0.65 |
| Jul 14                                                                                                  | 0.87                                           | 1.98 | 4.01 | 3.41 | 2.91 | 3.87                 | 4.37 | 2.82                                                                                    | 1.83 | 0.63                   | 0.28 | 0.24 | 0.2  | 0.23  | 0.24                | 0.24 | S    | 0.21 | 0.17 | 0.18 | 0.26 | 0.2           | 0.23 | 0.28          | 0.17          | 4.37          | 1.29 |
| Jul 15                                                                                                  | 0.25                                           | 0.34 | 0.29 | 0.27 | 0.28 | 0.35                 | 0.38 | 0.42                                                                                    | 0.41 | 0.18                   | 0.12 | 0.15 | 0.25 | 0.3   | 0.27                | S    | 0.24 | 0.17 | 0.14 | 0.13 | 0.15 | 0.16          | 0.2  | 0.21          | 0.12          | 0.42          | 0.25 |
| Jul 16                                                                                                  | 0.21                                           | 0.21 | 0.27 | 0.29 | 0.32 | 0.34                 | 0.39 | 0.44                                                                                    | 0.48 | 0.45                   | 0.44 | 0.41 | 0.42 | 0.38  | S                   | 0.44 | 0.39 | 0.33 | 0.32 | 0.27 | 0.28 | 0.31          | 0.28 | 0.3           | 0.21          | 0.48          | 0.35 |
| Jul 17                                                                                                  | 0.41                                           | 0.46 | 0.53 | 0.5  | 0.43 | 0.37                 | 0.36 | 0.42                                                                                    | 0.44 | 0.41                   | 0.4  | 0.3  | 0.26 | S     | 0.35                | 0.37 | 0.3  | 0.26 | 0.29 | 0.29 | 0.38 | 0.48          | 0.42 | 0.44          | 0.26          | 0.53          | 0.39 |
| Jul 18                                                                                                  | 0.76                                           | 0.46 | 0.46 | 0.49 | 0.52 | 0.56                 | 0.7  | 0.66                                                                                    | 0.47 | 0.37                   | 0.36 | 0.31 | S    | 0.28  | 0.24                | 0.22 | 0.23 | 0.24 | 0.32 | 0.29 | 0.25 | 0.26          | 0.22 | 0.23          | 0.22          | 0.76          | 0.39 |
| Jul 19                                                                                                  | 0.25                                           | 0.26 | 1.93 | 4.14 | 3    | 1.49                 | 3.18 | 0.73                                                                                    | 0.49 | 0.45                   | 0.41 | S    | 0.46 | 0.42  | 0.39                | 0.4  | 0.36 | 0.33 | 0.35 | 0.36 | 0.4  | 0.44          | 0.52 | 0.37          | 0.25          | 4.14          | 0.92 |
| Jul 20                                                                                                  | 0.34                                           | 0.29 | 0.28 | 0.26 | 0.29 | 0.26                 | 0.26 | 0.25                                                                                    | 0.28 | 0.3                    | S    | 0.44 | 0.4  | 0.35  | 0.37                | 0.33 | 0.35 | 0.33 | 0.27 | 0.25 | 0.4  | 0.47          | 0.37 | 0.31          | 0.25          | 0.47          | 0.32 |
| Jul 21                                                                                                  | 0.39                                           | 0.37 | 0.39 | 0.36 | 0.3  | 0.4                  | 0.5  | 0.33                                                                                    | 0.28 | S                      | 0.38 | 0.3  | 0.29 | 0.33  | 0.37                | 0.38 | 0.41 | 0.42 | 0.32 | 0.23 | 0.24 | 0.26          | 0.31 | 0.25          | 0.23          | 0.50          | 0.34 |
| Jul 22                                                                                                  | 0.27                                           | 0.29 | 0.27 | 0.2  | 0.16 | 0.2                  | 0.23 | 0.19                                                                                    | S    | 0.15                   | 0.11 | 0.09 | 0.1  | 0.08  | 0.1                 | 0.1  | 0.12 | 0.1  | 0.1  | 0.12 | 0.11 | 0.12          | 0.15 | 0.15          | 0.08          | 0.29          | 0.15 |
| Jul 23                                                                                                  | 0.14                                           | 0.13 | 0.16 | 0.16 | 0.16 | 0.18                 | 0.17 | S                                                                                       | 0.21 | 0.17                   | 0.16 | 0.15 | 0.14 | 0.12  | 0.13                | 0.12 | 0.11 | 0.11 | 0.11 | 0.14 | 0.16 | 0.18          | 0.21 | 0.22          | 0.11          | 0.22          | 0.15 |
| Jul 24                                                                                                  | 0.3                                            | 0.3  | 0.23 | 0.27 | 0.27 | 0.25                 | S    | 0.31                                                                                    | 0.2  | 0.16                   | 0.13 | 0.1  | 0.08 | 0.09  | 0.08                | 0.07 | 0.09 | 0.08 | 0.06 | 0.08 | 0.1  | 0.14          | 0.17 | 0.17          | 0.06          | 0.31          | 0.16 |
| Jul 25                                                                                                  | 0.23                                           | 0.24 | 0.16 | 0.21 | 0.18 | S                    | 0.31 | 0.24                                                                                    | 0.2  | 0.18                   | 0.08 | 0.07 | 0.05 | 0.04  | 0.05                | 0.04 | 0.04 | 0.05 | 0.06 | 0.1  | 0.12 | 0.13          | 0.16 | 0.18          | 0.04          | 0.31          | 0.14 |
| Jul 26                                                                                                  | 0.23                                           | 0.27 | 0.23 | 0.22 | S    | 0.26                 | 0.24 | 0.25                                                                                    | 0.22 | 0.13                   | 0.12 | 0.09 | 0.1  | 0.08  | 0.07                | 0.06 | 0.05 | 0.06 | 0.09 | 0.08 | 0.14 | 0.16          | 0.16 | 0.17          | 0.05          | 0.27          | 0.15 |
| Jul 27                                                                                                  | 0.18                                           | 0.19 | 0.21 | S    | 0.27 | 0.28                 | 0.25 | 0.2                                                                                     | 0.17 | 0.08                   | 0.06 | 0.06 | 0.05 | 0.05  | 0.05                | 0.05 | 0.04 | 0.05 | 0.06 | 0.08 | 0.19 | 0.27          | 0.26 | 0.28          | 0.04          | 0.28          | 0.15 |
| Jul 28                                                                                                  | 0.19                                           | 0.18 | S    | 0.33 | 0.25 | 0.26                 | 0.26 | 0.23                                                                                    | 0.18 | 0.17                   | 0.11 | 0.08 | 0.07 | 0.06  | 0.05                | 0.05 | 0.05 | 0.08 | 0.12 | 0.38 | 0.19 | 0.2           | 0.15 | 0.38          | 0.05          | 0.38          | 0.17 |
| Jul 29                                                                                                  | 0.41                                           | S    | 0.69 | 0.98 | 0.73 | 0.85                 | 0.71 | 0.31                                                                                    | 0.3  | 0.17                   | 0.13 | 0.08 | 0.08 | 0.07  | 0.08                | 0.06 | 0.05 | 0.06 | 0.07 | 0.07 | 0.1  | 0.15          | 0.25 | 0.57          | 0.05          | 0.98          | 0.30 |
| Jul 30                                                                                                  | S                                              | 0.41 | 0.47 | 0.33 | 0.3  | 0.28                 | 0.38 | 2.28                                                                                    | 2.46 | 1.49                   | 0.42 | 0.18 | 0.13 | 0.1   | 0.11                | 0.1  | 0.1  | 0.09 | 0.13 | 0.2  | 0.25 | 0.27          | 0.21 | S             | 0.09          | 2.46          | 0.49 |
| Jul 31                                                                                                  | 0.3                                            | 0.23 | 0.21 | 0.29 | 0.35 | 0.36                 | 0.36 | 0.34                                                                                    | 0.35 | 0.37                   | 0.31 | 0.21 | 0.2  | 0.19  | 0.19                | 0.21 | 0.17 | 0.2  | 0.21 | 0.24 | 0.26 | 0.27          | S    | 0.34          | 0.17          | 0.37          | 0.27 |
| Diurnal Maximum                                                                                         | 1.18                                           | 1.98 | 4.01 | 5.26 | 3.00 | 3.87                 | 4.37 | 2.82                                                                                    | 2.46 | 1.49                   | 0.70 | 0.70 | 0.82 | 0.82  | 0.85                | 0.82 | 0.77 | 0.69 | 0.82 | 0.99 | 1.25 | 1.14          | 1.09 | 1.00          |               |               |      |
| Diurnal Average                                                                                         | 0.45                                           | 0.49 | 0.75 | 0.93 | 0.80 | 0.74                 | 0.79 | 0.70                                                                                    | 0.54 | 0.39                   | 0.26 | 0.22 | 0.21 | 0.20  | 0.19                | 0.19 | 0.18 | 0.18 | 0.18 | 0.22 | 0.26 | 0.31          | 0.33 | 0.36          |               |               |      |
| C                                                                                                       | Monthly Calibration                            |      |      |      |      |                      | S    | Daily Zero-Span Check                                                                   |      |                        |      |      |      | Q     | Quality Assurance   |      |      |      |      |      |      |               |      |               |               |               |      |
| K                                                                                                       | Collection Error                               |      |      |      |      |                      | N    | No Data (Machine Not in Service)                                                        |      |                        |      |      |      | Y     | Routine Maintenance |      |      |      |      |      | P    | Power Failure |      |               |               |               |      |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |      |                      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |                        |      |      |      |       |                     |      |      |      |      |      |      |               |      |               |               |               |      |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |      |                      |      |                                                                                         |      |                        |      |      |      |       |                     |      |      |      |      |      |      |               |      |               |               |               |      |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |      |                      |      |                                                                                         |      |                        |      |      |      |       |                     |      |      |      |      |      |      |               |      |               |               |               |      |

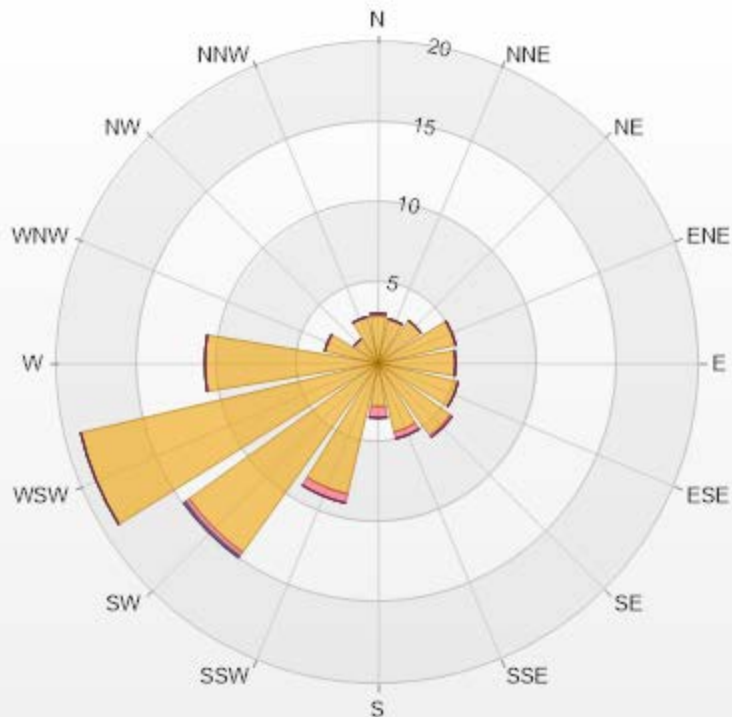
***Timeseries Chart of Hourly Average for TRS - Reno Station***





Wind: PRAMP RENO Poll.: PRAMP RENO-TRS[ppb] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 94.62% Calm Avg: 0.00 [ppb]

| Direction | 0-2   | 2-5  | 5-10 | 10-50 | >50.0 | Total |
|-----------|-------|------|------|-------|-------|-------|
| N         | 2.98  | 0.14 | 0    | 0     | 0     | 3.12  |
| NNE       | 2.84  | 0    | 0    | 0     | 0     | 2.84  |
| NE        | 3.27  | 0    | 0    | 0     | 0     | 3.27  |
| ENE       | 4.97  | 0    | 0    | 0     | 0     | 4.97  |
| E         | 4.83  | 0    | 0    | 0     | 0     | 4.83  |
| ESE       | 5.11  | 0    | 0    | 0     | 0     | 5.11  |
| SE        | 5.54  | 0.14 | 0    | 0     | 0     | 5.68  |
| SSE       | 4.4   | 0.43 | 0    | 0     | 0     | 4.83  |
| S         | 2.7   | 0.71 | 0    | 0     | 0     | 3.41  |
| SSW       | 8.38  | 0.57 | 0    | 0     | 0     | 8.95  |
| SW        | 14.49 | 0.28 | 0.14 | 0     | 0     | 14.91 |
| WSW       | 19.03 | 0    | 0    | 0     | 0     | 19.03 |
| W         | 10.8  | 0    | 0    | 0     | 0     | 10.8  |
| WNW       | 3.41  | 0    | 0    | 0     | 0     | 3.41  |
| NW        | 1.85  | 0    | 0    | 0     | 0     | 1.85  |
| NNW       | 2.98  | 0    | 0    | 0     | 0     | 2.98  |
| Summary   | 97.58 | 2.27 | 0.14 | 0     | 0     | 100   |



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% Icon Classes (ppb)

98 0-2

2 2-5

0 5-10

0 10-50

0 >50.0



# PEACE RIVER AREA MONITORING PROGRAM

Reno Station - July 2021

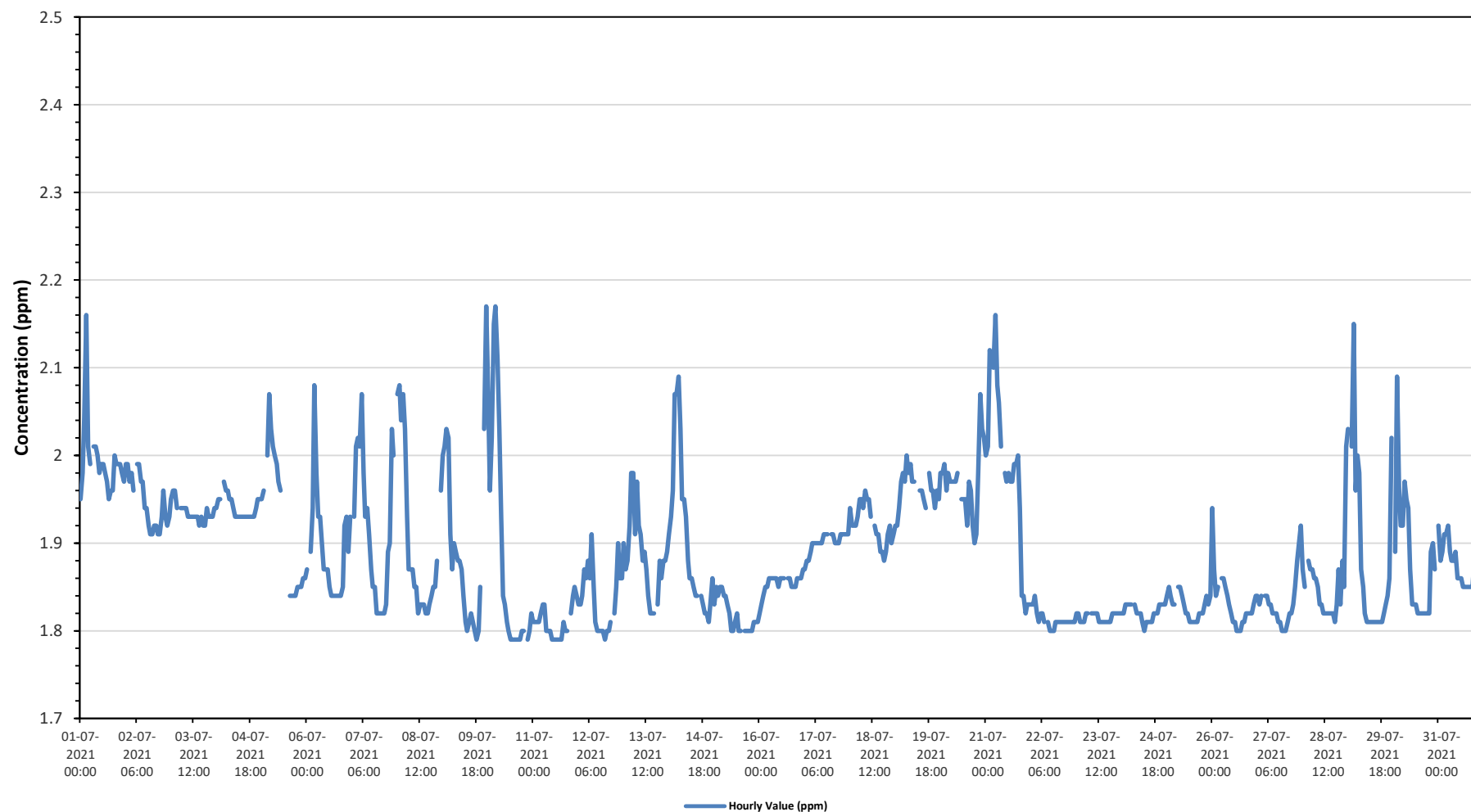
Summary of Hourly Averages

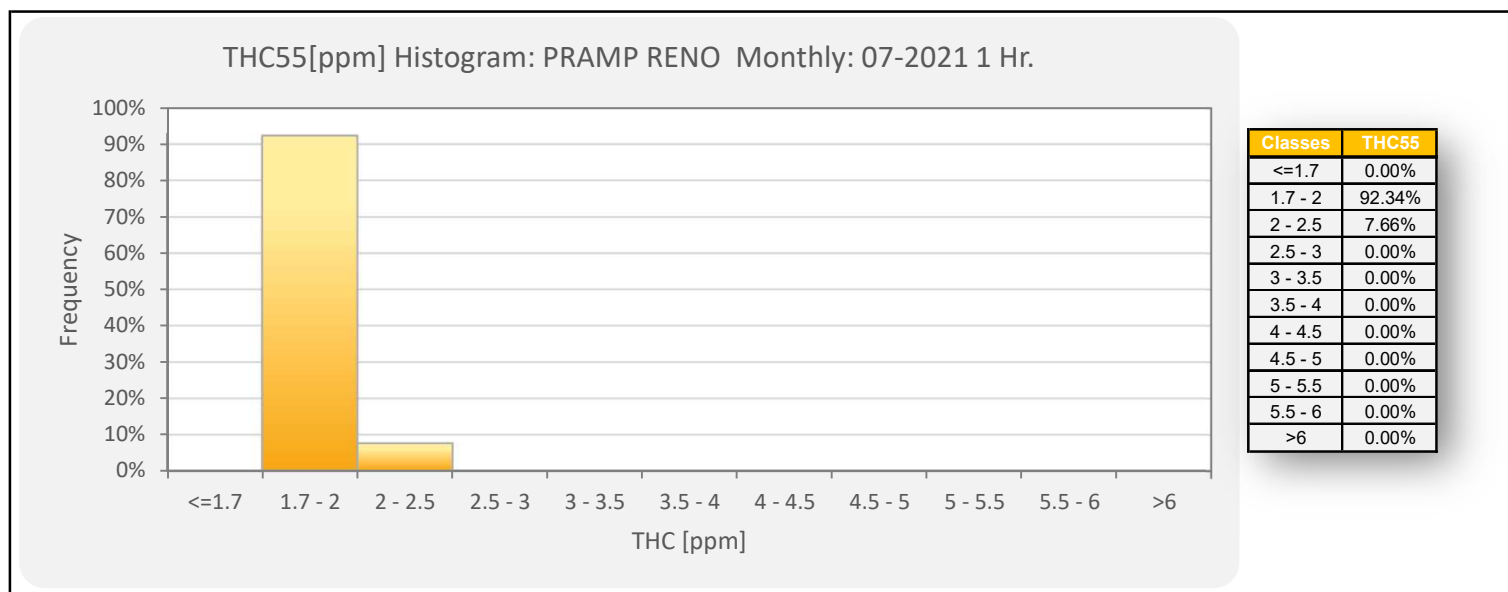
## TOTAL HYDROCARBONS (THC) in ppm

|                       |                               |                        |      |
|-----------------------|-------------------------------|------------------------|------|
| Maximum Hourly Value: | 2.17 ppm on July 9 at hour 23 | Hours in Service:      | 744  |
| Maximum Daily Value:  | 1.99 ppm on July 1            | Hours of Data:         | 705  |
| Minimum Hourly Value: | 1.79 ppm on July 9 at hour 18 | Hours of Missing Data: | 2    |
| Minimum Daily Value:  | 1.81 ppm on July 11           | Hours of Calibration:  | 37   |
| Monthly Average:      | 1.89 ppm                      | Operational Uptime:    | 99.7 |

| Day                                                                                                     | Hourly Period Starting at (MST)               |      |      |      |      |      |      |                                                                                         |      |      |      |      |      |      |                     |      |      |      |      |      |      |      |      | Daily Minimum | Daily Maximum | Daily Average |      |  |  |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|------|------|---------------------|------|------|------|------|------|------|------|------|---------------|---------------|---------------|------|--|--|
|                                                                                                         | 0                                             | 1    | 2    | 3    | 4    | 5    | 6    | 7                                                                                       | 8    | 9    | 10   | 11   | 12   | 13   | 14                  | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23            |               |               |      |  |  |
| Jul 1                                                                                                   | 1.95                                          | 1.98 | 2.04 | 2.16 | 2.01 | 1.99 | S    | 2.01                                                                                    | 2.01 | 2.00 | 1.98 | 1.99 | 1.99 | 1.98 | 1.97                | 1.95 | 1.96 | 1.96 | 2.00 | 1.99 | 1.99 | 1.99 | 1.98 | 1.97          | 1.95          | 2.16          | 1.99 |  |  |
| Jul 2                                                                                                   | 1.99                                          | 1.99 | 1.97 | 1.98 | 1.96 | S    | 1.99 | 1.99                                                                                    | 1.97 | 1.97 | 1.94 | 1.94 | 1.92 | 1.91 | 1.91                | 1.92 | 1.92 | 1.91 | 1.91 | 1.93 | 1.96 | 1.93 | 1.92 | 1.93          | 1.91          | 1.99          | 1.95 |  |  |
| Jul 3                                                                                                   | 1.95                                          | 1.96 | 1.96 | 1.94 | S    | 1.94 | 1.94 | 1.94                                                                                    | 1.94 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93                | 1.92 | 1.93 | 1.92 | 1.92 | 1.94 | 1.93 | 1.93 | 1.93 | 1.94          | 1.92          | 1.96          | 1.94 |  |  |
| Jul 4                                                                                                   | 1.94                                          | 1.95 | 1.95 | S    | 1.97 | 1.96 | 1.96 | 1.95                                                                                    | 1.95 | 1.94 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93                | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.94 | 1.95 | 1.95          | 1.93          | 1.97          | 1.94 |  |  |
| Jul 5                                                                                                   | 1.95                                          | 1.96 | S    | 2.00 | 2.07 | 2.03 | 2.01 | 2.00                                                                                    | 1.99 | 1.97 | 1.96 | C    | C    | C    | C                   | 1.84 | 1.84 | 1.84 | 1.84 | 1.85 | 1.85 | 1.85 | 1.86 | 1.86          | 1.84          | 2.07          | 1.92 |  |  |
| Jul 6                                                                                                   | 1.87                                          | S    | 1.89 | 1.94 | 2.08 | 1.98 | 1.93 | 1.93                                                                                    | 1.90 | 1.87 | 1.87 | 1.87 | 1.85 | 1.84 | 1.84                | 1.84 | 1.84 | 1.84 | 1.84 | 1.85 | 1.92 | 1.93 | 1.89 | 1.93          | 1.84          | 2.08          | 1.89 |  |  |
| Jul 7                                                                                                   | S                                             | 1.93 | 2.01 | 2.02 | 2.01 | 2.07 | 1.98 | 1.93                                                                                    | 1.94 | 1.91 | 1.87 | 1.85 | 1.85 | 1.82 | 1.82                | 1.82 | 1.82 | 1.82 | 1.83 | 1.89 | 1.90 | 2.03 | 2.00 | S             | 1.82          | 2.07          | 1.91 |  |  |
| Jul 8                                                                                                   | 2.07                                          | 2.08 | 2.04 | 2.07 | 2.03 | 1.93 | 1.87 | 1.87                                                                                    | 1.87 | 1.85 | 1.85 | 1.82 | 1.83 | 1.83 | 1.83                | 1.82 | 1.82 | 1.83 | 1.84 | 1.85 | 1.85 | 1.88 | S    | 1.96          | 1.82          | 2.08          | 1.90 |  |  |
| Jul 9                                                                                                   | 2.00                                          | 2.01 | 2.03 | 2.02 | 1.91 | 1.87 | 1.90 | 1.89                                                                                    | 1.88 | 1.88 | 1.87 | 1.84 | 1.81 | 1.80 | 1.81                | 1.82 | 1.81 | 1.80 | 1.79 | 1.80 | 1.85 | S    | 2.03 | 2.17          | 1.79          | 2.17          | 1.90 |  |  |
| Jul 10                                                                                                  | 2.09                                          | 1.96 | 2.02 | 2.15 | 2.17 | 2.11 | 2.03 | 1.93                                                                                    | 1.84 | 1.83 | 1.81 | 1.80 | 1.79 | 1.79 | 1.79                | 1.79 | 1.79 | 1.79 | 1.80 | 1.80 | S    | 1.79 | 1.80 | 1.82          | 1.79          | 2.17          | 1.89 |  |  |
| Jul 11                                                                                                  | 1.81                                          | 1.81 | 1.81 | 1.81 | 1.82 | 1.83 | 1.83 | 1.80                                                                                    | 1.80 | 1.80 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79                | 1.79 | 1.81 | 1.80 | 1.80 | S    | 1.82 | 1.84 | 1.85 | 1.84          | 1.79          | 1.85          | 1.81 |  |  |
| Jul 12                                                                                                  | 1.83                                          | 1.83 | 1.84 | 1.87 | 1.86 | 1.88 | 1.86 | 1.91                                                                                    | 1.85 | 1.81 | 1.80 | 1.80 | 1.80 | 1.80 | 1.79                | 1.80 | 1.80 | 1.81 | S    | 1.82 | 1.85 | 1.90 | 1.86 | 1.86          | 1.79          | 1.91          | 1.84 |  |  |
| Jul 13                                                                                                  | 1.90                                          | 1.87 | 1.88 | 1.92 | 1.98 | 1.98 | 1.91 | 1.97                                                                                    | 1.92 | 1.91 | 1.88 | 1.89 | 1.87 | 1.84 | 1.82                | 1.82 | 1.82 | S    | 1.83 | 1.88 | 1.86 | 1.88 | 1.88 | 1.89          | 1.82          | 1.98          | 1.89 |  |  |
| Jul 14                                                                                                  | 1.91                                          | 1.93 | 1.96 | 2.07 | 2.07 | 2.09 | 2.03 | 1.95                                                                                    | 1.95 | 1.93 | 1.88 | 1.86 | 1.86 | 1.85 | 1.84                | 1.84 | S    | 1.84 | 1.83 | 1.82 | 1.82 | 1.81 | 1.83 | 1.86          | 1.81          | 2.09          | 1.91 |  |  |
| Jul 15                                                                                                  | 1.83                                          | 1.85 | 1.84 | 1.85 | 1.85 | 1.84 | 1.84 | 1.83                                                                                    | 1.82 | 1.80 | 1.80 | 1.81 | 1.82 | 1.80 | 1.80                | S    | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.81 | 1.81 | 1.81          | 1.80          | 1.85          | 1.82 |  |  |
| Jul 16                                                                                                  | 1.82                                          | 1.83 | 1.84 | 1.85 | 1.85 | 1.86 | 1.86 | 1.86                                                                                    | 1.86 | 1.86 | 1.85 | 1.86 | 1.86 | 1.86 | S                   | 1.86 | 1.86 | 1.85 | 1.85 | 1.85 | 1.86 | 1.86 | 1.86 | 1.87          | 1.82          | 1.87          | 1.85 |  |  |
| Jul 17                                                                                                  | 1.87                                          | 1.88 | 1.88 | 1.89 | 1.90 | 1.90 | 1.90 | 1.90                                                                                    | 1.90 | 1.90 | 1.91 | 1.91 | 1.91 | S    | 1.91                | 1.91 | 1.90 | 1.90 | 1.90 | 1.91 | 1.91 | 1.91 | 1.91 | 1.91          | 1.87          | 1.91          | 1.90 |  |  |
| Jul 18                                                                                                  | 1.94                                          | 1.92 | 1.92 | 1.92 | 1.93 | 1.95 | 1.95 | 1.94                                                                                    | 1.96 | 1.95 | 1.95 | 1.93 | S    | 1.92 | 1.91                | 1.91 | 1.89 | 1.89 | 1.88 | 1.89 | 1.91 | 1.92 | 1.90 | 1.91          | 1.88          | 1.96          | 1.92 |  |  |
| Jul 19                                                                                                  | 1.92                                          | 1.92 | 1.94 | 1.97 | 1.98 | 1.97 | 2.00 | 1.98                                                                                    | 1.99 | 1.97 | 1.97 | S    | NRM  | 1.96 | 1.96                | 1.95 | 1.94 | NRM  | 1.98 | 1.96 | 1.96 | 1.94 | 1.96 | 1.95          | 1.92          | 2.00          | 1.96 |  |  |
| Jul 20                                                                                                  | 1.98                                          | 1.98 | 1.99 | 1.96 | 1.98 | 1.97 | 1.97 | 1.97                                                                                    | 1.97 | 1.98 | S    | 1.95 | 1.95 | 1.95 | 1.92                | 1.97 | 1.96 | 1.92 | 1.90 | 1.91 | 1.98 | 2.07 | 2.03 | 2.02          | 1.90          | 2.07          | 1.97 |  |  |
| Jul 21                                                                                                  | 2.00                                          | 2.01 | 2.12 | 2.11 | 2.10 | 2.16 | 2.08 | 2.06                                                                                    | 2.01 | S    | 1.98 | 1.97 | 1.98 | 1.97 | 1.97                | 1.99 | 1.99 | 2.00 | 1.94 | 1.84 | 1.84 | 1.82 | 1.83 | 1.83          | 1.82          | 2.16          | 1.98 |  |  |
| Jul 22                                                                                                  | 1.83                                          | 1.83 | 1.84 | 1.82 | 1.81 | 1.82 | 1.82 | 1.81                                                                                    | S    | 1.81 | 1.80 | 1.80 | 1.80 | 1.81 | 1.81                | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81          | 1.80          | 1.84          | 1.81 |  |  |
| Jul 23                                                                                                  | 1.82                                          | 1.82 | 1.81 | 1.81 | 1.81 | 1.82 | 1.82 | S                                                                                       | 1.82 | 1.82 | 1.82 | 1.82 | 1.81 | 1.81 | 1.81                | 1.81 | 1.81 | 1.81 | 1.81 | 1.82 | 1.82 | 1.82 | 1.82 | 1.82          | 1.81          | 1.82          | 1.82 |  |  |
| Jul 24                                                                                                  | 1.82                                          | 1.82 | 1.83 | 1.83 | 1.83 | 1.83 | S    | 1.83                                                                                    | 1.82 | 1.82 | 1.82 | 1.81 | 1.80 | 1.81 | 1.81                | 1.81 | 1.81 | 1.82 | 1.82 | 1.82 | 1.83 | 1.83 | 1.83 | 1.83          | 1.80          | 1.83          | 1.82 |  |  |
| Jul 25                                                                                                  | 1.84                                          | 1.85 | 1.84 | 1.83 | 1.83 | S    | 1.85 | 1.85                                                                                    | 1.84 | 1.83 | 1.82 | 1.82 | 1.81 | 1.81 | 1.81                | 1.81 | 1.81 | 1.82 | 1.82 | 1.82 | 1.83 | 1.84 | 1.83 | 1.84          | 1.81          | 1.85          | 1.83 |  |  |
| Jul 26                                                                                                  | 1.94                                          | 1.87 | 1.84 | 1.85 | S    | 1.86 | 1.86 | 1.85                                                                                    | 1.84 | 1.83 | 1.82 | 1.81 | 1.81 | 1.80 | 1.80                | 1.80 | 1.81 | 1.81 | 1.82 | 1.82 | 1.82 | 1.82 | 1.83 | 1.84          | 1.80          | 1.94          | 1.83 |  |  |
| Jul 27                                                                                                  | 1.84                                          | 1.83 | 1.84 | S    | 1.84 | 1.84 | 1.83 | 1.83                                                                                    | 1.82 | 1.82 | 1.82 | 1.81 | 1.81 | 1.80 | 1.80                | 1.80 | 1.81 | 1.82 | 1.82 | 1.83 | 1.85 | 1.88 | 1.90 | 1.92          | 1.80          | 1.92          | 1.83 |  |  |
| Jul 28                                                                                                  | 1.87                                          | 1.85 | S    | 1.88 | 1.87 | 1.87 | 1.86 | 1.86                                                                                    | 1.85 | 1.83 | 1.83 | 1.82 | 1.82 | 1.82 | 1.82                | 1.82 | 1.82 | 1.81 | 1.83 | 1.87 | 1.83 | 1.88 | 1.85 | 2.01          | 1.81          | 2.01          | 1.85 |  |  |
| Jul 29                                                                                                  | 2.03                                          | S    | 2.01 | 2.15 | 1.96 | 2.00 | 1.98 | 1.87                                                                                    | 1.85 | 1.82 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81                | 1.81 | 1.81 | 1.81 | 1.81 | 1.82 | 1.83 | 1.84 | 1.86 | 2.02          | 1.81          | 2.15          | 1.88 |  |  |
| Jul 30                                                                                                  | S                                             | 1.89 | 2.09 | 1.96 | 1.92 | 1.92 | 1.97 | 1.95                                                                                    | 1.94 | 1.87 | 1.83 | 1.83 | 1.83 | 1.82 | 1.82                | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.89 | 1.90 | 1.87 | S             | 1.82          | 2.09          | 1.88 |  |  |
| Jul 31                                                                                                  | 1.92                                          | 1.88 | 1.89 | 1.91 | 1.91 | 1.92 | 1.89 | 1.88                                                                                    | 1.88 | 1.89 | 1.86 | 1.86 | 1.86 | 1.85 | 1.85                | 1.85 | 1.85 | 1.85 | 1.85 | 1.86 | 1.87 | 1.87 | S    | 1.92          | 1.85          | 1.92          | 1.88 |  |  |
| Diurnal Maximum                                                                                         | 2.09                                          | 2.08 | 2.12 | 2.16 | 2.17 | 2.16 | 2.08 | 2.06                                                                                    | 2.01 | 2.00 | 1.98 | 1.99 | 1.99 | 1.98 | 1.97                | 1.99 | 1.99 | 2.00 | 2.00 | 1.99 | 1.99 | 2.07 | 2.03 | 2.17          |               |               |      |  |  |
| Diurnal Average                                                                                         | 1.91                                          | 1.91 | 1.93 | 1.95 | 1.94 | 1.94 | 1.92 | 1.91                                                                                    | 1.90 | 1.88 | 1.87 | 1.86 | 1.85 | 1.85 | 1.85                | 1.85 | 1.85 | 1.85 | 1.85 | 1.86 | 1.87 | 1.88 | 1.89 | 1.91          |               |               |      |  |  |
| C                                                                                                       | Monthly Calibration                           |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |      | Q    | Quality Assurance   |      |      |      |      |      |      |      |      |               |               |               |      |  |  |
| K                                                                                                       | Collection Error                              |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |      | Y    | Routine Maintenance |      |      |      |      |      |      |      |      |               |               |               |      |  |  |
| X                                                                                                       | InValid Data (Equipment Malfunction/Recovery) |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |      |      |                     |      |      |      |      |      |      |      |      |               |               |               |      |  |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                               |      |      |      |      |      |      |                                                                                         |      |      |      |      |      |      |                     |      |      |      |      |      |      |      |      |               |               |               |      |  |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                               |      |      |      |      |      |      |                                                                                         |      |      |      |      |      |      |                     |      |      |      |      |      |      |      |      |               |               |               |      |  |  |

*Timeseries Chart of Hourly Average for THC - Reno Station*

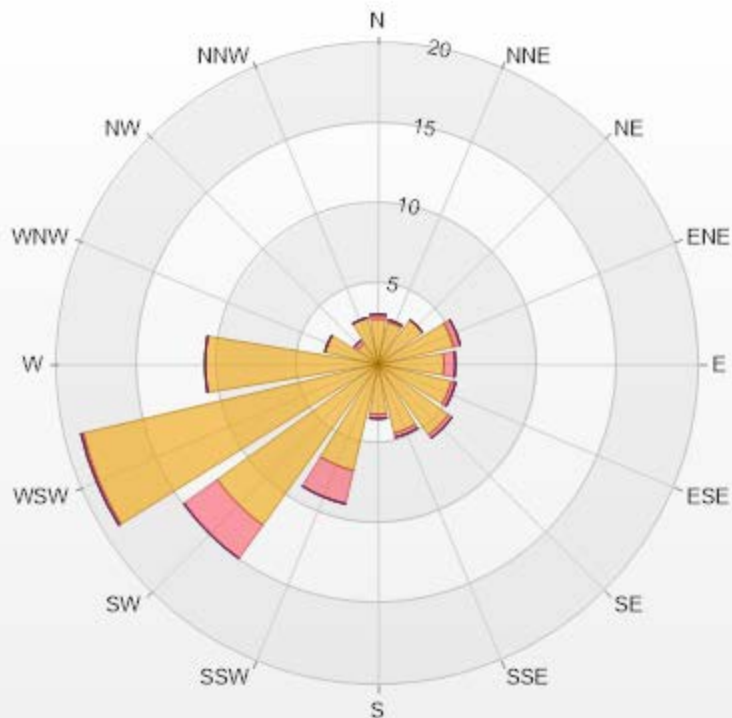






Wind: PRAMP RENO Poll.: PRAMP RENO-THC55[ppm] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 94.76% Calm Avg: 0.00 [ppm]

| Direction | 0-2   | 2-5  | 5-10 | 10-40 | >40.0 | Total |
|-----------|-------|------|------|-------|-------|-------|
| N         | 2.84  | 0.28 | 0    | 0     | 0     | 3.12  |
| NNE       | 2.7   | 0.14 | 0    | 0     | 0     | 2.84  |
| NE        | 3.4   | 0    | 0    | 0     | 0     | 3.4   |
| ENE       | 4.82  | 0.43 | 0    | 0     | 0     | 5.25  |
| E         | 4.11  | 0.71 | 0    | 0     | 0     | 4.82  |
| ESE       | 4.68  | 0.28 | 0    | 0     | 0     | 4.96  |
| SE        | 5.39  | 0.28 | 0    | 0     | 0     | 5.67  |
| SSE       | 4.4   | 0.28 | 0    | 0     | 0     | 4.68  |
| S         | 3.12  | 0.28 | 0    | 0     | 0     | 3.4   |
| SSW       | 6.81  | 2.13 | 0    | 0     | 0     | 8.94  |
| SW        | 12.34 | 2.55 | 0    | 0     | 0     | 14.89 |
| WSW       | 18.87 | 0.14 | 0    | 0     | 0     | 19.01 |
| W         | 10.78 | 0    | 0    | 0     | 0     | 10.78 |
| WNW       | 3.4   | 0    | 0    | 0     | 0     | 3.4   |
| NW        | 1.56  | 0.28 | 0    | 0     | 0     | 1.84  |
| NNW       | 2.98  | 0    | 0    | 0     | 0     | 2.98  |
| Summary   | 92.2  | 7.78 | 0    | 0     | 0     | 100   |



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% Icon Classes (ppm)

92 0-2

8 2-5

0 5-10

0 10-40

0 >40.0



# PEACE RIVER AREA MONITORING PROGRAM

Reno Station - July 2021

Summary of Hourly Averages

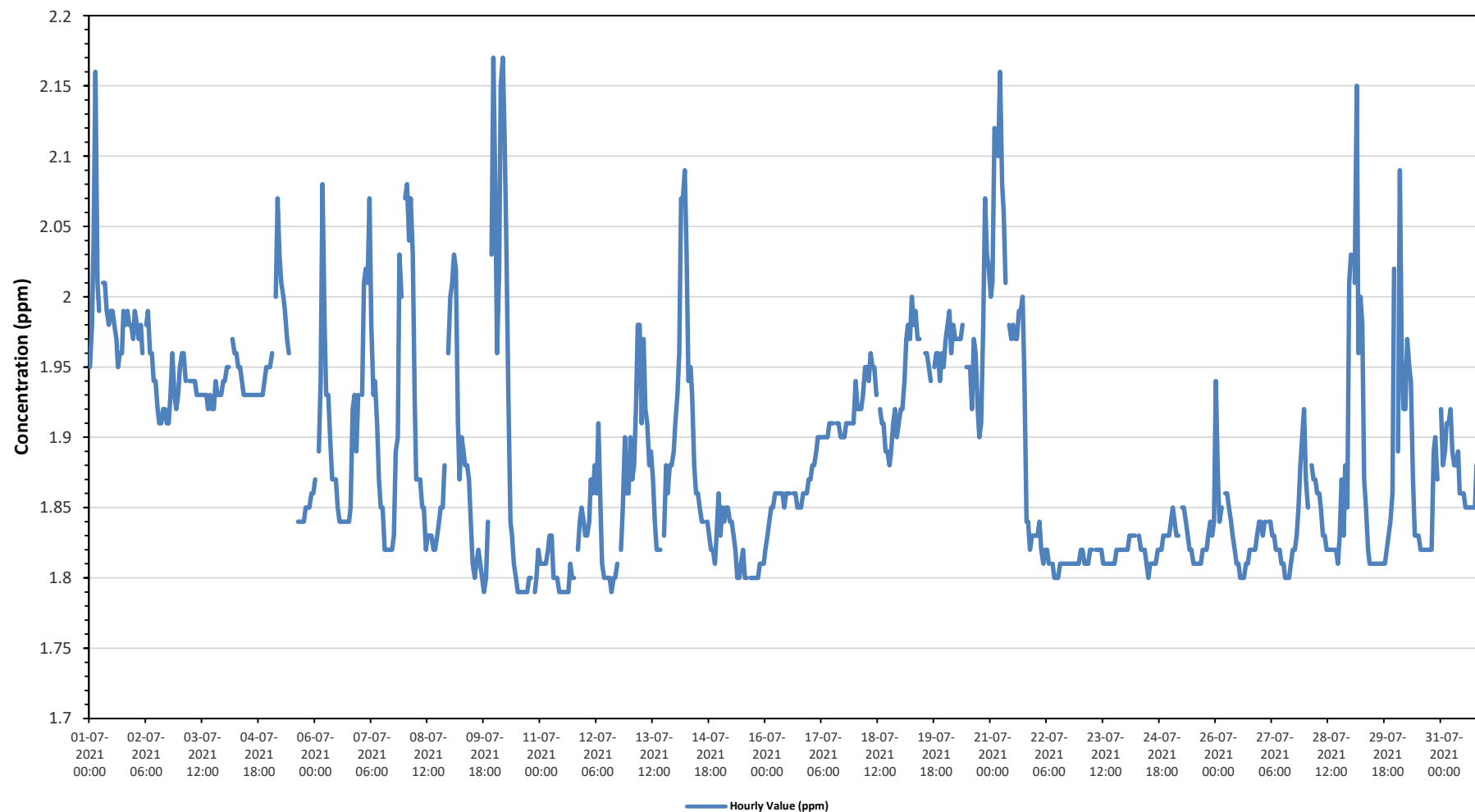
METHANE (CH4) in ppm

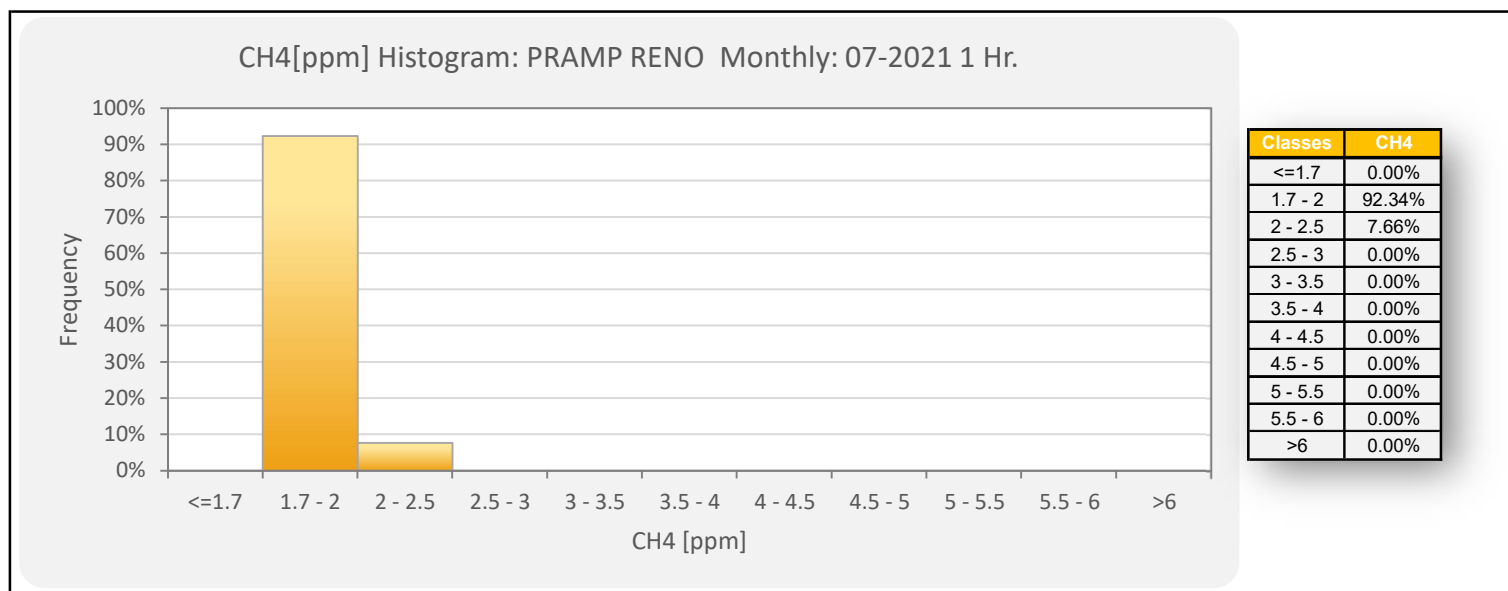
|                       |                               |                        |      |
|-----------------------|-------------------------------|------------------------|------|
| Maximum Hourly Value: | 2.17 ppm on July 9 at hour 23 | Hours in Service:      | 744  |
| Maximum Daily Value:  | 1.99 ppm on July 1            | Hours of Data:         | 705  |
| Minimum Hourly Value: | 1.79 ppm on July 9 at hour 18 | Hours of Missing Data: | 2    |
| Minimum Daily Value:  | 1.81 ppm on July 11           | Hours of Calibration:  | 37   |
| Monthly Average:      | 1.89 ppm                      | Operational Uptime:    | 99.7 |

| Day             | Hourly Period Starting at (MST)                |      |      |      |      |      |      |                                                                                         |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |      | Daily Minimum | Daily Maximum | Daily Average |      |
|-----------------|------------------------------------------------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|------|------|---------------------|------|------|------|------|------|------|---------------|------|---------------|---------------|---------------|------|
|                 | 0                                              | 1    | 2    | 3    | 4    | 5    | 6    | 7                                                                                       | 8    | 9    | 10   | 11   | 12   | 13   | 14                  | 15   | 16   | 17   | 18   | 19   | 20   | 21            | 22   | 23            |               |               |      |
| Jul 1           | 1.95                                           | 1.98 | 2.04 | 2.16 | 2.01 | 1.99 | S    | 2.01                                                                                    | 2.01 | 1.99 | 1.98 | 1.99 | 1.99 | 1.98 | 1.97                | 1.95 | 1.96 | 1.96 | 1.99 | 1.98 | 1.99 | 1.98          | 1.98 | 1.97          | 1.95          | 2.16          | 1.99 |
| Jul 2           | 1.99                                           | 1.98 | 1.97 | 1.98 | 1.96 | S    | 1.98 | 1.99                                                                                    | 1.96 | 1.96 | 1.94 | 1.94 | 1.92 | 1.91 | 1.91                | 1.92 | 1.92 | 1.91 | 1.91 | 1.93 | 1.96 | 1.93          | 1.92 | 1.93          | 1.91          | 1.99          | 1.94 |
| Jul 3           | 1.95                                           | 1.96 | 1.96 | 1.94 | S    | 1.94 | 1.94 | 1.94                                                                                    | 1.94 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93                | 1.92 | 1.93 | 1.92 | 1.92 | 1.94 | 1.93 | 1.93          | 1.93 | 1.94          | 1.92          | 1.96          | 1.94 |
| Jul 4           | 1.94                                           | 1.95 | 1.95 | S    | 1.97 | 1.96 | 1.96 | 1.95                                                                                    | 1.95 | 1.94 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93                | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93 | 1.94          | 1.95 | 1.95          | 1.93          | 1.97          | 1.94 |
| Jul 5           | 1.95                                           | 1.96 | S    | 2.00 | 2.07 | 2.03 | 2.01 | 2.00                                                                                    | 1.99 | 1.97 | 1.96 | C    | C    | C    | C                   | 1.84 | 1.84 | 1.84 | 1.84 | 1.85 | 1.85 | 1.85          | 1.86 | 1.86          | 1.84          | 2.07          | 1.92 |
| Jul 6           | 1.87                                           | S    | 1.89 | 1.94 | 2.08 | 1.98 | 1.93 | 1.93                                                                                    | 1.90 | 1.87 | 1.87 | 1.87 | 1.85 | 1.84 | 1.84                | 1.84 | 1.84 | 1.84 | 1.84 | 1.85 | 1.92 | 1.93          | 1.89 | 1.93          | 1.84          | 2.08          | 1.89 |
| Jul 7           | S                                              | 1.93 | 2.01 | 2.02 | 2.01 | 2.07 | 1.98 | 1.93                                                                                    | 1.94 | 1.91 | 1.87 | 1.85 | 1.85 | 1.82 | 1.82                | 1.82 | 1.82 | 1.82 | 1.83 | 1.89 | 1.90 | 2.03          | 2.00 | S             | 1.82          | 2.07          | 1.91 |
| Jul 8           | 2.07                                           | 2.08 | 2.04 | 2.07 | 2.03 | 1.93 | 1.87 | 1.87                                                                                    | 1.87 | 1.85 | 1.85 | 1.82 | 1.83 | 1.83 | 1.83                | 1.82 | 1.82 | 1.83 | 1.84 | 1.85 | 1.85 | 1.88          | S    | 1.96          | 1.82          | 2.08          | 1.90 |
| Jul 9           | 2.00                                           | 2.01 | 2.03 | 2.02 | 1.91 | 1.87 | 1.90 | 1.89                                                                                    | 1.88 | 1.88 | 1.87 | 1.84 | 1.81 | 1.80 | 1.81                | 1.82 | 1.81 | 1.80 | 1.79 | 1.80 | 1.84 | S             | 2.03 | 2.17          | 1.79          | 2.17          | 1.89 |
| Jul 10          | 2.08                                           | 1.96 | 2.02 | 2.15 | 2.17 | 2.11 | 2.03 | 1.93                                                                                    | 1.84 | 1.83 | 1.81 | 1.80 | 1.79 | 1.79 | 1.79                | 1.79 | 1.79 | 1.79 | 1.80 | 1.80 | S    | 1.79          | 1.80 | 1.82          | 1.79          | 2.17          | 1.89 |
| Jul 11          | 1.81                                           | 1.81 | 1.81 | 1.81 | 1.82 | 1.83 | 1.83 | 1.80                                                                                    | 1.80 | 1.80 | 1.79 | 1.79 | 1.79 | 1.79 | 1.79                | 1.79 | 1.81 | 1.80 | 1.80 | S    | 1.82 | 1.84          | 1.85 | 1.84          | 1.79          | 1.85          | 1.81 |
| Jul 12          | 1.83                                           | 1.83 | 1.84 | 1.87 | 1.86 | 1.88 | 1.86 | 1.91                                                                                    | 1.85 | 1.81 | 1.80 | 1.80 | 1.80 | 1.80 | 1.79                | 1.80 | 1.80 | 1.81 | S    | 1.82 | 1.85 | 1.90          | 1.86 | 1.86          | 1.79          | 1.91          | 1.84 |
| Jul 13          | 1.90                                           | 1.87 | 1.88 | 1.92 | 1.98 | 1.98 | 1.91 | 1.97                                                                                    | 1.92 | 1.91 | 1.88 | 1.89 | 1.87 | 1.84 | 1.82                | 1.82 | 1.82 | S    | 1.83 | 1.88 | 1.86 | 1.88          | 1.88 | 1.89          | 1.82          | 1.98          | 1.89 |
| Jul 14          | 1.91                                           | 1.93 | 1.96 | 2.07 | 2.07 | 2.09 | 2.03 | 1.94                                                                                    | 1.95 | 1.93 | 1.88 | 1.86 | 1.86 | 1.85 | 1.84                | 1.84 | S    | 1.84 | 1.83 | 1.82 | 1.82 | 1.81          | 1.83 | 1.86          | 1.81          | 2.09          | 1.91 |
| Jul 15          | 1.83                                           | 1.85 | 1.84 | 1.85 | 1.85 | 1.84 | 1.84 | 1.83                                                                                    | 1.82 | 1.80 | 1.80 | 1.81 | 1.82 | 1.80 | 1.80                | S    | 1.80 | 1.80 | 1.80 | 1.80 | 1.80 | 1.81          | 1.81 | 1.81          | 1.80          | 1.85          | 1.82 |
| Jul 16          | 1.82                                           | 1.83 | 1.84 | 1.85 | 1.85 | 1.86 | 1.86 | 1.86                                                                                    | 1.86 | 1.86 | 1.85 | 1.86 | 1.86 | 1.86 | S                   | 1.86 | 1.86 | 1.85 | 1.85 | 1.85 | 1.86 | 1.86          | 1.86 | 1.87          | 1.82          | 1.87          | 1.85 |
| Jul 17          | 1.87                                           | 1.88 | 1.88 | 1.89 | 1.90 | 1.90 | 1.90 | 1.90                                                                                    | 1.90 | 1.90 | 1.91 | 1.91 | 1.91 | S    | 1.91                | 1.91 | 1.90 | 1.90 | 1.90 | 1.91 | 1.91 | 1.91          | 1.91 | 1.91          | 1.87          | 1.91          | 1.90 |
| Jul 18          | 1.94                                           | 1.92 | 1.92 | 1.92 | 1.93 | 1.95 | 1.95 | 1.94                                                                                    | 1.96 | 1.95 | 1.95 | 1.93 | S    | 1.92 | 1.91                | 1.91 | 1.89 | 1.89 | 1.88 | 1.89 | 1.91 | 1.92          | 1.90 | 1.91          | 1.88          | 1.96          | 1.92 |
| Jul 19          | 1.92                                           | 1.92 | 1.94 | 1.97 | 1.98 | 1.97 | 2.00 | 1.98                                                                                    | 1.99 | 1.97 | 1.97 | S    | NRM  | 1.96 | 1.96                | 1.95 | 1.94 | NRM  | 1.95 | 1.96 | 1.96 | 1.94          | 1.96 | 1.95          | 1.92          | 2.00          | 1.96 |
| Jul 20          | 1.97                                           | 1.98 | 1.99 | 1.96 | 1.98 | 1.97 | 1.97 | 1.97                                                                                    | 1.97 | 1.98 | S    | 1.95 | 1.95 | 1.95 | 1.92                | 1.97 | 1.96 | 1.92 | 1.90 | 1.91 | 1.98 | 2.07          | 2.03 | 2.02          | 1.90          | 2.07          | 1.97 |
| Jul 21          | 2.00                                           | 2.01 | 2.12 | 2.11 | 2.10 | 2.16 | 2.08 | 2.06                                                                                    | 2.01 | S    | 1.98 | 1.97 | 1.98 | 1.97 | 1.97                | 1.99 | 1.99 | 2.00 | 1.94 | 1.84 | 1.84 | 1.82          | 1.83 | 1.83          | 1.82          | 2.16          | 1.98 |
| Jul 22          | 1.83                                           | 1.83 | 1.84 | 1.82 | 1.81 | 1.82 | 1.82 | 1.81                                                                                    | S    | 1.81 | 1.80 | 1.80 | 1.80 | 1.81 | 1.81                | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81          | 1.81 | 1.81          | 1.80          | 1.84          | 1.81 |
| Jul 23          | 1.82                                           | 1.82 | 1.81 | 1.81 | 1.81 | 1.82 | 1.82 | S                                                                                       | 1.82 | 1.82 | 1.82 | 1.82 | 1.81 | 1.81 | 1.81                | 1.81 | 1.81 | 1.81 | 1.81 | 1.82 | 1.82 | 1.82          | 1.82 | 1.82          | 1.81          | 1.82          | 1.82 |
| Jul 24          | 1.82                                           | 1.82 | 1.83 | 1.83 | 1.83 | 1.83 | S    | 1.83                                                                                    | 1.82 | 1.82 | 1.82 | 1.81 | 1.80 | 1.81 | 1.81                | 1.81 | 1.81 | 1.81 | 1.82 | 1.82 | 1.82 | 1.83          | 1.83 | 1.83          | 1.80          | 1.83          | 1.82 |
| Jul 25          | 1.84                                           | 1.85 | 1.84 | 1.83 | 1.83 | S    | 1.85 | 1.85                                                                                    | 1.84 | 1.83 | 1.82 | 1.82 | 1.81 | 1.81 | 1.81                | 1.81 | 1.81 | 1.81 | 1.82 | 1.82 | 1.82 | 1.83          | 1.84 | 1.83          | 1.81          | 1.85          | 1.83 |
| Jul 26          | 1.94                                           | 1.87 | 1.84 | 1.85 | S    | 1.86 | 1.86 | 1.85                                                                                    | 1.84 | 1.83 | 1.82 | 1.81 | 1.81 | 1.80 | 1.80                | 1.80 | 1.81 | 1.81 | 1.82 | 1.82 | 1.82 | 1.82          | 1.83 | 1.84          | 1.80          | 1.94          | 1.83 |
| Jul 27          | 1.84                                           | 1.83 | 1.84 | S    | 1.84 | 1.84 | 1.83 | 1.83                                                                                    | 1.82 | 1.82 | 1.82 | 1.81 | 1.81 | 1.80 | 1.80                | 1.80 | 1.81 | 1.82 | 1.82 | 1.83 | 1.85 | 1.88          | 1.90 | 1.92          | 1.80          | 1.92          | 1.83 |
| Jul 28          | 1.87                                           | 1.85 | S    | 1.88 | 1.87 | 1.87 | 1.86 | 1.86                                                                                    | 1.85 | 1.83 | 1.83 | 1.82 | 1.82 | 1.82 | 1.82                | 1.82 | 1.82 | 1.81 | 1.83 | 1.87 | 1.83 | 1.88          | 1.85 | 2.01          | 1.81          | 2.01          | 1.85 |
| Jul 29          | 2.03                                           | S    | 2.01 | 2.15 | 1.96 | 2.00 | 1.98 | 1.87                                                                                    | 1.85 | 1.82 | 1.81 | 1.81 | 1.81 | 1.81 | 1.81                | 1.81 | 1.81 | 1.81 | 1.81 | 1.82 | 1.83 | 1.84          | 1.86 | 2.02          | 1.81          | 2.15          | 1.88 |
| Jul 30          | S                                              | 1.89 | 2.09 | 1.96 | 1.92 | 1.92 | 1.97 | 1.95                                                                                    | 1.94 | 1.87 | 1.83 | 1.83 | 1.83 | 1.82 | 1.82                | 1.82 | 1.82 | 1.82 | 1.82 | 1.82 | 1.89 | 1.90          | 1.87 | S             | 1.82          | 2.09          | 1.88 |
| Jul 31          | 1.92                                           | 1.88 | 1.89 | 1.91 | 1.91 | 1.92 | 1.89 | 1.88                                                                                    | 1.88 | 1.89 | 1.86 | 1.86 | 1.86 | 1.85 | 1.85                | 1.85 | 1.85 | 1.85 | 1.85 | 1.88 | 1.86 | 1.87          | S    | 1.92          | 1.85          | 1.92          | 1.88 |
| Diurnal Maximum | 2.08                                           | 2.08 | 2.12 | 2.16 | 2.17 | 2.16 | 2.08 | 2.06                                                                                    | 2.01 | 1.99 | 1.98 | 1.99 | 1.99 | 1.98 | 1.97                | 1.99 | 1.99 | 2.00 | 1.99 | 1.98 | 1.99 | 2.07          | 2.03 | 2.17          |               |               |      |
| Diurnal Average | 1.91                                           | 1.91 | 1.93 | 1.95 | 1.94 | 1.94 | 1.92 | 1.91                                                                                    | 1.90 | 1.88 | 1.87 | 1.86 | 1.85 | 1.85 | 1.85                | 1.85 | 1.85 | 1.85 | 1.85 | 1.86 | 1.87 | 1.88          | 1.89 | 1.91          |               |               |      |
| C               | Monthly Calibration                            |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |      | Q    | Quality Assurance   |      |      |      |      |      |      |               |      |               |               |               |      |
| K               | Collection Error                               |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |      | Y    | Routine Maintenance |      |      |      |      |      | P    | Power Failure |      |               |               |               |      |
| X               | Invalid Data (Equipment Malfunction /Recovery) |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |      |               |               |               |      |

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.  
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

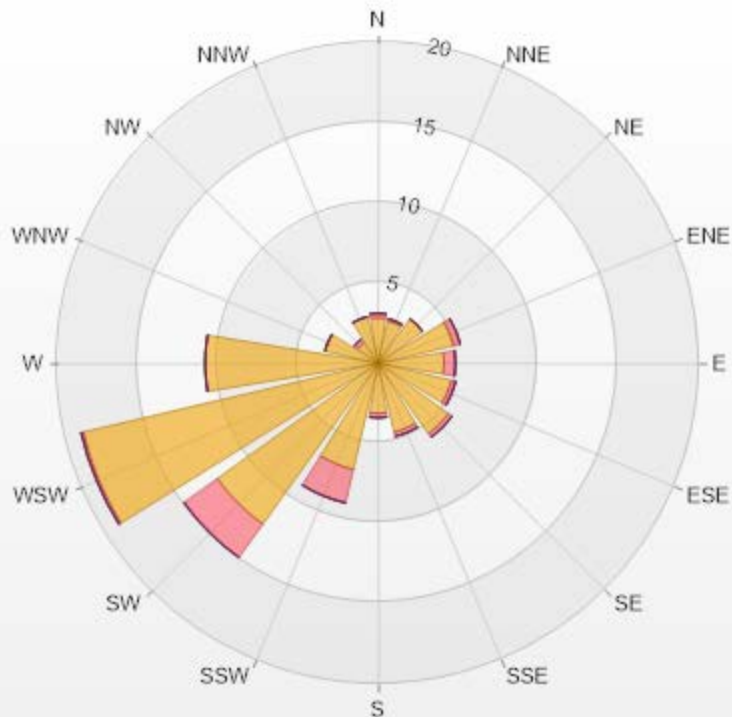
*Timeseries Chart of Hourly Average for CH4 - Reno Station*





Wind: PRAMP RENO Poll.: PRAMP RENO-CH4[ppm] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 94.76% Calm Avg: 0.00 [ppm]

| Direction | 0-2   | 2-5  | 5-10 | 10-20 | >20.0 | Total |
|-----------|-------|------|------|-------|-------|-------|
| N         | 2.84  | 0.28 | 0    | 0     | 0     | 3.12  |
| NNE       | 2.7   | 0.14 | 0    | 0     | 0     | 2.84  |
| NE        | 3.4   | 0    | 0    | 0     | 0     | 3.4   |
| ENE       | 4.82  | 0.43 | 0    | 0     | 0     | 5.25  |
| E         | 4.11  | 0.71 | 0    | 0     | 0     | 4.82  |
| ESE       | 4.68  | 0.28 | 0    | 0     | 0     | 4.96  |
| SE        | 5.39  | 0.28 | 0    | 0     | 0     | 5.67  |
| SSE       | 4.4   | 0.28 | 0    | 0     | 0     | 4.68  |
| S         | 3.12  | 0.28 | 0    | 0     | 0     | 3.4   |
| SSW       | 6.81  | 2.13 | 0    | 0     | 0     | 8.94  |
| SW        | 12.34 | 2.55 | 0    | 0     | 0     | 14.89 |
| WSW       | 18.87 | 0.14 | 0    | 0     | 0     | 19.01 |
| W         | 10.78 | 0    | 0    | 0     | 0     | 10.78 |
| WNW       | 3.4   | 0    | 0    | 0     | 0     | 3.4   |
| NW        | 1.56  | 0.28 | 0    | 0     | 0     | 1.84  |
| NNW       | 2.98  | 0    | 0    | 0     | 0     | 2.98  |
| Summary   | 92.2  | 7.78 | 0    | 0     | 0     | 100   |



PRAMP-202107

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% Icon Classes (ppm)

92 0-2

8 2-5

0 5-10

0 10-20

0 >20.0



# PEACE RIVER AREA MONITORING PROGRAM

Reno Station - July 2021

Summary of Hourly Averages

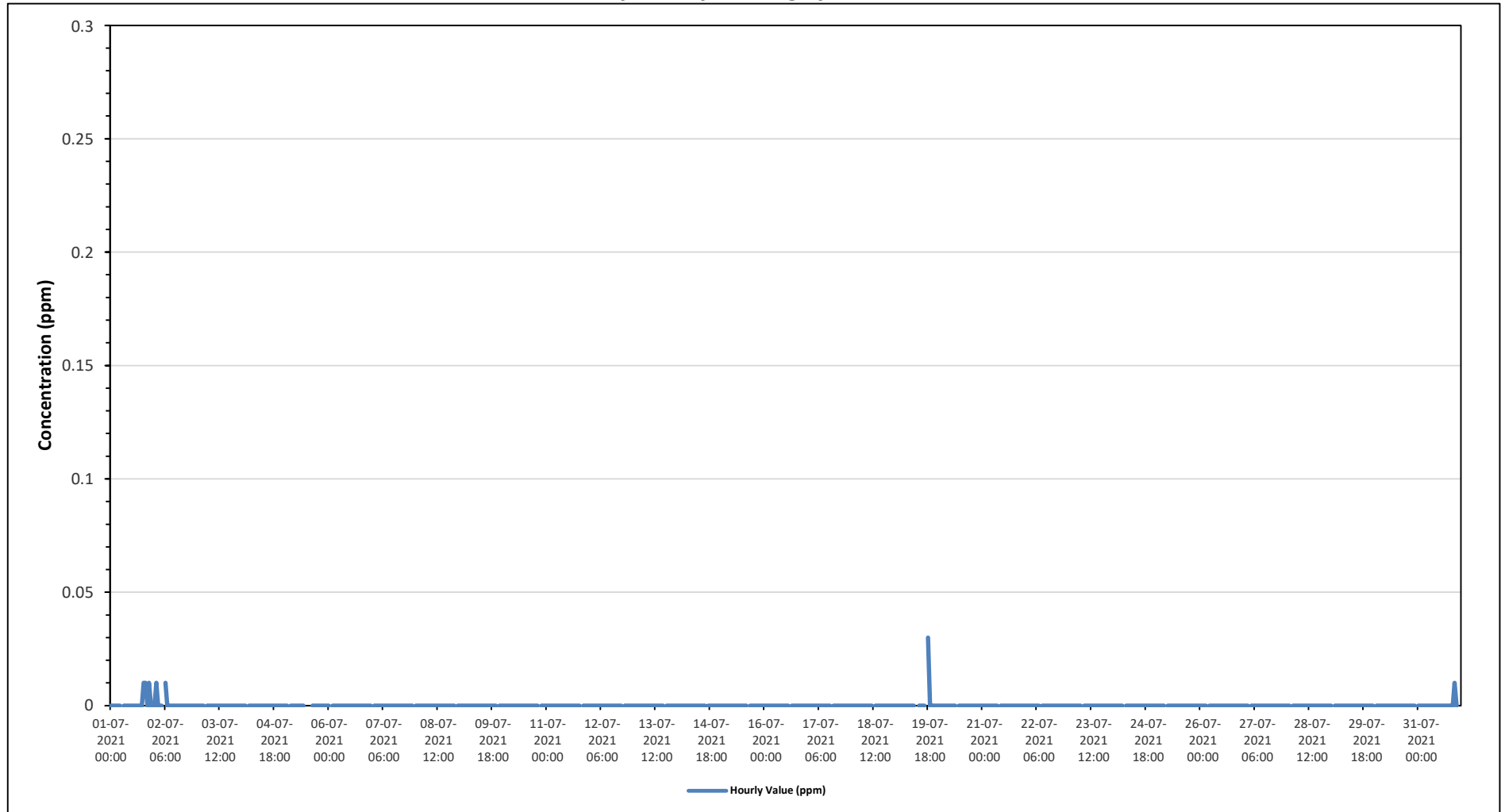
## NON-METHANE HYDROCARBONS (NMHC) in ppm

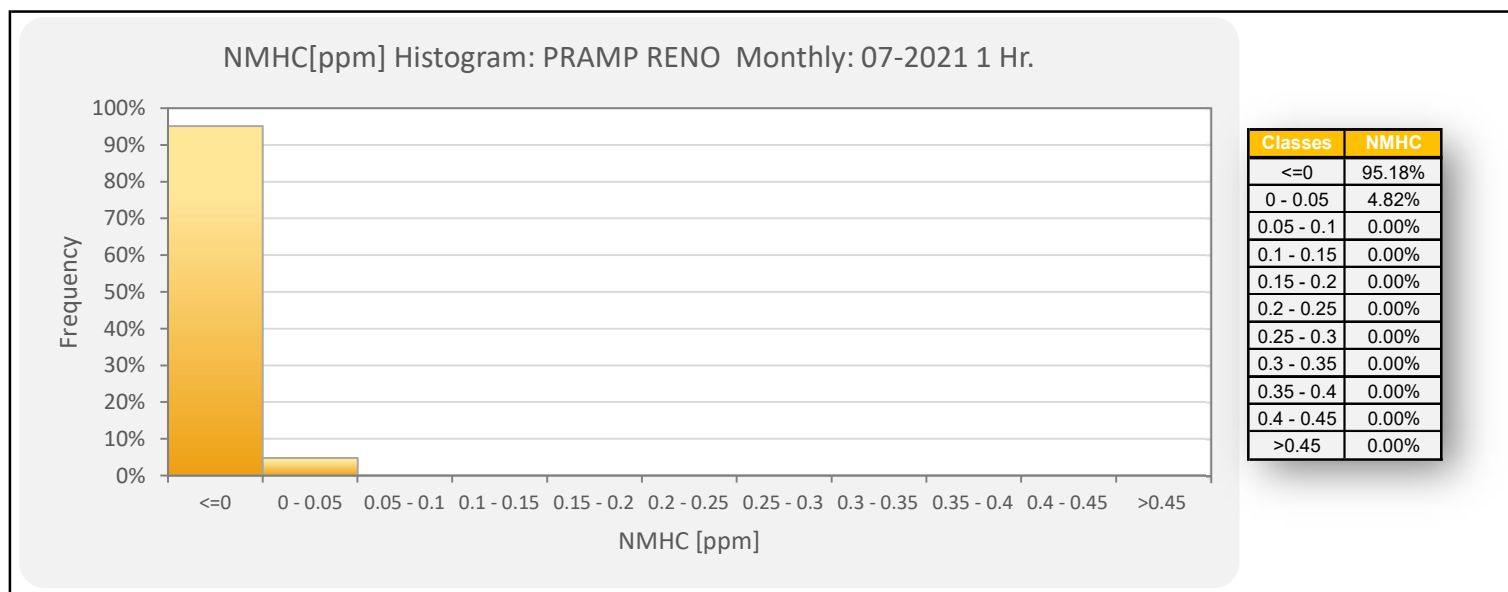
|                       |          |                       |                        |      |
|-----------------------|----------|-----------------------|------------------------|------|
| Maximum Hourly Value: | 0.03 ppm | on July 19 at hour 18 | Hours in Service:      | 744  |
| Maximum Daily Value:  | 0.00 ppm | on July 19            | Hours of Data:         | 705  |
| Minimum Hourly Value: | 0.00 ppm | on July 1 at hour 0   | Hours of Missing Data: | 2    |
| Minimum Daily Value:  | 0.00 ppm | on July 3             | Hours of Calibration:  | 37   |
| Monthly Average:      | 0.00 ppm |                       | Operational Uptime:    | 99.7 |

| Day                                                                                                     | Hourly Period Starting at (MST)               |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |      |      |      |                     |      |      |      |      |      |      |      | Daily Minimum | Daily Maximum | Daily Average |      |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|------|------|------|---------------------|------|------|------|------|------|------|------|---------------|---------------|---------------|------|
|                                                                                                         | 0                                             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8                                                                                       | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16                  | 17   | 18   | 19   | 20   | 21   | 22   | 23   |               |               |               |      |
| Jul 1                                                                                                   | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          |      |
| Jul 2                                                                                                   | 0.00                                          | 0.01 | 0.00 | 0.00 | 0.00 | S    | 0.01 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          |      |
| Jul 3                                                                                                   | 0.00                                          | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          |      |
| Jul 4                                                                                                   | 0.00                                          | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          |      |
| Jul 5                                                                                                   | 0.00                                          | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | C    | C    | C    | C    | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          |      |
| Jul 6                                                                                                   | 0.00                                          | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          |      |
| Jul 7                                                                                                   | S                                             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S             | 0.00          | 0.00          | 0.00 |
| Jul 8                                                                                                   | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 9                                                                                                   | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 10                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 11                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 12                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 13                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 14                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S                   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 15                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 16                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 17                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 18                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 19                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | S    | NRM  | 0.00 | 0.00 | 0.00 | 0.00                | NRM  | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 20                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 21                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 22                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S                                                                                       | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 23                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 24                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 25                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 26                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 27                                                                                                  | 0.00                                          | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 28                                                                                                  | 0.00                                          | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 29                                                                                                  | 0.00                                          | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00          | 0.00          | 0.00 |
| Jul 30                                                                                                  | S                                             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S             | 0.00          | 0.00          | 0.00 |
| Jul 31                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | S    | 0.00 | 0.00          | 0.01          | 0.00          | 0.00 |
| Diurnal Maximum                                                                                         | 0.00                                          | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.03 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 |               |               |               |      |
| Diurnal Average                                                                                         | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |               |               |               |      |
| C                                                                                                       | Monthly Calibration                           |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |      |      | Q    | Quality Assurance   |      |      |      |      |      |      |      |               |               |               |      |
| K                                                                                                       | Collection Error                              |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |      |      | Y    | Routine Maintenance |      |      |      |      |      |      | P    | Power Failure |               |               |      |
| X                                                                                                       | InValid Data (Equipment Malfunction/Recovery) |      |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |      |      |      |                     |      |      |      |      |      |      |      |               |               |               |      |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                               |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |      |      |      |                     |      |      |      |      |      |      |      |               |               |               |      |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                               |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |      |      |      |                     |      |      |      |      |      |      |      |               |               |               |      |



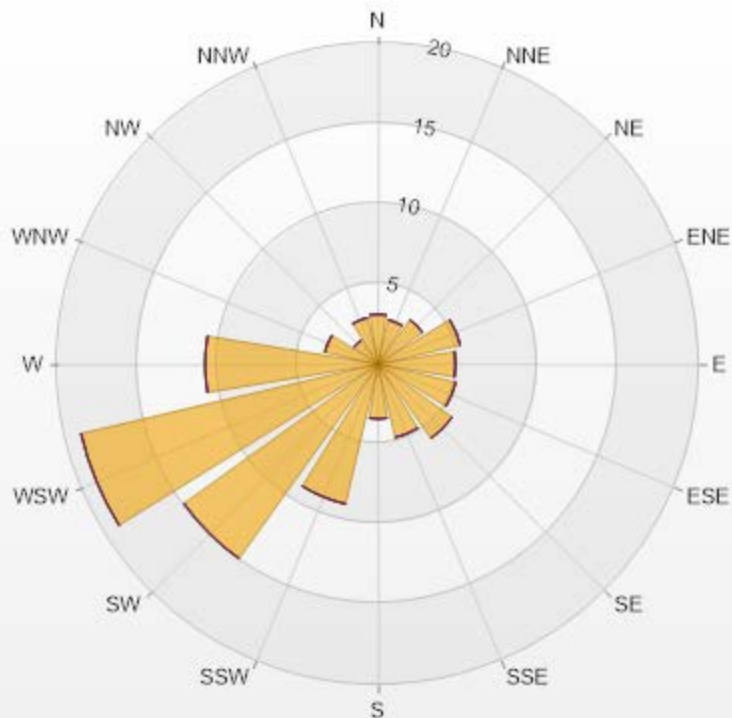
***Timeseries Chart of Hourly Average for NMHC - Reno Station***





Wind: PRAMP RENO Poll.: PRAMP RENO-NMHC[ppm] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 94.76% Calm Avg: 0.00 [ppm]

| Direction | 0-0.1 | 0.1-0.3 | 0.3-0.9 | 0.9-2 | >2.0 | Total |
|-----------|-------|---------|---------|-------|------|-------|
| N         | 3.12  | 0       | 0       | 0     | 0    | 3.12  |
| NNE       | 2.84  | 0       | 0       | 0     | 0    | 2.84  |
| NE        | 3.4   | 0       | 0       | 0     | 0    | 3.4   |
| ENE       | 5.25  | 0       | 0       | 0     | 0    | 5.25  |
| E         | 4.82  | 0       | 0       | 0     | 0    | 4.82  |
| ESE       | 4.96  | 0       | 0       | 0     | 0    | 4.96  |
| SE        | 5.67  | 0       | 0       | 0     | 0    | 5.67  |
| SSE       | 4.68  | 0       | 0       | 0     | 0    | 4.68  |
| S         | 3.4   | 0       | 0       | 0     | 0    | 3.4   |
| SSW       | 8.94  | 0       | 0       | 0     | 0    | 8.94  |
| SW        | 14.89 | 0       | 0       | 0     | 0    | 14.89 |
| WSW       | 19.01 | 0       | 0       | 0     | 0    | 19.01 |
| W         | 10.78 | 0       | 0       | 0     | 0    | 10.78 |
| WNW       | 3.4   | 0       | 0       | 0     | 0    | 3.4   |
| NW        | 1.84  | 0       | 0       | 0     | 0    | 1.84  |
| NNW       | 2.98  | 0       | 0       | 0     | 0    | 2.98  |
| Summary   | 100   | 0       | 0       | 0     | 0    | 100   |



PRAMP-202107

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% Icon Classes (ppm)

100 0-0.1

0 0.1-0.3

0 0.3-0.9

0 0.9-2

0 >2.0



## PEACE RIVER AREA MONITORING PROGRAM

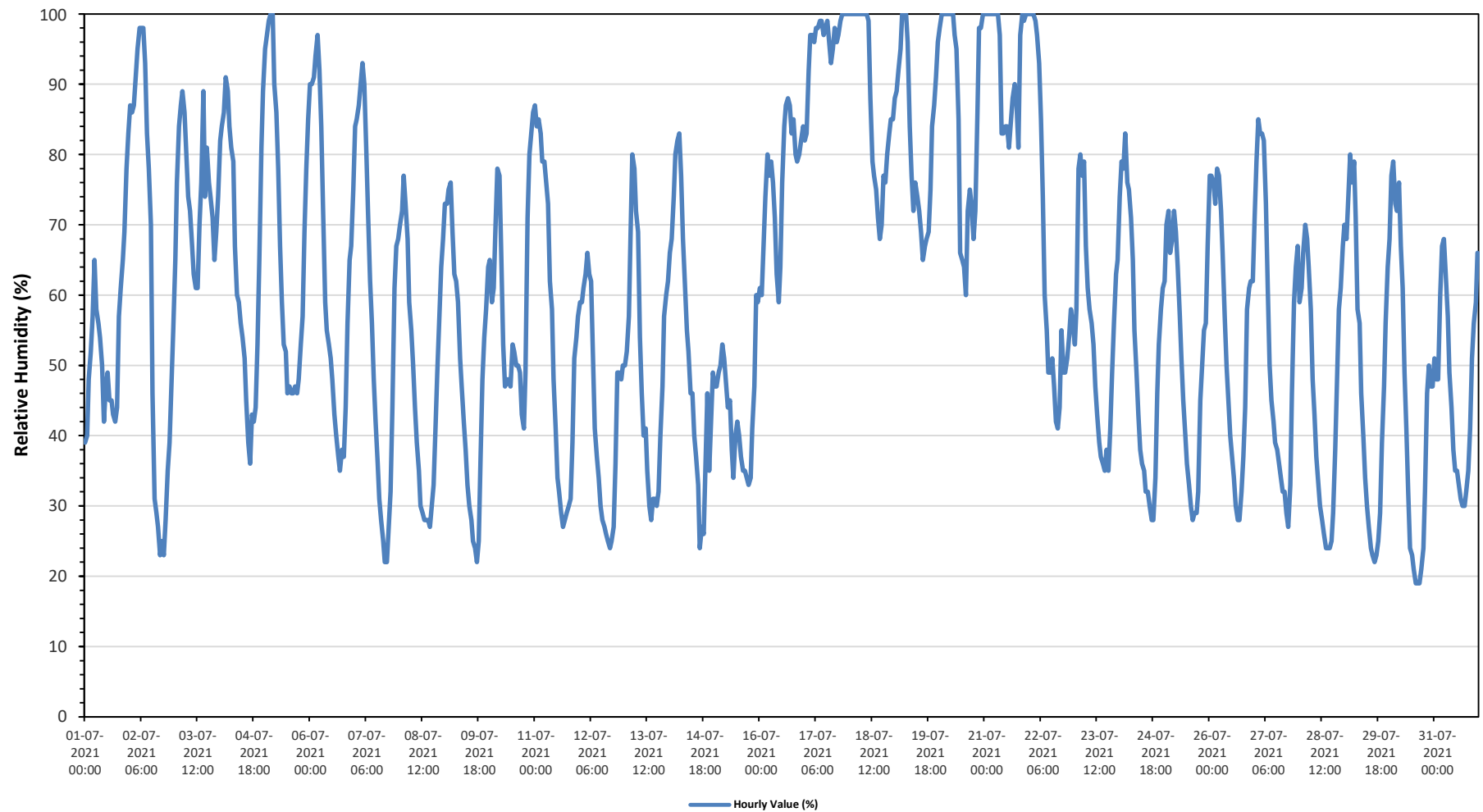
Reno Station - July 2021

Summary of Hourly Averages

RELATIVE HUMIDITY (RH) in %

| Maximum Hourly Value:                                                                                   |                                                |      | 100  | %    | on July 5 at hour 3   |      |      |      |                                                                                         |      |      |      |      |      | Hours in Service:      |      |                     | 744   |      |      |      |      |      |       |               |         |         |      |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|-----------------------|------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|------|------------------------|------|---------------------|-------|------|------|------|------|------|-------|---------------|---------|---------|------|--|
| Maximum Daily Value:                                                                                    |                                                |      | 96.2 | %    | on July 17            |      |      |      |                                                                                         |      |      |      |      |      | Hours of Data:         |      |                     | 744   |      |      |      |      |      |       |               |         |         |      |  |
| Minimum Hourly Value:                                                                                   |                                                |      | 19   | %    | on July 30 at hour 14 |      |      |      |                                                                                         |      |      |      |      |      | Hours of Missing Data: |      |                     | 0     |      |      |      |      |      |       |               |         |         |      |  |
| Minimum Daily Value:                                                                                    |                                                |      | 43.3 | %    | on July 12            |      |      |      |                                                                                         |      |      |      |      |      | Hours of Calibration:  |      |                     | 0     |      |      |      |      |      |       |               |         |         |      |  |
| Monthly Average:                                                                                        |                                                |      | 60.7 | %    |                       |      |      |      |                                                                                         |      |      |      |      |      | Operational Uptime:    |      |                     | 100.0 |      |      |      |      |      |       |               |         |         |      |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |                       |      |      |      |                                                                                         |      |      |      |      |      |                        |      |                     |       |      |      |      |      |      | Daily | Daily         | Daily   |         |      |  |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4                     | 5    | 6    | 7    | 8                                                                                       | 9    | 10   | 11   | 12   | 13   | 14                     | 15   | 16                  | 17    | 18   | 19   | 20   | 21   | 22   | 23    | Minimum       | Maximum | Average |      |  |
| Jul 1                                                                                                   | 39                                             | 40   | 48   | 52   | 57                    | 65   | 58   | 56   | 54                                                                                      | 50   | 42   | 47   | 49   | 45   | 45                     | 43   | 42                  | 44    | 57   | 61   | 65   | 69   | 78   | 83    | 39            | 83      | 53.7    |      |  |
| Jul 2                                                                                                   | 87                                             | 86   | 87   | 91   | 95                    | 98   | 98   | 98   | 93                                                                                      | 83   | 78   | 70   | 46   | 31   | 29                     | 27   | 23                  | 25    | 23   | 28   | 35   | 39   | 47   | 55    | 23            | 98      | 61.3    |      |  |
| Jul 3                                                                                                   | 65                                             | 76   | 84   | 87   | 89                    | 86   | 80   | 74   | 72                                                                                      | 67   | 63   | 61   | 61   | 70   | 76                     | 89   | 74                  | 81    | 76   | 74   | 71   | 65   | 69   | 74    | 61            | 89      | 74.3    |      |  |
| Jul 4                                                                                                   | 82                                             | 84   | 86   | 91   | 89                    | 84   | 81   | 79   | 67                                                                                      | 60   | 59   | 56   | 54   | 51   | 45                     | 39   | 36                  | 43    | 42   | 44   | 53   | 65   | 81   | 89    | 36            | 91      | 65.0    |      |  |
| Jul 5                                                                                                   | 95                                             | 97   | 99   | 100  | 100                   | 90   | 86   | 78   | 67                                                                                      | 59   | 53   | 52   | 46   | 47   | 46                     | 46   | 47                  | 46    | 48   | 53   | 57   | 69   | 78   | 85    | 46            | 100     | 68.5    |      |  |
| Jul 6                                                                                                   | 90                                             | 90   | 91   | 94   | 97                    | 92   | 84   | 72   | 59                                                                                      | 55   | 53   | 51   | 48   | 43   | 40                     | 37   | 35                  | 38    | 37   | 44   | 56   | 65   | 67   | 75    | 35            | 97      | 63.0    |      |  |
| Jul 7                                                                                                   | 84                                             | 85   | 87   | 90   | 93                    | 90   | 80   | 72   | 62                                                                                      | 56   | 48   | 42   | 36   | 31   | 28                     | 25   | 22                  | 22    | 27   | 32   | 44   | 61   | 67   | 68    | 22            | 93      | 56.3    |      |  |
| Jul 8                                                                                                   | 70                                             | 72   | 77   | 73   | 68                    | 59   | 55   | 50   | 44                                                                                      | 39   | 35   | 30   | 29   | 28   | 28                     | 28   | 27                  | 30    | 33   | 42   | 49   | 57   | 64   | 68    | 27            | 77      | 48.1    |      |  |
| Jul 9                                                                                                   | 73                                             | 73   | 75   | 76   | 69                    | 63   | 62   | 59   | 51                                                                                      | 47   | 42   | 38   | 33   | 30   | 28                     | 25   | 24                  | 22    | 25   | 37   | 48   | 54   | 58   | 64    | 22            | 76      | 49.0    |      |  |
| Jul 10                                                                                                  | 65                                             | 59   | 61   | 70   | 78                    | 77   | 67   | 53   | 47                                                                                      | 48   | 48   | 47   | 53   | 52   | 50                     | 50   | 49                  | 43    | 41   | 49   | 71   | 80   | 83   | 86    | 41            | 86      | 59.5    |      |  |
| Jul 11                                                                                                  | 87                                             | 84   | 85   | 83   | 79                    | 79   | 76   | 73   | 62                                                                                      | 58   | 48   | 41   | 34   | 32   | 29                     | 27   | 28                  | 29    | 30   | 31   | 39   | 51   | 54   | 57    | 27            | 87      | 54.0    |      |  |
| Jul 12                                                                                                  | 59                                             | 59   | 61   | 63   | 66                    | 63   | 62   | 50   | 41                                                                                      | 37   | 34   | 30   | 28   | 27   | 26                     | 25   | 24                  | 25    | 27   | 36   | 49   | 49   | 48   | 50    | 24            | 66      | 43.3    |      |  |
| Jul 13                                                                                                  | 50                                             | 52   | 57   | 68   | 80                    | 78   | 72   | 69   | 54                                                                                      | 46   | 40   | 41   | 35   | 30   | 28                     | 31   | 31                  | 30    | 32   | 40   | 47   | 57   | 60   | 62    | 28            | 80      | 49.6    |      |  |
| Jul 14                                                                                                  | 66                                             | 68   | 74   | 80   | 82                    | 83   | 77   | 68   | 62                                                                                      | 55   | 52   | 46   | 46   | 40   | 37                     | 33   | 24                  | 27    | 26   | 36   | 46   | 35   | 42   | 49    | 24            | 83      | 52.3    |      |  |
| Jul 15                                                                                                  | 47                                             | 47   | 49   | 50   | 53                    | 51   | 47   | 44   | 45                                                                                      | 38   | 34   | 40   | 42   | 40   | 37                     | 35   | 35                  | 34    | 33   | 34   | 41   | 47   | 60   | 59    | 33            | 60      | 43.4    |      |  |
| Jul 16                                                                                                  | 61                                             | 60   | 67   | 74   | 80                    | 77   | 79   | 76   | 71                                                                                      | 63   | 59   | 64   | 76   | 84   | 87                     | 88   | 87                  | 83    | 85   | 80   | 79   | 80   | 82   | 84    | 59            | 88      | 76.1    |      |  |
| Jul 17                                                                                                  | 82                                             | 83   | 92   | 97   | 97                    | 96   | 98   | 98   | 99                                                                                      | 99   | 97   | 98   | 99   | 96   | 93                     | 95   | 98                  | 96    | 97   | 99   | 100  | 100  | 100  | 100   | 82            | 100     | 96.2    |      |  |
| Jul 18                                                                                                  | 100                                            | 100  | 100  | 100  | 100                   | 100  | 100  | 100  | 100                                                                                     | 100  | 99   | 88   | 79   | 77   | 75                     | 71   | 68                  | 70    | 77   | 76   | 80   | 83   | 85   | 85    | 68            | 100     | 88.0    |      |  |
| Jul 19                                                                                                  | 88                                             | 89   | 92   | 95   | 100                   | 100  | 100  | 100  | 96                                                                                      | 84   | 77   | 72   | 76   | 74   | 72                     | 69   | 65                  | 67    | 68   | 69   | 75   | 84   | 87   | 91    | 96            | 65      | 100     | 82.8 |  |
| Jul 20                                                                                                  | 98                                             | 100  | 100  | 100  | 100                   | 100  | 100  | 100  | 97                                                                                      | 95   | 85   | 66   | 65   | 64   | 60                     | 72   | 75                  | 73    | 68   | 72   | 86   | 98   | 98   | 100   | 60            | 100     | 86.3    |      |  |
| Jul 21                                                                                                  | 100                                            | 100  | 100  | 100  | 100                   | 100  | 100  | 100  | 97                                                                                      | 83   | 83   | 84   | 84   | 81   | 85                     | 88   | 90                  | 87    | 81   | 97   | 100  | 99   | 100  | 100   | 81            | 100     | 93.3    |      |  |
| Jul 22                                                                                                  | 100                                            | 100  | 100  | 99   | 97                    | 93   | 85   | 74   | 60                                                                                      | 55   | 49   | 49   | 51   | 47   | 42                     | 41   | 44                  | 55    | 49   | 49   | 51   | 54   | 58   | 56    | 41            | 100     | 64.9    |      |  |
| Jul 23                                                                                                  | 53                                             | 58   | 78   | 80   | 77                    | 79   | 67   | 61   | 58                                                                                      | 56   | 53   | 47   | 43   | 39   | 37                     | 36   | 35                  | 38    | 35   | 41   | 49   | 56   | 63   | 65    | 35            | 80      | 54.3    |      |  |
| Jul 24                                                                                                  | 74                                             | 79   | 78   | 83   | 76                    | 75   | 71   | 65   | 55                                                                                      | 49   | 43   | 38   | 36   | 35   | 32                     | 32   | 30                  | 28    | 28   | 34   | 46   | 53   | 58   | 61    | 28            | 83      | 52.5    |      |  |
| Jul 25                                                                                                  | 62                                             | 70   | 72   | 66   | 68                    | 72   | 69   | 64   | 57                                                                                      | 51   | 45   | 40   | 36   | 33   | 30                     | 28   | 29                  | 29    | 32   | 45   | 50   | 55   | 56   | 67    | 28            | 72      | 51.1    |      |  |
| Jul 26                                                                                                  | 77                                             | 77   | 76   | 73   | 78                    | 77   | 72   | 66   | 57                                                                                      | 50   | 45   | 40   | 37   | 34   | 30                     | 28   | 28                  | 32    | 37   | 44   | 58   | 61   | 62   | 62    | 28            | 78      | 54.2    |      |  |
| Jul 27                                                                                                  | 71                                             | 79   | 85   | 83   | 83                    | 82   | 73   | 61   | 50                                                                                      | 45   | 42   | 39   | 38   | 36   | 34                     | 32   | 32                  | 29    | 27   | 33   | 46   | 59   | 64   | 67    | 27            | 85      | 53.8    |      |  |
| Jul 28                                                                                                  | 59                                             | 61   | 66   | 70   | 68                    | 64   | 58   | 48   | 43                                                                                      | 37   | 33   | 30   | 28   | 26   | 24                     | 24   | 24                  | 25    | 29   | 38   | 48   | 58   | 61   | 67    | 24            | 70      | 45.4    |      |  |
| Jul 29                                                                                                  | 70                                             | 68   | 74   | 80   | 76                    | 79   | 71   | 58   | 56                                                                                      | 46   | 40   | 34   | 30   | 27   | 24                     | 23   | 22                  | 23    | 25   | 29   | 39   | 47   | 56   | 64    | 22            | 80      | 48.4    |      |  |
| Jul 30                                                                                                  | 68                                             | 77   | 79   | 73   | 72                    | 76   | 67   | 61   | 49                                                                                      | 41   | 32   | 24   | 23   | 21   | 19                     | 19   | 19                  | 21    | 24   | 32   | 46   | 50   | 47   | 47    | 19            | 79      | 45.3    |      |  |
| Jul 31                                                                                                  | 51                                             | 48   | 48   | 60   | 67                    | 68   | 63   | 57   | 49                                                                                      | 44   | 38   | 35   | 35   | 33   | 31                     | 30   | 30                  | 32    | 35   | 41   | 51   | 56   | 59   | 66    | 30            | 68      | 47.0    |      |  |
| Diurnal Maximum                                                                                         | 100                                            | 100  | 100  | 100  | 100                   | 100  | 100  | 100  | 100                                                                                     | 100  | 99   | 98   | 99   | 96   | 93                     | 95   | 98                  | 96    | 97   | 99   | 100  | 100  | 100  | 100   |               |         |         |      |  |
| Diurnal Average                                                                                         | 73.3                                           | 74.9 | 78.3 | 80.7 | 81.7                  | 80.5 | 76.1 | 70.3 | 63.3                                                                                    | 57.7 | 53.0 | 49.8 | 47.5 | 45.2 | 43.4                   | 43.0 | 41.9                | 42.8  | 43.7 | 49.2 | 57.5 | 63.2 | 67.6 | 71.3  |               |         |         |      |  |
| C                                                                                                       | Monthly Calibration                            |      |      |      |                       |      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |      |                        | Q    | Quality Assurance   |       |      |      |      |      |      |       |               |         |         |      |  |
| K                                                                                                       | Collection Error                               |      |      |      |                       |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |      |                        | Y    | Routine Maintenance |       |      |      |      |      |      | P     | Power Failure |         |         |      |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |                       |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |      |                        |      |                     |       |      |      |      |      |      |       |               |         |         |      |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |                       |      |      |      |                                                                                         |      |      |      |      |      |                        |      |                     |       |      |      |      |      |      |       |               |         |         |      |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |                       |      |      |      |                                                                                         |      |      |      |      |      |                        |      |                     |       |      |      |      |      |      |       |               |         |         |      |  |

***Timeseries Chart of Hourly Average for RH - Reno Station***





# PEACE RIVER AREA MONITORING PROGRAM

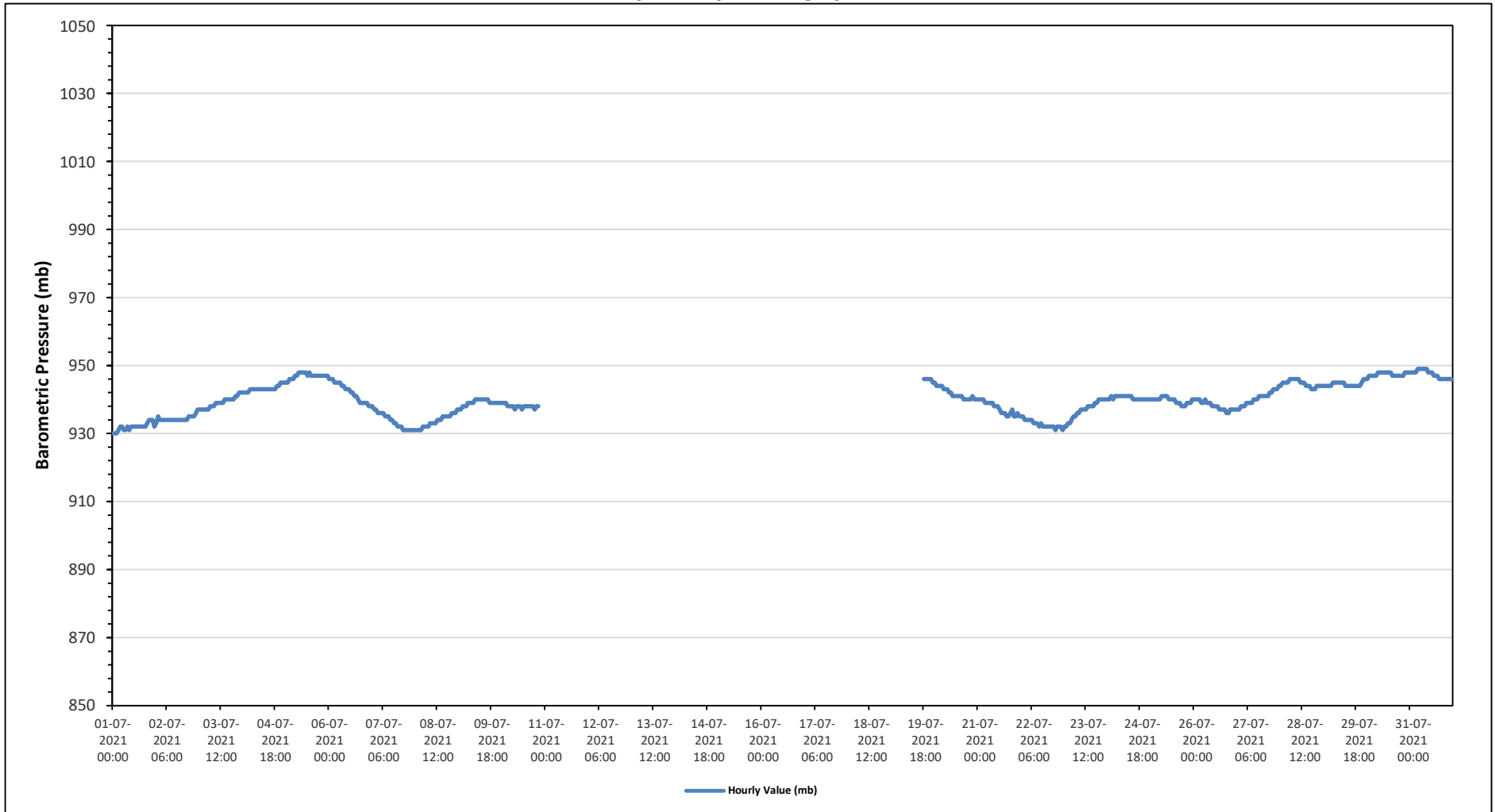
Reno Station - July 2021

Summary of Hourly Averages

## BAROMETRIC PRESSURE (BP) in millibar

|                                                                                                         |                                                |     |     |     |     |     |     |     |                                                                                         |     |     |                      |     |     |     |     |                     |     |     |     |     |                        |     |       |               |         |         |  |  |  |  |      |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----------------------------------------------------------------------------------------|-----|-----|----------------------|-----|-----|-----|-----|---------------------|-----|-----|-----|-----|------------------------|-----|-------|---------------|---------|---------|--|--|--|--|------|
| Maximum Hourly Value:                                                                                   |                                                |     |     |     |     |     |     |     |                                                                                         | 949 | mb  | on July 31 at hour 4 |     |     |     |     |                     |     |     |     |     | Hours in Service:      |     |       |               |         |         |  |  |  |  | 744  |
| Maximum Daily Value:                                                                                    |                                                |     |     |     |     |     |     |     |                                                                                         | 947 | mb  | on July 31           |     |     |     |     |                     |     |     |     |     | Hours of Data:         |     |       |               |         |         |  |  |  |  | 531  |
| Minimum Hourly Value:                                                                                   |                                                |     |     |     |     |     |     |     |                                                                                         | 930 | mb  | on July 1 at hour 0  |     |     |     |     |                     |     |     |     |     | Hours of Missing Data: |     |       |               |         |         |  |  |  |  | 213  |
| Minimum Daily Value:                                                                                    |                                                |     |     |     |     |     |     |     |                                                                                         | 932 | mb  | on July 1            |     |     |     |     |                     |     |     |     |     | Hours of Calibration:  |     |       |               |         |         |  |  |  |  | 0    |
| Monthly Average:                                                                                        |                                                |     |     |     |     |     |     |     |                                                                                         | 940 | mb  |                      |     |     |     |     |                     |     |     |     |     | Operational Uptime:    |     |       |               |         |         |  |  |  |  | 71.4 |
| Day                                                                                                     | Hourly Period Starting at (MST)                |     |     |     |     |     |     |     |                                                                                         |     |     |                      |     |     |     |     |                     |     |     |     |     |                        |     | Daily | Daily         | Daily   |         |  |  |  |  |      |
|                                                                                                         | 0                                              | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8                                                                                       | 9   | 10  | 11                   | 12  | 13  | 14  | 15  | 16                  | 17  | 18  | 19  | 20  | 21                     | 22  | 23    | Minimum       | Maximum | Average |  |  |  |  |      |
| Jul 1                                                                                                   | 930                                            | 930 | 930 | 931 | 932 | 932 | 931 | 931 | 932                                                                                     | 931 | 932 | 932                  | 932 | 932 | 932 | 932 | 932                 | 932 | 932 | 933 | 934 | 934                    | 934 | 932   | 930           | 934     | 931.9   |  |  |  |  |      |
| Jul 2                                                                                                   | 933                                            | 935 | 934 | 934 | 934 | 934 | 934 | 934 | 934                                                                                     | 934 | 934 | 934                  | 934 | 934 | 934 | 934 | 934                 | 934 | 935 | 935 | 935 | 935                    | 936 | 937   | 933           | 937     | 934.4   |  |  |  |  |      |
| Jul 3                                                                                                   | 937                                            | 937 | 937 | 937 | 937 | 937 | 938 | 938 | 938                                                                                     | 939 | 939 | 939                  | 939 | 939 | 940 | 940 | 940                 | 940 | 940 | 940 | 941 | 941                    | 942 | 942   | 937           | 942     | 939.0   |  |  |  |  |      |
| Jul 4                                                                                                   | 942                                            | 942 | 942 | 942 | 943 | 943 | 943 | 943 | 943                                                                                     | 943 | 943 | 943                  | 943 | 943 | 943 | 943 | 943                 | 943 | 943 | 944 | 944 | 945                    | 945 | 945   | 942           | 945     | 943.2   |  |  |  |  |      |
| Jul 5                                                                                                   | 945                                            | 945 | 946 | 946 | 946 | 947 | 947 | 948 | 948                                                                                     | 948 | 948 | 948                  | 947 | 948 | 947 | 947 | 947                 | 947 | 947 | 947 | 947 | 947                    | 947 | 947   | 945           | 948     | 947.0   |  |  |  |  |      |
| Jul 6                                                                                                   | 946                                            | 946 | 946 | 945 | 945 | 945 | 945 | 944 | 944                                                                                     | 943 | 943 | 943                  | 942 | 942 | 941 | 941 | 940                 | 939 | 939 | 939 | 939 | 939                    | 938 | 938   | 938           | 946     | 942.2   |  |  |  |  |      |
| Jul 7                                                                                                   | 938                                            | 937 | 937 | 936 | 936 | 936 | 936 | 935 | 935                                                                                     | 935 | 934 | 934                  | 933 | 933 | 932 | 932 | 932                 | 931 | 931 | 931 | 931 | 931                    | 931 | 931   | 931           | 938     | 933.7   |  |  |  |  |      |
| Jul 8                                                                                                   | 931                                            | 931 | 931 | 931 | 932 | 932 | 932 | 932 | 933                                                                                     | 933 | 933 | 933                  | 934 | 934 | 934 | 935 | 935                 | 935 | 935 | 935 | 936 | 936                    | 936 | 937   | 931           | 937     | 933.6   |  |  |  |  |      |
| Jul 9                                                                                                   | 937                                            | 937 | 938 | 938 | 938 | 939 | 939 | 939 | 939                                                                                     | 940 | 940 | 940                  | 940 | 940 | 940 | 940 | 940                 | 939 | 939 | 939 | 939 | 939                    | 939 | 939   | 937           | 940     | 939.0   |  |  |  |  |      |
| Jul 10                                                                                                  | 939                                            | 939 | 939 | 938 | 938 | 938 | 938 | 937 | 938                                                                                     | 938 | 938 | 937                  | 938 | 938 | 938 | 938 | 938                 | 938 | 937 | 938 | 938 | X                      | X   | X     | 937           | 939     | 938.0   |  |  |  |  |      |
| Jul 11                                                                                                  | X                                              | X   | X   | X   | X   | X   | X   | X   | X                                                                                       | X   | X   | X                    | X   | X   | X   | X   | X                   | X   | X   | X   | X   | X                      | X   | X     | -             | -       | -       |  |  |  |  |      |
| Jul 12                                                                                                  | X                                              | X   | X   | X   | X   | X   | X   | X   | X                                                                                       | X   | X   | X                    | X   | X   | X   | X   | X                   | X   | X   | X   | X   | X                      | X   | X     | -             | -       | -       |  |  |  |  |      |
| Jul 13                                                                                                  | X                                              | X   | X   | X   | X   | X   | X   | X   | X                                                                                       | X   | X   | X                    | X   | X   | X   | X   | X                   | X   | X   | X   | X   | X                      | X   | X     | -             | -       | -       |  |  |  |  |      |
| Jul 14                                                                                                  | X                                              | X   | X   | X   | X   | X   | X   | X   | X                                                                                       | X   | X   | X                    | X   | X   | X   | X   | X                   | X   | X   | X   | X   | X                      | X   | X     | -             | -       | -       |  |  |  |  |      |
| Jul 15                                                                                                  | X                                              | X   | X   | X   | X   | X   | X   | X   | X                                                                                       | X   | X   | X                    | X   | X   | X   | X   | X                   | X   | X   | X   | X   | X                      | X   | X     | -             | -       | -       |  |  |  |  |      |
| Jul 16                                                                                                  | X                                              | X   | X   | X   | X   | X   | X   | X   | X                                                                                       | X   | X   | X                    | X   | X   | X   | X   | X                   | X   | X   | X   | X   | X                      | X   | X     | -             | -       | -       |  |  |  |  |      |
| Jul 17                                                                                                  | X                                              | X   | X   | X   | X   | X   | X   | X   | X                                                                                       | X   | X   | X                    | X   | X   | X   | X   | X                   | X   | X   | X   | X   | X                      | X   | X     | -             | -       | -       |  |  |  |  |      |
| Jul 18                                                                                                  | X                                              | X   | X   | X   | X   | X   | X   | X   | X                                                                                       | X   | X   | X                    | X   | X   | X   | X   | X                   | X   | X   | X   | X   | X                      | X   | X     | -             | -       | -       |  |  |  |  |      |
| Jul 19                                                                                                  | X                                              | X   | X   | X   | X   | X   | X   | X   | X                                                                                       | X   | X   | X                    | X   | X   | X   | X   | X                   | X   | X   | 946 | 946 | 946                    | 946 | 945   | 945           | 946     | -       |  |  |  |  |      |
| Jul 20                                                                                                  | 945                                            | 944 | 944 | 944 | 944 | 943 | 943 | 943 | 942                                                                                     | 942 | 941 | 941                  | 941 | 941 | 941 | 941 | 940                 | 940 | 940 | 940 | 940 | 941                    | 940 | 940   | 940           | 945     | 941.7   |  |  |  |  |      |
| Jul 21                                                                                                  | 940                                            | 940 | 940 | 940 | 939 | 939 | 939 | 939 | 939                                                                                     | 938 | 938 | 938                  | 937 | 936 | 936 | 936 | 935                 | 935 | 936 | 937 | 935 | 935                    | 936 | 935   | 935           | 940     | 937.4   |  |  |  |  |      |
| Jul 22                                                                                                  | 935                                            | 935 | 934 | 934 | 934 | 934 | 934 | 933 | 933                                                                                     | 933 | 932 | 933                  | 932 | 932 | 932 | 932 | 932                 | 932 | 932 | 931 | 932 | 932                    | 932 | 931   | 931           | 935     | 932.8   |  |  |  |  |      |
| Jul 23                                                                                                  | 932                                            | 932 | 933 | 933 | 934 | 935 | 935 | 936 | 936                                                                                     | 937 | 937 | 937                  | 937 | 938 | 938 | 938 | 938                 | 939 | 939 | 940 | 940 | 940                    | 940 | 940   | 932           | 940     | 936.8   |  |  |  |  |      |
| Jul 24                                                                                                  | 940                                            | 940 | 941 | 940 | 941 | 941 | 941 | 941 | 941                                                                                     | 941 | 941 | 941                  | 941 | 941 | 940 | 940 | 940                 | 940 | 940 | 940 | 940 | 940                    | 940 | 940   | 940           | 941     | 940.5   |  |  |  |  |      |
| Jul 25                                                                                                  | 940                                            | 940 | 940 | 940 | 940 | 940 | 941 | 941 | 941                                                                                     | 941 | 940 | 940                  | 940 | 940 | 939 | 939 | 939                 | 938 | 938 | 938 | 939 | 939                    | 939 | 940   | 938           | 941     | 939.7   |  |  |  |  |      |
| Jul 26                                                                                                  | 940                                            | 940 | 940 | 940 | 939 | 939 | 940 | 939 | 939                                                                                     | 939 | 938 | 938                  | 938 | 938 | 937 | 937 | 937                 | 937 | 936 | 936 | 937 | 937                    | 937 | 937   | 936           | 940     | 938.1   |  |  |  |  |      |
| Jul 27                                                                                                  | 937                                            | 937 | 938 | 938 | 938 | 939 | 939 | 939 | 939                                                                                     | 940 | 940 | 940                  | 941 | 941 | 941 | 941 | 941                 | 941 | 942 | 942 | 943 | 943                    | 943 | 944   | 937           | 944     | 940.3   |  |  |  |  |      |
| Jul 28                                                                                                  | 944                                            | 945 | 945 | 945 | 945 | 946 | 946 | 946 | 946                                                                                     | 946 | 946 | 945                  | 945 | 945 | 944 | 944 | 944                 | 943 | 943 | 943 | 944 | 944                    | 944 | 944   | 943           | 946     | 944.7   |  |  |  |  |      |
| Jul 29                                                                                                  | 944                                            | 944 | 944 | 944 | 944 | 945 | 945 | 945 | 945                                                                                     | 945 | 945 | 945                  | 944 | 944 | 944 | 944 | 944                 | 944 | 944 | 944 | 944 | 945                    | 946 | 946   | 944           | 946     | 944.5   |  |  |  |  |      |
| Jul 30                                                                                                  | 946                                            | 947 | 947 | 947 | 947 | 947 | 948 | 948 | 948                                                                                     | 948 | 948 | 948                  | 948 | 948 | 947 | 947 | 947                 | 947 | 947 | 947 | 947 | 948                    | 948 | 948   | 946           | 948     | 947.4   |  |  |  |  |      |
| Jul 31                                                                                                  | 948                                            | 948 | 948 | 948 | 949 | 949 | 949 | 949 | 949                                                                                     | 949 | 948 | 948                  | 948 | 947 | 947 | 947 | 946                 | 946 | 946 | 946 | 946 | 946                    | 946 | 946   | 946           | 949     | 947.5   |  |  |  |  |      |
| Diurnal Maximum                                                                                         | 948                                            | 948 | 948 | 948 | 949 | 949 | 949 | 949 | 949                                                                                     | 949 | 948 | 948                  | 948 | 948 | 947 | 947 | 947                 | 947 | 947 | 947 | 947 | 948                    | 948 | 948   | 946           | 949     | 947.5   |  |  |  |  |      |
| Diurnal Average                                                                                         | 940                                            | 940 | 940 | 940 | 940 | 940 | 940 | 940 | 940                                                                                     | 940 | 940 | 940                  | 940 | 940 | 939 | 939 | 939                 | 939 | 939 | 940 | 940 | 940                    | 940 | 940   | 940           | 940     | 940     |  |  |  |  |      |
| C                                                                                                       | Monthly Calibration                            |     |     |     |     |     |     | S   | Daily Zero-Span Check                                                                   |     |     |                      |     |     |     | Q   | Quality Assurance   |     |     |     |     |                        |     |       |               |         |         |  |  |  |  |      |
| K                                                                                                       | Collection Error                               |     |     |     |     |     |     | N   | No Data (Machine Not in Service)                                                        |     |     |                      |     |     |     | Y   | Routine Maintenance |     |     |     |     |                        |     | P     | Power Failure |         |         |  |  |  |  |      |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |     |     |     |     |     |     | NRM | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |     |     |                      |     |     |     |     |                     |     |     |     |     |                        |     |       |               |         |         |  |  |  |  |      |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |     |     |     |     |     |     |     |                                                                                         |     |     |                      |     |     |     |     |                     |     |     |     |     |                        |     |       |               |         |         |  |  |  |  |      |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |     |     |     |     |     |     |     |                                                                                         |     |     |                      |     |     |     |     |                     |     |     |     |     |                        |     |       |               |         |         |  |  |  |  |      |

***Timeseries Chart of Hourly Average for BP - Reno Station***







# PEACE RIVER AREA MONITORING PROGRAM

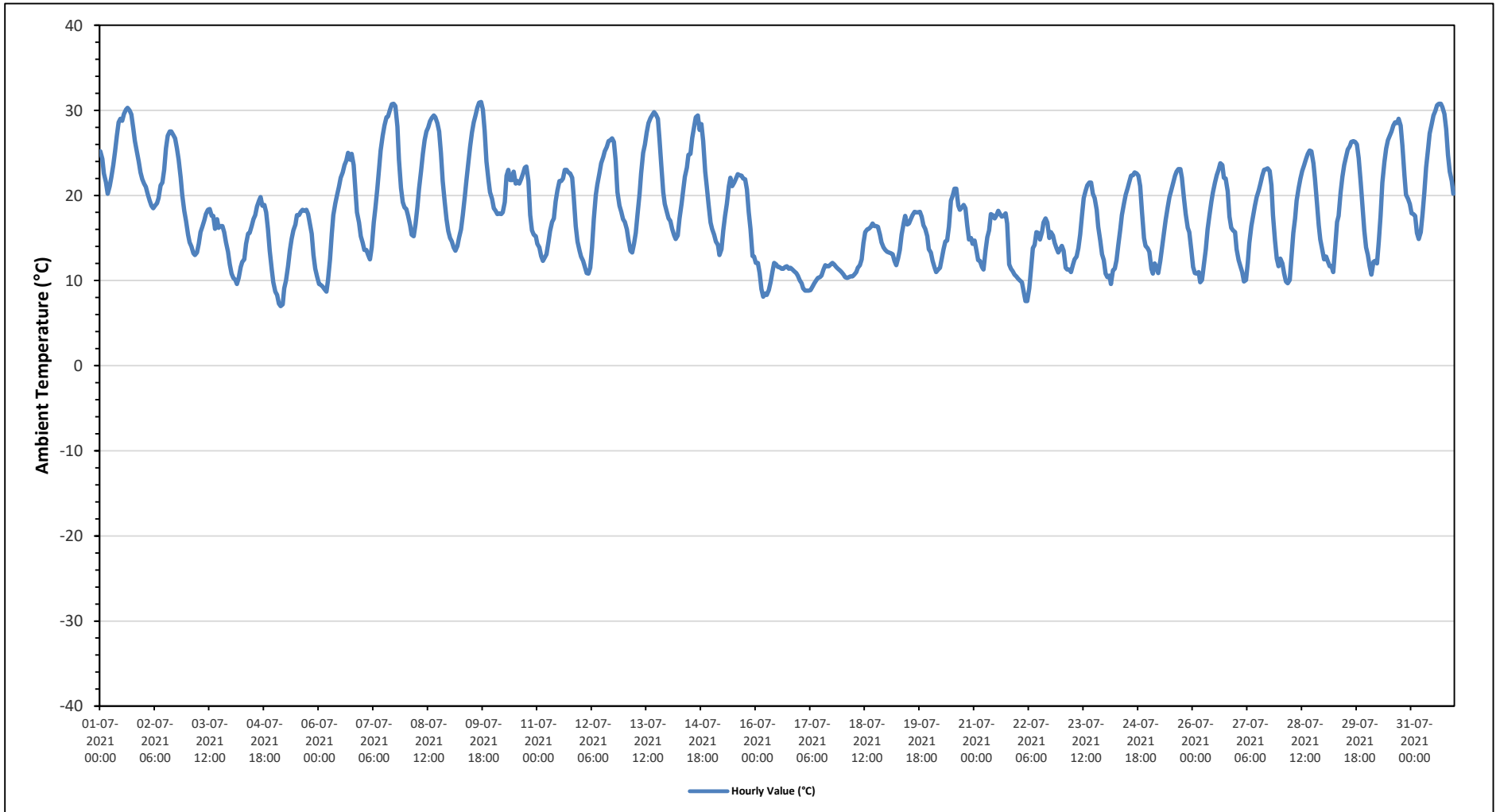
Reno Station - July 2021

Summary of Hourly Averages

## AMBIENT TEMPERATURE (AT) in Degree Celsius

| Maximum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |                                                                                         | 31.0 | °C   | on July 9 at hour 17 |      |      |      |      |                     |      |      |      |      | Hours in Service:      |      |       |               |         |         |  |  |  |  | 744   |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|----------------------|------|------|------|------|---------------------|------|------|------|------|------------------------|------|-------|---------------|---------|---------|--|--|--|--|-------|
| Maximum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | 25.7 | °C   | on July 1            |      |      |      |      |                     |      |      |      |      | Hours of Data:         |      |       |               |         |         |  |  |  |  | 744   |
| Minimum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |                                                                                         | 7.0  | °C   | on July 5 at hour 3  |      |      |      |      |                     |      |      |      |      | Hours of Missing Data: |      |       |               |         |         |  |  |  |  | 0     |
| Minimum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | 10.5 | °C   | on July 17           |      |      |      |      |                     |      |      |      |      | Hours of Calibration:  |      |       |               |         |         |  |  |  |  | 0     |
| Monthly Average:                                                                                        |                                                |      |      |      |      |      |      |      |                                                                                         | 17.9 | °C   |                      |      |      |      |      |                     |      |      |      |      | Operational Uptime:    |      |       |               |         |         |  |  |  |  | 100.0 |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |      |      |      |      |                                                                                         |      |      |                      |      |      |      |      |                     |      |      |      |      |                        |      | Daily | Daily         | Daily   |         |  |  |  |  |       |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8                                                                                       | 9    | 10   | 11                   | 12   | 13   | 14   | 15   | 16                  | 17   | 18   | 19   | 20   | 21                     | 22   | 23    | Minimum       | Maximum | Average |  |  |  |  |       |
| Jul 1                                                                                                   | 25.2                                           | 24.3 | 22.6 | 21.6 | 20.2 | 21.1 | 22.1 | 23.6 | 25.2                                                                                    | 27   | 28.6 | 29                   | 28.8 | 29.6 | 30.1 | 30.3 | 30                  | 29.5 | 27.8 | 26.4 | 25.1 | 24                     | 22.7 | 21.9  | 20.2          | 30.3    | 25.7    |  |  |  |  |       |
| Jul 2                                                                                                   | 21.4                                           | 21   | 20.2 | 19.4 | 18.8 | 18.5 | 18.8 | 19.1 | 19.7                                                                                    | 21.2 | 21.5 | 23                   | 25.5 | 27   | 27.5 | 27.5 | 27.1                | 26.7 | 25.6 | 24.2 | 22.1 | 20.1                   | 18.2 | 17    | 17.0          | 27.5    | 22.1    |  |  |  |  |       |
| Jul 3                                                                                                   | 15.4                                           | 14.5 | 14   | 13.2 | 13   | 13.3 | 14.3 | 15.7 | 16.3                                                                                    | 17.1 | 17.8 | 18.3                 | 18.4 | 17.6 | 17.6 | 16.1 | 17.2                | 16.2 | 16.4 | 16.4 | 15.7 | 14.5                   | 13.4 | 11.9  | 11.9          | 18.4    | 15.6    |  |  |  |  |       |
| Jul 4                                                                                                   | 10.8                                           | 10.3 | 10.1 | 9.6  | 10.3 | 11.6 | 12.2 | 12.5 | 14.3                                                                                    | 15.5 | 15.6 | 16.4                 | 17.2 | 17.7 | 18.7 | 19.4 | 19.8                | 18.8 | 18.9 | 18   | 16.1 | 13.5                   | 11.3 | 9.8   | 9.6           | 19.8    | 14.5    |  |  |  |  |       |
| Jul 5                                                                                                   | 8.7                                            | 8.3  | 7.3  | 7    | 7.2  | 9.1  | 10   | 11.7 | 13.5                                                                                    | 14.9 | 15.9 | 16.6                 | 17.7 | 17.7 | 18.1 | 18.3 | 18.2                | 18.3 | 17.8 | 16.8 | 15.5 | 13                     | 11.4 | 10.5  | 7.0           | 18.3    | 13.5    |  |  |  |  |       |
| Jul 6                                                                                                   | 9.6                                            | 9.5  | 9.3  | 9    | 8.7  | 10   | 12.5 | 15.5 | 17.7                                                                                    | 19.1 | 20.1 | 21                   | 22.1 | 22.7 | 23.6 | 24.1 | 25                  | 24.2 | 24.9 | 23.6 | 20.6 | 18                     | 16.8 | 15.2  | 8.7           | 25.0    | 17.6    |  |  |  |  |       |
| Jul 7                                                                                                   | 14.5                                           | 13.6 | 13.6 | 13   | 12.5 | 13.9 | 16.8 | 18.4 | 20.8                                                                                    | 23.2 | 25.3 | 27                   | 28.2 | 29.2 | 29.3 | 30.1 | 30.7                | 30.8 | 30.5 | 28.1 | 24.2 | 20.9                   | 19.2 | 18.6  | 12.5          | 30.8    | 22.2    |  |  |  |  |       |
| Jul 8                                                                                                   | 18.4                                           | 17.6 | 16.5 | 15.4 | 15.2 | 16.6 | 18.5 | 20.8 | 22.9                                                                                    | 24.9 | 26.5 | 27.5                 | 28   | 28.7 | 29.1 | 29.4 | 29.2                | 28.5 | 27.5 | 25   | 21.7 | 19.2                   | 17.2 | 15.8  | 15.2          | 29.4    | 22.5    |  |  |  |  |       |
| Jul 9                                                                                                   | 15                                             | 14.6 | 13.9 | 13.5 | 14.1 | 15   | 16   | 17.7 | 19.9                                                                                    | 21.7 | 23.9 | 25.8                 | 27.4 | 28.6 | 29.4 | 30.3 | 30.9                | 31   | 30.1 | 27.6 | 24   | 21.8                   | 20.4 | 19.6  | 13.5          | 31.0    | 22.2    |  |  |  |  |       |
| Jul 10                                                                                                  | 18.5                                           | 18.2 | 17.8 | 17.9 | 17.8 | 18   | 19.2 | 22.3 | 23                                                                                      | 21.8 | 21.8 | 22.8                 | 21.4 | 21.7 | 21.4 | 21.9 | 22.5                | 23.3 | 23.4 | 21.7 | 17.7 | 15.9                   | 15.4 | 15.2  | 15.2          | 23.4    | 20.0    |  |  |  |  |       |
| Jul 11                                                                                                  | 14.3                                           | 13.9 | 12.9 | 12.3 | 12.7 | 13.1 | 14.6 | 15.8 | 16.9                                                                                    | 17.3 | 19.3 | 20.6                 | 21.7 | 21.7 | 22   | 23   | 23                  | 22.7 | 22.6 | 22.1 | 19.9 | 16.4                   | 14.6 | 13.5  | 12.3          | 23.0    | 17.8    |  |  |  |  |       |
| Jul 12                                                                                                  | 12.8                                           | 12.3 | 11.6 | 10.9 | 10.8 | 11.5 | 13.9 | 17.2 | 20.1                                                                                    | 21.3 | 22.6 | 23.8                 | 24.5 | 25.2 | 25.7 | 26.4 | 26.5                | 26.7 | 26.3 | 24.1 | 20.4 | 18.8                   | 18.1 | 17.2  | 10.8          | 26.7    | 19.5    |  |  |  |  |       |
| Jul 13                                                                                                  | 16.9                                           | 16   | 14.8 | 13.5 | 13.3 | 14.3 | 15.6 | 17.8 | 20.2                                                                                    | 22.6 | 25   | 26                   | 27.4 | 28.5 | 29.1 | 29.4 | 29.8                | 29.5 | 29   | 26.7 | 23.7 | 20.4                   | 19   | 18.1  | 13.3          | 29.8    | 21.9    |  |  |  |  |       |
| Jul 14                                                                                                  | 17.3                                           | 17   | 16.1 | 15.3 | 14.9 | 15.3 | 17.3 | 19   | 20.5                                                                                    | 22.2 | 23.3 | 24.8                 | 24.9 | 26.8 | 28   | 29.2 | 29.4                | 27.7 | 28.4 | 26.4 | 22.8 | 21.1                   | 19   | 16.8  | 14.9          | 29.4    | 21.8    |  |  |  |  |       |
| Jul 15                                                                                                  | 16.1                                           | 15.4 | 14.6 | 14.2 | 13   | 13.7 | 15.9 | 17.6 | 19                                                                                      | 21.1 | 22.1 | 21.1                 | 21.5 | 22   | 22.5 | 22.4 | 22.3                | 22   | 21.9 | 20.7 | 18.1 | 16.1                   | 12.9 | 12.8  | 12.8          | 22.5    | 18.3    |  |  |  |  |       |
| Jul 16                                                                                                  | 12.1                                           | 12.1 | 10.9 | 9    | 8.1  | 8.5  | 8.3  | 8.9  | 9.8                                                                                     | 11   | 12.1 | 11.9                 | 11.6 | 11.6 | 11.4 | 11.4 | 11.6                | 11.7 | 11.4 | 11.5 | 11.3 | 11.1                   | 10.9 | 10.6  | 8.1           | 12.1    | 10.8    |  |  |  |  |       |
| Jul 17                                                                                                  | 10                                             | 9.7  | 9.1  | 8.8  | 8.8  | 8.8  | 8.9  | 9.3  | 9.7                                                                                     | 10   | 10.3 | 10.4                 | 10.6 | 11.3 | 11.8 | 11.7 | 11.7                | 11.9 | 12.1 | 11.9 | 11.6 | 11.4                   | 11.2 | 11    | 8.8           | 12.1    | 10.5    |  |  |  |  |       |
| Jul 18                                                                                                  | 10.7                                           | 10.4 | 10.3 | 10.4 | 10.5 | 10.5 | 10.7 | 11   | 11.5                                                                                    | 11.8 | 12.5 | 14.4                 | 15.7 | 16   | 16.1 | 16.3 | 16.7                | 16.4 | 16.4 | 16.3 | 15.4 | 14.5                   | 13.9 | 13.6  | 10.3          | 16.7    | 13.4    |  |  |  |  |       |
| Jul 19                                                                                                  | 13.4                                           | 13.3 | 13.2 | 13.1 | 12.3 | 11.8 | 12.6 | 13.6 | 15.4                                                                                    | 16.7 | 17.6 | 16.6                 | 16.7 | 17.2 | 17.7 | 18.1 | 18                  | 18   | 18.1 | 17.5 | 16.5 | 16.1                   | 15.2 | 13.7  | 11.8          | 18.1    | 15.5    |  |  |  |  |       |
| Jul 20                                                                                                  | 13.3                                           | 12.3 | 11.5 | 11   | 11.3 | 11.5 | 12.6 | 13.7 | 14.6                                                                                    | 14.7 | 16.3 | 19.4                 | 20   | 20.8 | 20.8 | 18.8 | 18.3                | 18.6 | 18.9 | 18.5 | 16.5 | 14.8                   | 15   | 14.3  | 11.0          | 20.8    | 15.7    |  |  |  |  |       |
| Jul 21                                                                                                  | 14.7                                           | 13.6 | 12.4 | 12.3 | 11.6 | 11.3 | 13.5 | 15.1 | 15.9                                                                                    | 17.8 | 17.7 | 17.3                 | 17.6 | 18.2 | 17.8 | 17.5 | 17.6                | 17.9 | 16.7 | 11.9 | 11.4 | 11.1                   | 10.7 | 10.5  | 10.5          | 18.2    | 14.7    |  |  |  |  |       |
| Jul 22                                                                                                  | 10.2                                           | 10   | 9.8  | 8.7  | 7.6  | 7.6  | 9.1  | 11.4 | 13.8                                                                                    | 14.2 | 15.7 | 15.6                 | 14.8 | 15.7 | 16.8 | 17.3 | 16.8                | 15   | 15.7 | 15.3 | 14.4 | 13.8                   | 13.3 | 13.7  | 7.6           | 17.3    | 13.2    |  |  |  |  |       |
| Jul 23                                                                                                  | 14.1                                           | 13.5 | 11.5 | 11.3 | 11.3 | 11   | 11.9 | 12.5 | 12.8                                                                                    | 13.8 | 15.4 | 17.6                 | 19.7 | 20.5 | 21.2 | 21.5 | 21.5                | 20.2 | 19.7 | 18.3 | 16.3 | 14.7                   | 13.1 | 12.4  | 11.0          | 21.5    | 15.7    |  |  |  |  |       |
| Jul 24                                                                                                  | 10.8                                           | 10.4 | 10.6 | 9.6  | 11.2 | 11.4 | 12.4 | 14.2 | 16.1                                                                                    | 17.7 | 19   | 20.1                 | 20.9 | 21.6 | 22.3 | 22.4 | 22.7                | 22.6 | 22.3 | 21.1 | 18.1 | 15                     | 14.1 | 13.8  | 9.6           | 22.7    | 16.7    |  |  |  |  |       |
| Jul 25                                                                                                  | 13.4                                           | 11.4 | 10.8 | 12   | 11.5 | 10.9 | 12.3 | 13.9 | 15.5                                                                                    | 17.1 | 18.6 | 19.8                 | 20.6 | 21.4 | 22.3 | 22.8 | 23.1                | 23.1 | 22.1 | 19.7 | 17.8 | 16.2                   | 15.7 | 13.6  | 10.8          | 23.1    | 16.9    |  |  |  |  |       |
| Jul 26                                                                                                  | 11.6                                           | 10.9 | 10.8 | 11   | 9.8  | 10.1 | 12   | 13.7 | 16                                                                                      | 17.6 | 19.3 | 20.4                 | 21.5 | 22.4 | 23   | 23.8 | 23.6                | 22.1 | 22   | 20.5 | 17.5 | 16.2                   | 15.9 | 15.7  | 9.8           | 23.8    | 17.0    |  |  |  |  |       |
| Jul 27                                                                                                  | 13.7                                           | 12.4 | 11.7 | 11   | 9.9  | 10.1 | 12.1 | 14.4 | 16.4                                                                                    | 17.6 | 18.8 | 19.8                 | 20.6 | 21.3 | 22.3 | 23   | 23.1                | 23.2 | 22.9 | 21.2 | 17.7 | 14.7                   | 12.6 | 11.7  | 9.9           | 23.2    | 16.8    |  |  |  |  |       |
| Jul 28                                                                                                  | 12.6                                           | 12   | 10.8 | 9.9  | 9.7  | 10.1 | 12.5 | 15.6 | 17.3                                                                                    | 19.4 | 20.9 | 22                   | 22.9 | 23.5 | 24.3 | 24.9 | 25.3                | 25.2 | 23.8 | 22   | 19.1 | 16.5                   | 14.8 | 13.6  | 9.7           | 25.3    | 17.9    |  |  |  |  |       |
| Jul 29                                                                                                  | 12.5                                           | 12.8 | 12.3 | 11.7 | 11.7 | 11   | 13.7 | 16.9 | 17.6                                                                                    | 20.4 | 22.2 | 23.6                 | 24.5 | 25.4 | 25.8 | 26.3 | 26.4                | 26.3 | 26   | 24.4 | 21.5 | 18.7                   | 15.9 | 13.9  | 11.0          | 26.4    | 19.2    |  |  |  |  |       |
| Jul 30                                                                                                  | 13                                             | 11.7 | 10.7 | 12.2 | 12.3 | 12   | 14.6 | 17.6 | 21.5                                                                                    | 23.9 | 25.5 | 26.5                 | 27   | 27.5 | 28.2 | 28.6 | 28.5                | 29   | 28.2 | 25.8 | 22.3 | 20.1                   | 19.6 | 19    | 10.7          | 29.0    | 21.1    |  |  |  |  |       |
| Jul 31                                                                                                  | 17.9                                           | 17.8 | 17.6 | 15.6 | 14.9 | 15.7 | 17.8 | 20.3 | 23.3                                                                                    | 25.5 | 27.3 | 28.4                 | 29.4 | 29.9 | 30.6 | 30.8 | 30.8                | 30.4 | 29.6 | 27.8 | 24.8 | 22.8                   | 21.7 | 20.2  | 14.9          | 30.8    | 23.8    |  |  |  |  |       |
| Diurnal Maximum                                                                                         | 25.2                                           | 24.3 | 22.6 | 21.6 | 20.2 | 21.1 | 22.1 | 23.6 | 25.2                                                                                    | 27.0 | 28.6 | 29.0                 | 29.4 | 29.9 | 30.6 | 30.8 | 30.9                | 31.0 | 30.5 | 28.1 | 25.1 | 24.0                   | 22.7 | 21.9  |               |         |         |  |  |  |  |       |
| Diurnal Average                                                                                         | 14.2                                           | 13.6 | 12.9 | 12.4 | 12.1 | 12.5 | 14.0 | 15.7 | 17.3                                                                                    | 18.7 | 20.0 | 20.9                 | 21.6 | 22.2 | 22.7 | 23.0 | 23.1                | 22.8 | 22.5 | 21.0 | 18.7 | 16.8                   | 15.6 | 14.7  |               |         |         |  |  |  |  |       |
| C                                                                                                       | Monthly Calibration                            |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |                      |      |      |      | Q    | Quality Assurance   |      |      |      |      |                        |      |       |               |         |         |  |  |  |  |       |
| K                                                                                                       | Collection Error                               |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |                      |      |      |      | Y    | Routine Maintenance |      |      |      |      |                        |      | P     | Power Failure |         |         |  |  |  |  |       |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |                      |      |      |      |      |                     |      |      |      |      |                        |      |       |               |         |         |  |  |  |  |       |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |                      |      |      |      |      |                     |      |      |      |      |                        |      |       |               |         |         |  |  |  |  |       |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |                      |      |      |      |      |                     |      |      |      |      |                        |      |       |               |         |         |  |  |  |  |       |

***Timeseries Chart of Hourly Average for AT - Reno Station***





# PEACE RIVER AREA MONITORING PROGRAM

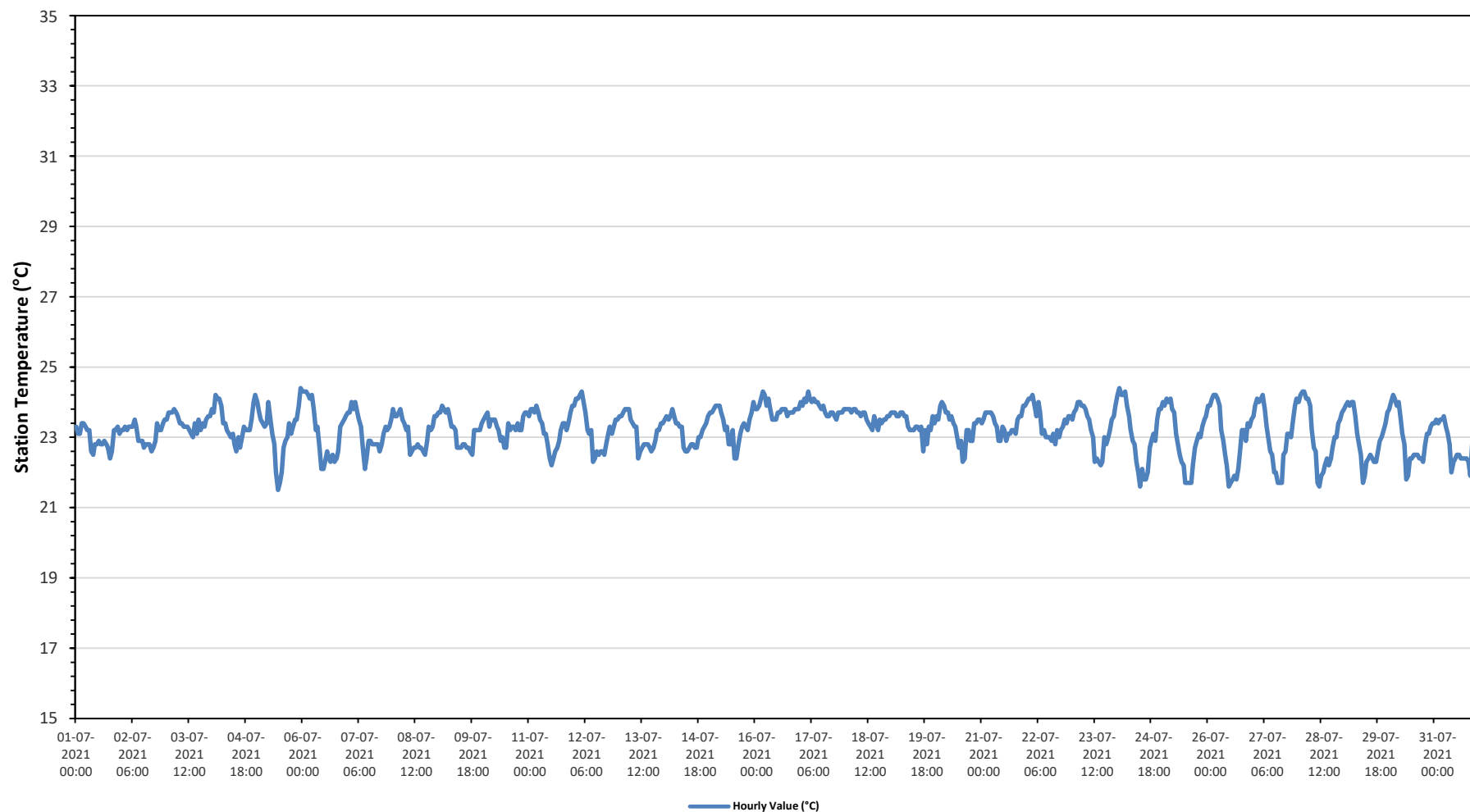
Reno Station - July 2021

Summary of Hourly Averages

## STATION TEMPERATURE (ST) in Degree Celsius

| Maximum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |                                                                                         | 24.4 | °C   | on July 5 at hour 23 |      |      |      |      | Hours in Service:      |      |      |      |      |      |      |       |               |         | 744     |  |  |  |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|----------------------|------|------|------|------|------------------------|------|------|------|------|------|------|-------|---------------|---------|---------|--|--|--|--|
| Maximum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | 23.9 | °C   | on July 17           |      |      |      |      | Hours of Data:         |      |      |      |      |      |      |       |               |         | 744     |  |  |  |  |
| Minimum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |                                                                                         | 21.5 | °C   | on July 5 at hour 11 |      |      |      |      | Hours of Missing Data: |      |      |      |      |      |      |       |               |         | 0       |  |  |  |  |
| Minimum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | 22.8 | °C   | on July 31           |      |      |      |      | Hours of Calibration:  |      |      |      |      |      |      |       |               |         | 0       |  |  |  |  |
| Monthly Average:                                                                                        |                                                |      |      |      |      |      |      |      |                                                                                         | 23.2 | °C   |                      |      |      |      |      | Operational Uptime:    |      |      |      |      |      |      |       |               |         | 100.0   |  |  |  |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |      |      |      |      |                                                                                         |      |      |                      |      |      |      |      |                        |      |      |      |      |      |      | Daily | Daily         | Daily   |         |  |  |  |  |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8                                                                                       | 9    | 10   | 11                   | 12   | 13   | 14   | 15   | 16                     | 17   | 18   | 19   | 20   | 21   | 22   | 23    | Minimum       | Maximum | Average |  |  |  |  |
| Jul 1                                                                                                   | 23.3                                           | 23.1 | 23.1 | 23.4 | 23.4 | 23.3 | 23.2 | 23.2 | 22.6                                                                                    | 22.5 | 22.8 | 22.8                 | 22.9 | 22.8 | 22.8 | 22.9 | 22.8                   | 22.7 | 22.4 | 22.6 | 23.2 | 23.2 | 23.3 | 23.1  | 22.4          | 23.4    | 23.0    |  |  |  |  |
| Jul 2                                                                                                   | 23.2                                           | 23.2 | 23.3 | 23.2 | 23.3 | 23.3 | 23.3 | 23.5 | 23.3                                                                                    | 22.9 | 22.9 | 22.9                 | 22.7 | 22.8 | 22.8 | 22.8 | 22.6                   | 22.7 | 22.9 | 23.4 | 23.2 | 23.2 | 23.4 | 23.5  | 22.6          | 23.5    | 23.1    |  |  |  |  |
| Jul 3                                                                                                   | 23.5                                           | 23.7 | 23.7 | 23.7 | 23.8 | 23.7 | 23.6 | 23.4 | 23.4                                                                                    | 23.3 | 23.3 | 23.3                 | 23.2 | 23.1 | 23.0 | 23.4 | 23.1                   | 23.5 | 23.2 | 23.4 | 23.3 | 23.5 | 23.6 | 23.6  | 23.0          | 23.8    | 23.4    |  |  |  |  |
| Jul 4                                                                                                   | 23.8                                           | 23.7 | 24.2 | 24.1 | 24.1 | 23.9 | 23.4 | 23.4 | 23.2                                                                                    | 23.1 | 23.0 | 23.1                 | 22.8 | 22.6 | 23.0 | 22.7 | 23.0                   | 23.3 | 23.2 | 23.2 | 23.2 | 23.5 | 24.0 | 24.2  | 22.6          | 24.2    | 23.4    |  |  |  |  |
| Jul 5                                                                                                   | 24.0                                           | 23.7 | 23.5 | 23.4 | 23.3 | 23.4 | 24.0 | 23.5 | 23.1                                                                                    | 22.8 | 22.0 | 21.5                 | 21.7 | 22.0 | 22.7 | 22.9 | 23.0                   | 23.4 | 23.1 | 23.3 | 23.5 | 23.5 | 23.9 | 24.4  | 21.5          | 24.4    | 23.2    |  |  |  |  |
| Jul 6                                                                                                   | 24.3                                           | 24.3 | 24.3 | 24.2 | 24.1 | 24.2 | 23.8 | 23.2 | 23.3                                                                                    | 22.7 | 22.1 | 22.1                 | 22.3 | 22.6 | 22.4 | 22.3 | 22.5                   | 22.3 | 22.4 | 22.6 | 23.3 | 23.4 | 23.5 | 23.6  | 22.1          | 24.3    | 23.2    |  |  |  |  |
| Jul 7                                                                                                   | 23.7                                           | 23.7 | 24.0 | 23.8 | 24.0 | 23.7 | 23.5 | 23.3 | 22.7                                                                                    | 22.1 | 22.4 | 22.9                 | 22.9 | 22.8 | 22.8 | 22.8 | 22.6                   | 22.8 | 23.1 | 23.3 | 23.2 | 23.3 | 23.3 | 23.5  | 22.1          | 24.0    | 23.2    |  |  |  |  |
| Jul 8                                                                                                   | 23.8                                           | 23.6 | 23.6 | 23.7 | 23.8 | 23.5 | 23.4 | 23.2 | 23.3                                                                                    | 22.5 | 22.6 | 22.7                 | 22.7 | 22.8 | 22.7 | 22.7 | 22.6                   | 22.5 | 22.9 | 23.3 | 23.2 | 23.3 | 23.6 | 23.6  | 22.5          | 23.8    | 23.2    |  |  |  |  |
| Jul 9                                                                                                   | 23.7                                           | 23.7 | 23.9 | 23.8 | 23.7 | 23.8 | 23.6 | 23.3 | 23.3                                                                                    | 23.2 | 22.7 | 22.7                 | 22.7 | 22.8 | 22.8 | 22.7 | 22.7                   | 22.6 | 22.5 | 23.2 | 23.2 | 23.2 | 23.2 | 23.4  | 22.5          | 23.9    | 23.2    |  |  |  |  |
| Jul 10                                                                                                  | 23.5                                           | 23.6 | 23.7 | 23.3 | 23.5 | 23.5 | 23.5 | 23.3 | 23.2                                                                                    | 22.9 | 23.0 | 22.7                 | 22.7 | 23.4 | 23.2 | 23.3 | 23.3                   | 23.2 | 23.4 | 23.2 | 23.2 | 23.6 | 23.7 | 23.7  | 22.7          | 23.7    | 23.3    |  |  |  |  |
| Jul 11                                                                                                  | 23.6                                           | 23.8 | 23.8 | 23.7 | 23.9 | 23.7 | 23.5 | 23.4 | 23.1                                                                                    | 23.1 | 22.8 | 22.4                 | 22.2 | 22.4 | 22.6 | 22.7 | 22.9                   | 23.2 | 23.4 | 23.4 | 23.2 | 23.4 | 23.7 | 23.9  | 22.2          | 23.9    | 23.2    |  |  |  |  |
| Jul 12                                                                                                  | 23.9                                           | 24.1 | 24.1 | 24.2 | 24.3 | 24.0 | 23.7 | 23.2 | 23.1                                                                                    | 23.2 | 22.3 | 22.4                 | 22.6 | 22.5 | 22.6 | 22.6 | 22.5                   | 22.8 | 23.1 | 23.3 | 23.1 | 23.3 | 23.5 | 23.5  | 22.3          | 24.3    | 23.2    |  |  |  |  |
| Jul 13                                                                                                  | 23.6                                           | 23.6 | 23.7 | 23.8 | 23.8 | 23.8 | 23.5 | 23.4 | 23.3                                                                                    | 23.3 | 22.4 | 22.6                 | 22.7 | 22.8 | 22.8 | 22.8 | 22.7                   | 22.6 | 22.7 | 22.9 | 23.2 | 23.2 | 23.4 | 23.4  | 22.4          | 23.8    | 23.2    |  |  |  |  |
| Jul 14                                                                                                  | 23.5                                           | 23.6 | 23.5 | 23.6 | 23.8 | 23.6 | 23.4 | 23.4 | 23.3                                                                                    | 23.3 | 22.7 | 22.6                 | 22.6 | 22.7 | 22.8 | 22.8 | 22.7                   | 22.7 | 23.0 | 23.0 | 23.2 | 23.3 | 23.4 | 23.6  | 22.6          | 23.8    | 23.2    |  |  |  |  |
| Jul 15                                                                                                  | 23.7                                           | 23.7 | 23.8 | 23.9 | 23.9 | 23.9 | 23.7 | 23.5 | 23.2                                                                                    | 23.3 | 22.8 | 22.8                 | 23.2 | 22.4 | 22.4 | 22.8 | 23.1                   | 23.3 | 23.4 | 23.3 | 23.2 | 23.5 | 23.7 | 24.0  | 22.4          | 24.0    | 23.4    |  |  |  |  |
| Jul 16                                                                                                  | 23.8                                           | 23.8 | 23.9 | 24.1 | 24.3 | 24.2 | 23.9 | 24.1 | 23.8                                                                                    | 23.5 | 23.5 | 23.5                 | 23.7 | 23.7 | 23.8 | 23.8 | 23.8                   | 23.6 | 23.7 | 23.7 | 23.7 | 23.8 | 23.8 | 23.8  | 23.5          | 24.3    | 23.8    |  |  |  |  |
| Jul 17                                                                                                  | 24.0                                           | 23.9 | 24.1 | 24.0 | 24.3 | 24.1 | 24.0 | 24.1 | 24.0                                                                                    | 23.9 | 23.8 | 23.9                 | 23.7 | 23.6 | 23.6 | 23.7 | 23.7                   | 23.6 | 23.5 | 23.7 | 23.7 | 23.7 | 23.7 | 23.8  | 23.5          | 24.3    | 23.9    |  |  |  |  |
| Jul 18                                                                                                  | 23.8                                           | 23.8 | 23.8 | 23.7 | 23.8 | 23.8 | 23.7 | 23.7 | 23.6                                                                                    | 23.7 | 23.7 | 23.5                 | 23.4 | 23.3 | 23.2 | 23.6 | 23.4                   | 23.2 | 23.5 | 23.4 | 23.5 | 23.5 | 23.6 | 23.6  | 23.2          | 23.8    | 23.6    |  |  |  |  |
| Jul 19                                                                                                  | 23.7                                           | 23.7 | 23.7 | 23.6 | 23.6 | 23.7 | 23.7 | 23.6 | 23.6                                                                                    | 23.3 | 23.2 | 23.2                 | 23.2 | 23.3 | 23.3 | 23.2 | 23.3                   | 22.6 | 23.2 | 22.8 | 23.3 | 23.2 | 23.6 | 23.4  | 22.6          | 23.7    | 23.4    |  |  |  |  |
| Jul 20                                                                                                  | 23.6                                           | 23.5 | 23.9 | 24.0 | 23.9 | 23.7 | 23.7 | 23.5 | 23.6                                                                                    | 23.4 | 23.3 | 23.0                 | 22.7 | 22.9 | 22.3 | 22.4 | 23.2                   | 23.2 | 22.9 | 22.9 | 23.4 | 23.4 | 23.5 | 23.5  | 22.3          | 24.0    | 23.3    |  |  |  |  |
| Jul 21                                                                                                  | 23.4                                           | 23.5 | 23.7 | 23.7 | 23.7 | 23.7 | 23.6 | 23.4 | 23.3                                                                                    | 22.9 | 22.9 | 23.3                 | 23.2 | 22.9 | 23.1 | 23.1 | 23.2                   | 23.2 | 23.1 | 23.5 | 23.6 | 23.6 | 23.9 | 23.9  | 22.9          | 23.9    | 23.4    |  |  |  |  |
| Jul 22                                                                                                  | 24.0                                           | 24.1 | 24.1 | 24.2 | 23.9 | 23.6 | 24.0 | 23.7 | 23.1                                                                                    | 23.2 | 23.0 | 23.0                 | 23.0 | 22.9 | 23.1 | 22.8 | 23.2                   | 23.0 | 23.2 | 23.3 | 23.5 | 23.4 | 23.6 | 23.6  | 22.8          | 24.2    | 23.4    |  |  |  |  |
| Jul 23                                                                                                  | 23.5                                           | 23.7 | 23.8 | 24.0 | 24.0 | 23.9 | 23.9 | 23.8 | 23.6                                                                                    | 23.5 | 23.2 | 23.0                 | 22.3 | 22.4 | 22.3 | 22.2 | 22.3                   | 23.0 | 22.8 | 23.0 | 23.2 | 23.5 | 23.6 | 23.9  | 22.2          | 24.0    | 23.3    |  |  |  |  |
| Jul 24                                                                                                  | 24.2                                           | 24.4 | 24.2 | 24.2 | 24.3 | 23.9 | 23.6 | 23.2 | 22.9                                                                                    | 22.8 | 22.3 | 22.0                 | 21.6 | 22.1 | 21.8 | 21.8 | 22.0                   | 22.7 | 22.9 | 23.1 | 22.9 | 23.5 | 23.8 | 23.8  | 21.6          | 24.4    | 23.1    |  |  |  |  |
| Jul 25                                                                                                  | 24.0                                           | 23.9 | 24.1 | 24.0 | 24.1 | 23.8 | 23.7 | 23.1 | 22.8                                                                                    | 22.5 | 22.3 | 22.2                 | 21.7 | 21.7 | 21.7 | 21.7 | 22.2                   | 22.7 | 22.9 | 23.1 | 23.0 | 23.3 | 23.5 | 23.6  | 21.7          | 24.1    | 23.0    |  |  |  |  |
| Jul 26                                                                                                  | 23.9                                           | 23.9 | 24.1 | 24.2 | 24.2 | 24.1 | 23.9 | 23.2 | 22.9                                                                                    | 22.5 | 22.2 | 21.6                 | 21.7 | 21.8 | 21.9 | 21.8 | 22.1                   | 22.7 | 23.2 | 23.2 | 22.9 | 23.4 | 23.3 | 23.5  | 21.6          | 24.2    | 23.0    |  |  |  |  |
| Jul 27                                                                                                  | 23.6                                           | 23.9 | 24.1 | 24.0 | 24.1 | 24.2 | 23.8 | 23.3 | 22.9                                                                                    | 22.6 | 22.5 | 22.0                 | 22.0 | 21.7 | 21.7 | 21.7 | 22.5                   | 22.6 | 23.1 | 23.1 | 23.0 | 23.5 | 23.9 | 24.1  | 21.7          | 24.2    | 23.1    |  |  |  |  |
| Jul 28                                                                                                  | 24.0                                           | 24.2 | 24.3 | 24.3 | 24.1 | 24.1 | 23.9 | 23.2 | 22.7                                                                                    | 22.6 | 21.7 | 21.6                 | 21.9 | 22.0 | 22.2 | 22.4 | 22.2                   | 22.4 | 22.7 | 23.0 | 23.0 | 23.4 | 23.5 | 23.7  | 21.6          | 24.3    | 23.0    |  |  |  |  |
| Jul 29                                                                                                  | 23.8                                           | 23.9 | 24.0 | 23.9 | 24.0 | 24.0 | 23.6 | 23.1 | 22.8                                                                                    | 22.5 | 21.7 | 21.9                 | 22.3 | 22.4 | 22.5 | 22.4 | 22.3                   | 22.3 | 22.6 | 22.9 | 23.0 | 23.2 | 23.4 | 23.7  | 21.7          | 24.0    | 23.0    |  |  |  |  |
| Jul 30                                                                                                  | 23.8                                           | 24.0 | 24.2 | 24.1 | 23.9 | 24.0 | 23.5 | 23.1 | 22.8                                                                                    | 21.8 | 21.9 | 22.4                 | 22.4 | 22.5 | 22.5 | 22.5 | 22.4                   | 22.4 | 22.3 | 22.8 | 23.1 | 23.1 | 23.3 | 23.4  | 21.8          | 24.2    | 23.0    |  |  |  |  |
| Jul 31                                                                                                  | 23.4                                           | 23.5 | 23.4 | 23.5 | 23.5 | 23.6 | 23.3 | 23.1 | 22.8                                                                                    | 22.0 | 22.3 | 22.4                 | 22.5 | 22.5 | 22.4 | 22.4 | 22.4                   | 22.4 | 22.3 | 21.9 | 22.8 | 22.9 | 23.1 | 23.0  | 21.9          | 23.6    | 22.8    |  |  |  |  |
| Diurnal Maximum                                                                                         | 24.3                                           | 24.4 | 24.3 | 24.3 | 24.3 | 24.2 | 24.0 | 24.1 | 24.0                                                                                    | 24.0 | 23.9 | 23.8                 | 23.9 | 23.7 | 23.8 | 23.8 | 23.8                   | 23.7 | 23.7 | 23.7 | 23.8 | 24.0 | 24.4 | 24.4  |               |         |         |  |  |  |  |
| Diurnal Average                                                                                         | 23.7                                           | 23.8 | 23.9 | 23.8 | 23.9 | 23.8 | 23.6 | 23.4 | 23.2                                                                                    | 22.9 | 22.7 | 22.6                 | 22.6 | 22.7 | 22.7 | 22.7 | 22.8                   | 22.9 | 23.0 | 23.1 | 23.2 | 23.4 | 23.6 | 23.7  | 23.7          |         |         |  |  |  |  |
| C                                                                                                       | Monthly Calibration                            |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |                      |      |      |      | Q    | Quality Assurance      |      |      |      |      |      |      |       |               |         |         |  |  |  |  |
| K                                                                                                       | Collection Error                               |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |                      |      |      |      | Y    | Routine Maintenance    |      |      |      |      |      |      | P     | Power Failure |         |         |  |  |  |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |      |      |      | NR   | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |                      |      |      |      |      |                        |      |      |      |      |      |      |       |               |         |         |  |  |  |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |                      |      |      |      |      |                        |      |      |      |      |      |      |       |               |         |         |  |  |  |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |                      |      |      |      |      |                        |      |      |      |      |      |      |       |               |         |         |  |  |  |  |

***Timeseries Chart of Hourly Average for ST - Reno Station***





# PEACE RIVER AREA MONITORING PROGRAM

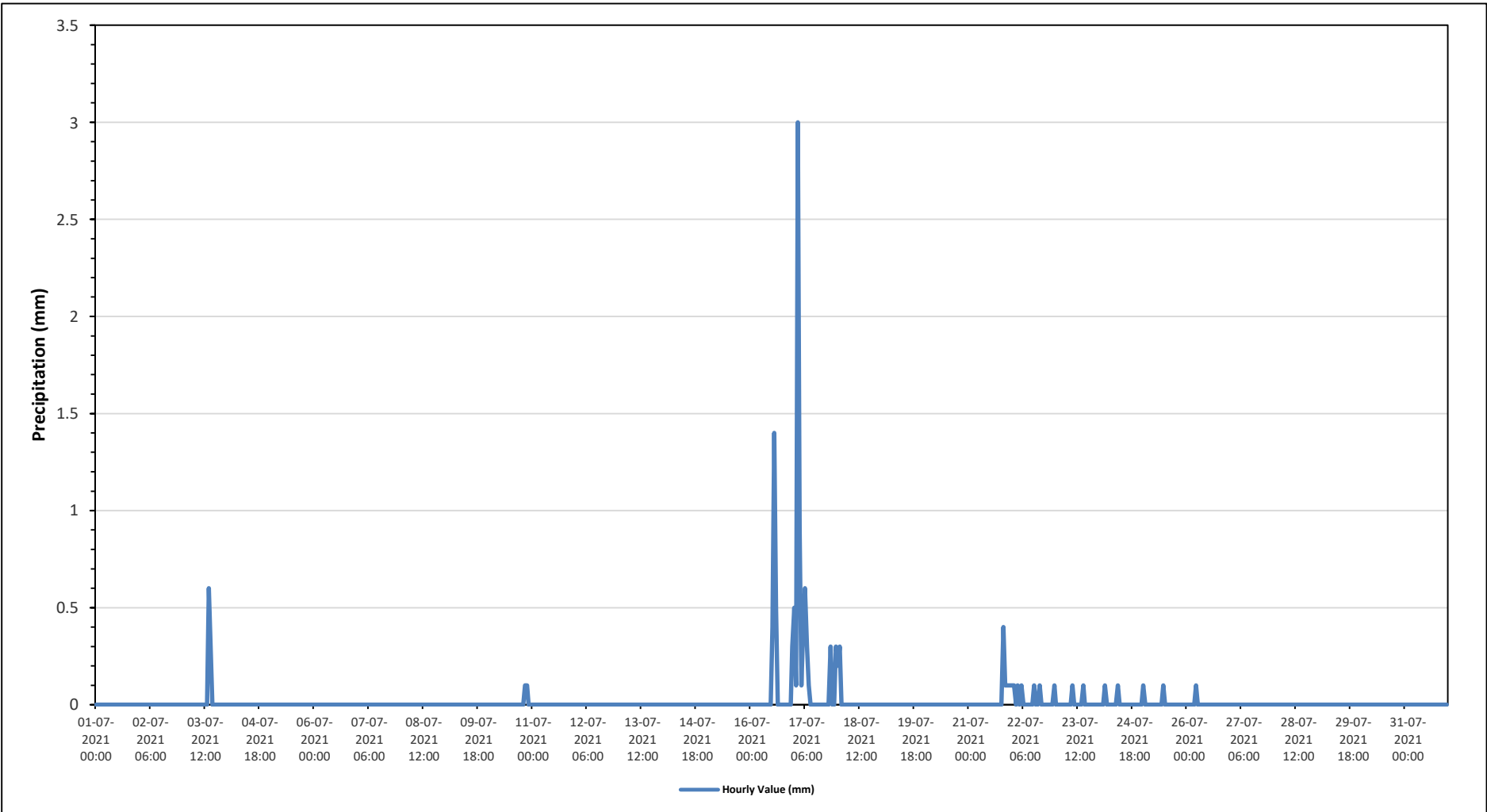
Reno Station - July 2021

Summary of Hourly Averages

PRECIPITATION in mm

|                                                                                                         |                                                |     |     |     |     |     |     |     |                                                                                         |                             |     |                        |     |     |     |     |                     |     |     |     |     |       |     |               |               |             |     |     |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----------------------------------------------------------------------------------------|-----------------------------|-----|------------------------|-----|-----|-----|-----|---------------------|-----|-----|-----|-----|-------|-----|---------------|---------------|-------------|-----|-----|
| Maximum Hourly Value:                                                                                   |                                                |     |     |     |     |     |     |     |                                                                                         | 3.0 mm on July 17 at hour 2 |     | Hours in Service:      |     |     |     |     |                     |     |     |     |     | 744   |     |               |               |             |     |     |
| Maximum Daily Value:                                                                                    |                                                |     |     |     |     |     |     |     |                                                                                         | 6.6 mm on July 17           |     | Hours of Data:         |     |     |     |     |                     |     |     |     |     | 744   |     |               |               |             |     |     |
| Minimum Hourly Value:                                                                                   |                                                |     |     |     |     |     |     |     |                                                                                         | 0.0 mm on July 1 at hour 0  |     | Hours of Missing Data: |     |     |     |     |                     |     |     |     |     | 0     |     |               |               |             |     |     |
| Minimum Daily Value:                                                                                    |                                                |     |     |     |     |     |     |     |                                                                                         | 0.0 mm on July 1            |     | Hours of Calibration:  |     |     |     |     |                     |     |     |     |     | 0     |     |               |               |             |     |     |
| Monthly Total:                                                                                          |                                                |     |     |     |     |     |     |     |                                                                                         | 13.0 mm                     |     | Operational Uptime:    |     |     |     |     |                     |     |     |     |     | 100.0 |     |               |               |             |     |     |
| Day                                                                                                     | Hourly Period Starting at (MST)                |     |     |     |     |     |     |     |                                                                                         |                             |     |                        |     |     |     |     |                     |     |     |     |     |       |     | Daily Minimum | Daily Maximum | Daily Total |     |     |
|                                                                                                         | 0                                              | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8                                                                                       | 9                           | 10  | 11                     | 12  | 13  | 14  | 15  | 16                  | 17  | 18  | 19  | 20  | 21    | 22  |               |               |             | 23  |     |
| Jul 1                                                                                                   | 0                                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0                           | 0   | 0                      | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0     | 0   | 0             | 0.0           | 0.0         | 0.0 |     |
| Jul 2                                                                                                   | 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         | 0.0 |     |
| Jul 3                                                                                                   | 0                                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0                           | 0   | 0                      | 0   | 0   | 0.6 | 0.3 | 0                   | 0   | 0   | 0   | 0   | 0     | 0   | 0             | 0.0           | 0.6         | 0.9 |     |
| Jul 4                                                                                                   | 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         | 0.0 |     |
| Jul 5                                                                                                   | 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         | 0.0 |     |
| Jul 6                                                                                                   | 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         | 0.0 |     |
| Jul 7                                                                                                   | 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         | 0.0 |     |
| Jul 8                                                                                                   | 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         | 0.0 |     |
| Jul 9                                                                                                   | 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         | 0.0 |     |
| Jul 10                                                                                                  | 0                                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0                           | 0   | 0                      | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0.1 | 0.1   | 0   | 0             | 0.0           | 0.1         | 0.2 |     |
| Jul 11                                                                                                  | 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         | 0.0 |     |
| Jul 12                                                                                                  | 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         | 0.0 |     |
| Jul 13                                                                                                  | 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         | 0.0 |     |
| Jul 14                                                                                                  | 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         | 0.0 |     |
| Jul 15                                                                                                  | 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         | 0.0 |     |
| Jul 16                                                                                                  | 0                                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0                           | 0   | 0                      | 0.4 | 1.4 | 0.5 | 0   | 0                   | 0   | 0   | 0   | 0   | 0     | 0   | 0.3           | 0.0           | 1.4         | 2.6 |     |
| Jul 17                                                                                                  | 0.5                                            | 0.1 | 3   | 0.9 | 0.1 | 0.4 | 0.6 | 0.3 | 0.1                                                                                     | 0                           | 0   | 0                      | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0.3 | 0     | 0   | 0.3           | 0.0           | 3.0         | 6.6 |     |
| Jul 18                                                                                                  | 0.2                                            | 0.3 | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0                           | 0   | 0                      | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0     | 0   | 0             | 0.0           | 0.3         | 0.5 |     |
| Jul 19                                                                                                  | 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         | 0.0 |     |
| Jul 20                                                                                                  | 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         | 0.0 |     |
| Jul 21                                                                                                  | 0                                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0                           | 0   | 0                      | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0.4 | 0.1   | 0.1 | 0.1           | 0.1           | 0.0         | 0.4 | 0.8 |
| Jul 22                                                                                                  | 0.1                                            | 0.1 | 0   | 0.1 | 0   | 0.1 | 0   | 0   | 0                                                                                       | 0                           | 0   | 0                      | 0.1 | 0   | 0   | 0.1 | 0                   | 0   | 0   | 0   | 0   | 0     | 0   | 0             | 0.1           | 0.0         | 0.1 | 0.7 |
| Jul 23                                                                                                  | 0                                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0.1                         | 0   | 0                      | 0   | 0   | 0   | 0.1 | 0                   | 0   | 0   | 0   | 0   | 0     | 0   | 0             | 0.0           | 0.0         | 0.1 | 0.2 |
| Jul 24                                                                                                  | 0                                              | 0   | 0   | 0.1 | 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         | 0.2 |     |
| Jul 25                                                                                                  | 0.1                                            | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0                           | 0   | 0.1                    | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0     | 0   | 0             | 0.0           | 0.1         | 0.2 |     |
| Jul 26                                                                                                  | 0                                              | 0   | 0   | 0   | 0   | 0.1 | 0   | 0   | 0                                                                                       | 0                           | 0   | 0                      | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0     | 0   | 0             | 0.0           | 0.1         | 0.1 |     |
| Jul 27                                                                                                  | 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         | 0.0 |     |
| Jul 28                                                                                                  | 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         | 0.0 |     |
| Jul 29                                                                                                  | 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         | 0.0 |     |
| Jul 30                                                                                                  | 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         | 0.0 |     |
| Jul 31                                                                                                  | 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         | 0.0 |     |
| Diurnal Maximum                                                                                         | 0.5                                            | 0.3 | 3.0 | 0.9 | 0.1 | 0.4 | 0.6 | 0.3 | 0.1                                                                                     | 0.1                         | 0.1 | 0.1                    | 0.4 | 1.4 | 0.6 | 0.3 | 0.0                 | 0.0 | 0.0 | 0.4 | 0.3 | 0.1   | 0.1 | 0.3           |               |             |     |     |
| Diurnal Average                                                                                         | 0.0                                            | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0                                                                                     | 0.0                         | 0.0 | 0.0                    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.0 |               |               |             |     |     |
| C                                                                                                       | Monthly Calibration                            |     |     |     |     |     |     | S   | Daily Zero-Span Check                                                                   |                             |     |                        |     |     |     | Q   | Quality Assurance   |     |     |     |     |       |     |               |               |             |     |     |
| K                                                                                                       | Collection Error                               |     |     |     |     |     |     | N   | No Data (Machine Not in Service)                                                        |                             |     |                        |     |     |     | Y   | Routine Maintenance |     |     |     |     |       |     | P             | Power Failure |             |     |     |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |     |     |     |     |     |     | NRM | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |                             |     |                        |     |     |     |     |                     |     |     |     |     |       |     |               |               |             |     |     |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |     |     |     |     |     |     |     |                                                                                         |                             |     |                        |     |     |     |     |                     |     |     |     |     |       |     |               |               |             |     |     |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |     |     |     |     |     |     |     |                                                                                         |                             |     |                        |     |     |     |     |                     |     |     |     |     |       |     |               |               |             |     |     |

### ***Timeseries Chart of Hourly Average for Precipitation - Reno Station***





# PEACE RIVER AREA MONITORING PROGRAM

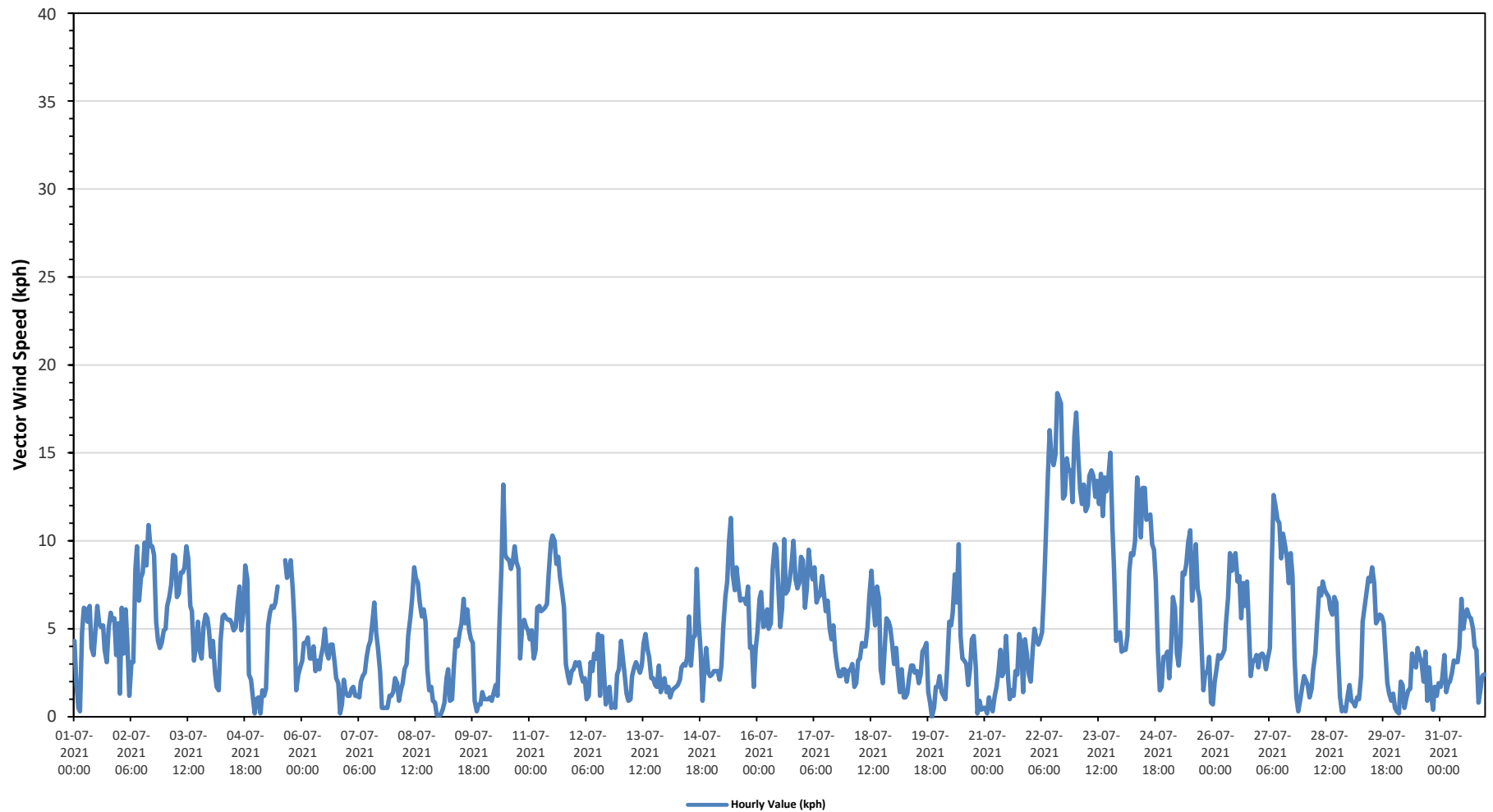
Reno Station - July 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr

|                                                                                                         |                                               |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |                       |      |      |                     |      |      |      |      |      |      |                        |               |               |      |  |  |  |  |  |  |       |  |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|-----------------------|------|------|---------------------|------|------|------|------|------|------|------------------------|---------------|---------------|------|--|--|--|--|--|--|-------|--|
| Maximum Hourly Value:                                                                                   |                                               |      |      |      |      |      |      |      |                                                                                         | 18.4 |      | kph  |      | on July 22 at hour 14 |      |      |                     |      |      |      |      |      |      | Hours in Service:      |               |               |      |  |  |  |  |  |  | 744   |  |
| Maximum Daily Value:                                                                                    |                                               |      |      |      |      |      |      |      |                                                                                         | 11.9 |      | kph  |      | on July 23            |      |      |                     |      |      |      |      |      |      | Hours of Data:         |               |               |      |  |  |  |  |  |  | 741   |  |
| Minimum Hourly Value:                                                                                   |                                               |      |      |      |      |      |      |      |                                                                                         | 0.0  |      | kph  |      | on July 19 at hour 20 |      |      |                     |      |      |      |      |      |      | Hours of Missing Data: |               |               |      |  |  |  |  |  |  | 0     |  |
| Minimum Daily Value:                                                                                    |                                               |      |      |      |      |      |      |      |                                                                                         | 0.8  |      | kph  |      | on July 12            |      |      |                     |      |      |      |      |      |      | Hours of Calibration:  |               |               |      |  |  |  |  |  |  | 3     |  |
| Monthly Average:                                                                                        |                                               |      |      |      |      |      |      |      |                                                                                         | 2.0  |      | kph  |      |                       |      |      |                     |      |      |      |      |      |      | Operational Uptime:    |               |               |      |  |  |  |  |  |  | 100.0 |  |
| Day                                                                                                     | Hourly Period Starting at (MST)               |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |                       |      |      |                     |      |      |      |      |      |      | Daily Minimum          | Daily Maximum | Daily Average |      |  |  |  |  |  |  |       |  |
| Jul 1                                                                                                   | 4.3                                           | 2.0  | 0.5  | 0.3  | 4.8  | 6.2  | 6.1  | 5.4  | 6.3                                                                                     | 3.9  | 3.5  | 4.7  | 6.3  | 5.3                   | 5.1  | 5.2  | 3.8                 | 3.1  | 5.0  | 5.9  | 5.5  | 5.6  | 3.5  | 5.3                    | 0.3           | 6.3           | 3.5  |  |  |  |  |  |  |       |  |
| Jul 2                                                                                                   | 1.3                                           | 6.2  | 3.6  | 6.1  | 4.0  | 1.2  | 3.1  | 3.1  | 8.4                                                                                     | 9.7  | 6.6  | 7.9  | 8.2  | 9.9                   | 8.6  | 10.9 | 9.7                 | 9.7  | 9.2  | 5.4  | 4.3  | 3.9  | 4.2  | 4.9                    | 1.2           | 10.9          | 6.0  |  |  |  |  |  |  |       |  |
| Jul 3                                                                                                   | 5.0                                           | 6.3  | 6.8  | 7.5  | 9.2  | 9.1  | 6.8  | 7.0  | 8.2                                                                                     | 8.2  | 8.5  | 9.7  | 9.0  | 6.3                   | 6.0  | 3.2  | 4.0                 | 5.4  | 3.8  | 3.3  | 5.1  | 5.8  | 5.6  | 4.9                    | 3.2           | 9.7           | 5.4  |  |  |  |  |  |  |       |  |
| Jul 4                                                                                                   | 3.4                                           | 4.3  | 2.5  | 1.7  | 1.5  | 4.3  | 5.7  | 5.8  | 5.6                                                                                     | 5.5  | 5.5  | 5.3  | 4.9  | 5.1                   | 6.5  | 7.4  | 4.9                 | 5.9  | 8.6  | 7.8  | 2.4  | 2.1  | 1.1  | 0.2                    | 0.2           | 8.6           | 4.0  |  |  |  |  |  |  |       |  |
| Jul 5                                                                                                   | 1.0                                           | 1.1  | 0.2  | 1.5  | 1.2  | 1.6  | 5.2  | 5.9  | 6.3                                                                                     | 6.2  | 6.5  | 7.4  | C    | C                     | C    | 8.9  | 7.9                 | 8.3  | 8.9  | 7.2  | 5.1  | 1.5  | 2.4  | 2.8                    | 0.2           | 8.9           | 4.5  |  |  |  |  |  |  |       |  |
| Jul 6                                                                                                   | 3.2                                           | 4.2  | 4.2  | 4.5  | 3.3  | 3.3  | 4.0  | 2.6  | 3.2                                                                                     | 2.7  | 3.4  | 4.0  | 5.0  | 3.6                   | 3.3  | 4.1  | 4.1                 | 3.1  | 2.2  | 1.9  | 0.2  | 0.7  | 2.1  | 1.4                    | 0.2           | 5.0           | 1.8  |  |  |  |  |  |  |       |  |
| Jul 7                                                                                                   | 1.2                                           | 1.2  | 1.6  | 1.7  | 1.2  | 1.2  | 1.1  | 2.0  | 2.3                                                                                     | 2.5  | 3.4  | 4.0  | 4.3  | 5.4                   | 6.5  | 4.8  | 3.9                 | 2.6  | 0.5  | 0.5  | 0.5  | 1.2  | 1.2  | 0.5                    | 6.5           | 2.2           |      |  |  |  |  |  |  |       |  |
| Jul 8                                                                                                   | 1.4                                           | 2.2  | 1.9  | 0.9  | 1.5  | 1.9  | 2.7  | 3.0  | 4.6                                                                                     | 5.6  | 6.7  | 8.5  | 7.9  | 7.6                   | 6.5  | 5.7  | 6.1                 | 5.4  | 2.7  | 1.5  | 1.7  | 0.9  | 0.8  | 0.1                    | 0.1           | 8.5           | 3.5  |  |  |  |  |  |  |       |  |
| Jul 9                                                                                                   | 0.1                                           | 0.1  | 0.4  | 0.8  | 2.2  | 2.7  | 0.9  | 1.0  | 2.9                                                                                     | 4.4  | 4.0  | 4.8  | 5.3  | 6.7                   | 5.3  | 6.1  | 4.9                 | 4.4  | 4.2  | 0.9  | 0.3  | 0.7  | 0.7  | 1.4                    | 0.1           | 6.7           | 2.6  |  |  |  |  |  |  |       |  |
| Jul 10                                                                                                  | 1.0                                           | 1.0  | 1.0  | 1.1  | 0.9  | 1.4  | 1.8  | 1.2  | 5.1                                                                                     | 8.5  | 13.2 | 9.2  | 9.0  | 8.9                   | 8.4  | 8.8  | 9.7                 | 8.8  | 8.4  | 3.3  | 5.2  | 5.5  | 5.1  | 4.9                    | 0.9           | 13.2          | 5.3  |  |  |  |  |  |  |       |  |
| Jul 11                                                                                                  | 4.4                                           | 4.9  | 3.3  | 3.8  | 6.2  | 6.3  | 6.0  | 6.1  | 6.2                                                                                     | 6.4  | 8.2  | 9.9  | 10.3 | 10.0                  | 8.7  | 9.1  | 7.9                 | 7.2  | 6.2  | 3.0  | 2.3  | 1.9  | 2.6  | 2.7                    | 1.9           | 10.3          | 5.6  |  |  |  |  |  |  |       |  |
| Jul 12                                                                                                  | 3.1                                           | 2.9  | 3.1  | 2.4  | 2.0  | 2.2  | 1.0  | 1.2  | 3.1                                                                                     | 2.6  | 3.6  | 3.3  | 4.7  | 1.2                   | 4.6  | 2.8  | 0.7                 | 1.3  | 1.7  | 0.5  | 0.7  | 0.5  | 2.4  | 2.7                    | 0.5           | 4.7           | 0.8  |  |  |  |  |  |  |       |  |
| Jul 13                                                                                                  | 4.3                                           | 3.3  | 2.5  | 1.3  | 0.9  | 1.0  | 2.3  | 2.8  | 3.1                                                                                     | 2.8  | 2.5  | 2.9  | 4.2  | 4.7                   | 3.8  | 3.4  | 2.2                 | 2.2  | 1.8  | 1.7  | 2.9  | 1.4  | 1.9  | 2.2                    | 0.9           | 4.7           | 2.5  |  |  |  |  |  |  |       |  |
| Jul 14                                                                                                  | 1.4                                           | 1.7  | 1.1  | 1.5  | 1.6  | 1.7  | 1.8  | 2.1  | 2.8                                                                                     | 3.0  | 2.9  | 3.4  | 5.7  | 2.9                   | 4.5  | 4.6  | 8.4                 | 5.5  | 3.7  | 0.9  | 2.6  | 3.9  | 2.5  | 2.3                    | 0.9           | 8.4           | 2.7  |  |  |  |  |  |  |       |  |
| Jul 15                                                                                                  | 2.4                                           | 2.6  | 2.6  | 2.6  | 2.1  | 2.9  | 5.1  | 6.8  | 7.7                                                                                     | 10.0 | 11.3 | 8.1  | 7.2  | 8.5                   | 7.4  | 6.6  | 6.7                 | 6.7  | 6.4  | 7.4  | 3.9  | 4.0  | 1.7  | 3.8                    | 1.7           | 11.3          | 2.7  |  |  |  |  |  |  |       |  |
| Jul 16                                                                                                  | 4.8                                           | 6.7  | 7.1  | 5.1  | 5.2  | 6.1  | 5.0  | 5.3  | 8.4                                                                                     | 9.8  | 9.6  | 7.5  | 5.1  | 6.2                   | 10.1 | 7.0  | 7.2                 | 7.8  | 8.9  | 10.0 | 7.8  | 7.3  | 7.6  | 9.1                    | 4.8           | 10.1          | 6.9  |  |  |  |  |  |  |       |  |
| Jul 17                                                                                                  | 8.9                                           | 6.2  | 7.3  | 9.5  | 8.4  | 7.8  | 8.5  | 6.5  | 6.8                                                                                     | 6.9  | 8.0  | 7.0  | 6.0  | 6.6                   | 5.0  | 4.4  | 5.2                 | 3.7  | 2.8  | 2.3  | 2.3  | 2.7  | 2.7  | 2.0                    | 2.0           | 9.5           | 5.0  |  |  |  |  |  |  |       |  |
| Jul 18                                                                                                  | 2.6                                           | 2.7  | 3.0  | 1.7  | 1.9  | 3.2  | 3.3  | 4.2  | 4.0                                                                                     | 4.0  | 5.1  | 6.9  | 8.3  | 6.6                   | 5.2  | 7.4  | 6.7                 | 2.7  | 1.9  | 3.8  | 5.6  | 5.4  | 5.1  | 4.1                    | 1.7           | 8.3           | 3.6  |  |  |  |  |  |  |       |  |
| Jul 19                                                                                                  | 3.0                                           | 3.9  | 2.6  | 1.4  | 2.7  | 1.1  | 1.1  | 1.3  | 2.3                                                                                     | 2.9  | 2.9  | 2.5  | 2.6  | 1.9                   | 2.4  | 3.7  | 3.9                 | 4.2  | 1.4  | 0.8  | 0.0  | 0.5  | 1.7  | 1.7                    | 0.0           | 4.2           | 2.1  |  |  |  |  |  |  |       |  |
| Jul 20                                                                                                  | 2.3                                           | 1.4  | 1.2  | 1.0  | 2.8  | 5.4  | 5.2  | 5.9  | 8.1                                                                                     | 6.5  | 9.8  | 4.6  | 3.3  | 3.2                   | 3.0  | 1.8  | 2.7                 | 4.4  | 4.6  | 2.8  | 0.2  | 0.9  | 0.4  | 0.5                    | 0.2           | 9.8           | 2.6  |  |  |  |  |  |  |       |  |
| Jul 21                                                                                                  | 0.5                                           | 0.2  | 1.1  | 0.5  | 0.3  | 1.2  | 1.7  | 2.5  | 3.8                                                                                     | 2.3  | 2.6  | 4.6  | 2.2  | 1.0                   | 1.5  | 1.2  | 2.6                 | 2.4  | 4.7  | 4.1  | 1.4  | 4.4  | 3.6  | 2.4                    | 0.2           | 4.7           | 1.0  |  |  |  |  |  |  |       |  |
| Jul 22                                                                                                  | 2.0                                           | 3.9  | 5.0  | 4.4  | 4.1  | 4.4  | 4.8  | 7.0  | 10.5                                                                                    | 13.6 | 16.3 | 14.8 | 14.3 | 14.9                  | 18.4 | 18.1 | 17.8                | 12.4 | 12.6 | 14.7 | 14.0 | 14.0 | 12.2 | 15.9                   | 2.0           | 18.4          | 11.0 |  |  |  |  |  |  |       |  |
| Jul 23                                                                                                  | 17.3                                          | 14.7 | 12.9 | 12.1 | 13.2 | 11.7 | 12.0 | 13.7 | 14.0                                                                                    | 13.7 | 12.5 | 13.4 | 12.1 | 13.8                  | 11.4 | 13.6 | 12.8                | 13.7 | 15.0 | 10.7 | 8.4  | 4.3  | 4.7  | 4.8                    | 4.3           | 17.3          | 11.9 |  |  |  |  |  |  |       |  |
| Jul 24                                                                                                  | 3.7                                           | 3.8  | 3.8  | 4.6  | 8.3  | 9.3  | 9.2  | 10.0 | 13.6                                                                                    | 12.6 | 10.2 | 13.0 | 13.0 | 11.2                  | 11.3 | 11.5 | 9.8                 | 9.5  | 7.7  | 3.7  | 1.5  | 1.7  | 3.4  | 3.4                    | 1.5           | 13.6          | 7.7  |  |  |  |  |  |  |       |  |
| Jul 25                                                                                                  | 3.7                                           | 2.2  | 3.9  | 6.8  | 6.2  | 3.6  | 2.9  | 4.2  | 8.2                                                                                     | 8.1  | 8.7  | 9.9  | 10.6 | 6.6                   | 7.7  | 9.8  | 7.3                 | 6.7  | 4.4  | 1.5  | 2.5  | 2.5  | 3.4  | 0.8                    | 0.8           | 10.6          | 5.4  |  |  |  |  |  |  |       |  |
| Jul 26                                                                                                  | 0.7                                           | 2.0  | 2.8  | 3.5  | 3.3  | 3.5  | 3.8  | 5.3  | 6.8                                                                                     | 9.3  | 8.3  | 8.7  | 9.3  | 7.7                   | 8.0  | 5.6  | 7.6                 | 6.3  | 7.7  | 4.7  | 2.3  | 3.2  | 3.2  | 3.5                    | 0.7           | 9.3           | 5.2  |  |  |  |  |  |  |       |  |
| Jul 27                                                                                                  | 2.8                                           | 3.5  | 3.6  | 3.4  | 2.7  | 3.3  | 3.9  | 8.6  | 12.6                                                                                    | 12.0 | 11.2 | 11.0 | 9.0  | 10.4                  | 9.8  | 9.0  | 7.6                 | 9.3  | 8.0  | 3.3  | 1.1  | 0.3  | 0.9  | 1.6                    | 0.3           | 12.6          | 6.0  |  |  |  |  |  |  |       |  |
| Jul 28                                                                                                  | 2.3                                           | 2.1  | 1.8  | 1.1  | 1.6  | 2.7  | 3.6  | 5.4  | 7.3                                                                                     | 6.9  | 7.7  | 7.2  | 7.0  | 6.8                   | 6.1  | 5.8  | 6.8                 | 6.5  | 3.7  | 1.1  | 0.3  | 0.5  | 0.3  | 1.1                    | 0.3           | 7.7           | 3.8  |  |  |  |  |  |  |       |  |
| Jul 29                                                                                                  | 1.8                                           | 0.9  | 0.8  | 0.6  | 1.1  | 1.0  | 2.3  | 5.4  | 6.3                                                                                     | 7.1  | 7.9  | 7.7  | 8.5  | 7.6                   | 5.3  | 5.5  | 5.8                 | 5.7  | 5.3  | 3.6  | 1.9  | 1.3  | 0.9  | 1.3                    | 0.6           | 8.5           | 3.7  |  |  |  |  |  |  |       |  |
| Jul 30                                                                                                  | 0.5                                           | 0.3  | 0.2  | 2.0  | 1.8  | 0.5  | 1.1  | 1.5  | 1.6                                                                                     | 3.6  | 2.9  | 2.8  | 3.9  | 3.4                   | 3.1  | 2.0  | 3.7                 | 0.9  | 2.8  | 1.3  | 0.4  | 1.7  | 1.2  | 1.9                    | 0.2           | 3.9           | 1.1  |  |  |  |  |  |  |       |  |
| Jul 31                                                                                                  | 1.7                                           | 2.2  | 3.5  | 1.4  | 1.9  | 2.0  | 2.5  | 3.2  | 3.1                                                                                     | 3.1  | 3.9  | 6.7  | 5.0  | 5.8                   | 6.1  | 5.7  | 5.6                 | 5.0  | 4.0  | 3.8  | 0.8  | 1.5  | 2.3  | 2.4                    | 0.8           | 6.7           | 3.3  |  |  |  |  |  |  |       |  |
| Diurnal Maximum                                                                                         | 17                                            | 15   | 13   | 12   | 13   | 12   | 12   | 14   | 14                                                                                      | 14   | 16   | 15   | 14   | 15                    | 18   | 18   | 18                  | 14   | 15   | 15   | 14   | 14   | 12   | 16                     |               |               |      |  |  |  |  |  |  |       |  |
| Diurnal Average                                                                                         | 3.1                                           | 3.2  | 3.1  | 3.1  | 3.5  | 3.7  | 4.0  | 4.7  | 6.2                                                                                     | 6.6  | 7.0  | 7.1  | 7.1  | 6.7                   | 6.7  | 6.6  | 6.4                 | 5.8  | 5.4  | 4.0  | 3.0  | 2.9  | 2.9  | 3.1                    |               |               |      |  |  |  |  |  |  |       |  |
| C                                                                                                       | Monthly Calibration                           |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |                       |      | Q    | Quality Assurance   |      |      |      |      |      |      |                        |               |               |      |  |  |  |  |  |  |       |  |
| K                                                                                                       | Collection Error                              |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |                       |      | Y    | Routine Maintenance |      |      |      |      |      |      | P                      | Power Failure |               |      |  |  |  |  |  |  |       |  |
| X                                                                                                       | InValid Data (Equipment Malfunction/Recovery) |      |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |                       |      |      |                     |      |      |      |      |      |      |                        |               |               |      |  |  |  |  |  |  |       |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                               |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |                       |      |      |                     |      |      |      |      |      |      |                        |               |               |      |  |  |  |  |  |  |       |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                               |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |                       |      |      |                     |      |      |      |      |      |      |                        |               |               |      |  |  |  |  |  |  |       |  |

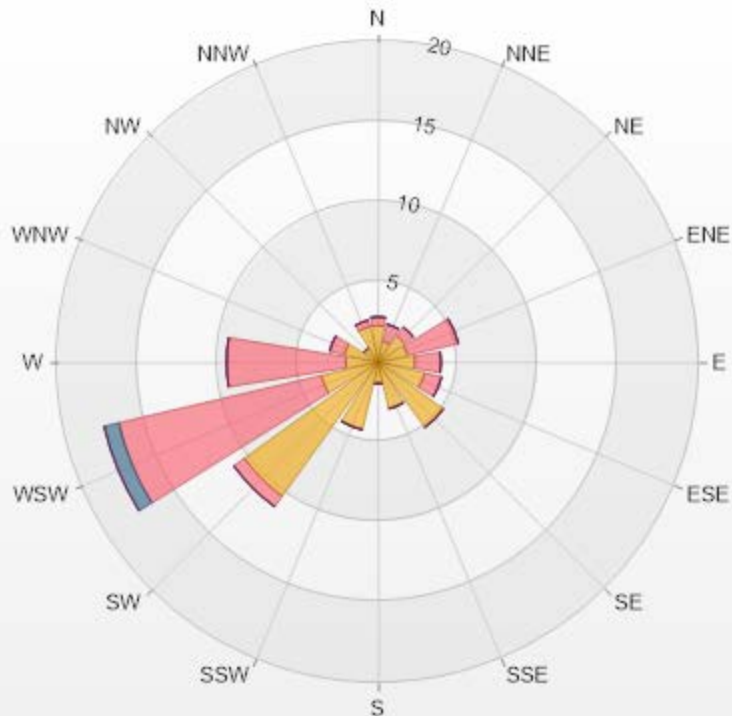
***Timeseries Chart of Hourly Average for VWS - Reno Station***





Wind: PRAMP RENO Monitor: WDS [KPH] Monthly: 07-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 20.38% Valid Data: 99.60%

| Direction | 1.8-6.0 | 6.0-15.0 | 15.0-29.0 | 29.0-39.0 | >39.0 | Total |
|-----------|---------|----------|-----------|-----------|-------|-------|
| N         | 2.29    | 0.54     | 0         | 0         | 0     | 2.83  |
| NNE       | 1.35    | 1.08     | 0         | 0         | 0     | 2.43  |
| NE        | 2.02    | 0.67     | 0         | 0         | 0     | 2.69  |
| ENE       | 1.89    | 3.24     | 0         | 0         | 0     | 5.13  |
| E         | 2.29    | 1.62     | 0         | 0         | 0     | 3.91  |
| ESE       | 2.97    | 1.08     | 0         | 0         | 0     | 4.05  |
| SE        | 4.99    | 0        | 0         | 0         | 0     | 4.99  |
| SSE       | 2.97    | 0        | 0         | 0         | 0     | 2.97  |
| S         | 1.35    | 0        | 0         | 0         | 0     | 1.35  |
| SSW       | 4.32    | 0        | 0         | 0         | 0     | 4.32  |
| SW        | 10.26   | 0.81     | 0         | 0         | 0     | 11.07 |
| WSW       | 3.64    | 12.96    | 0.94      | 0         | 0     | 17.54 |
| W         | 2.02    | 7.42     | 0         | 0         | 0     | 9.44  |
| WNW       | 2.16    | 0.94     | 0         | 0         | 0     | 3.1   |
| NW        | 1.08    | 0        | 0         | 0         | 0     | 1.08  |
| NNW       | 2.29    | 0.4      | 0         | 0         | 0     | 2.69  |
| Summary   | 47.89   | 30.76    | 0.94      | 0         | 0     | 79.59 |



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% Icon Classes (KPH)

48 1.8-6.0

31 6.0-15.0

1 15.0-29.0

0 29.0-39.0

0 >39.0



# PEACE RIVER AREA MONITORING PROGRAM

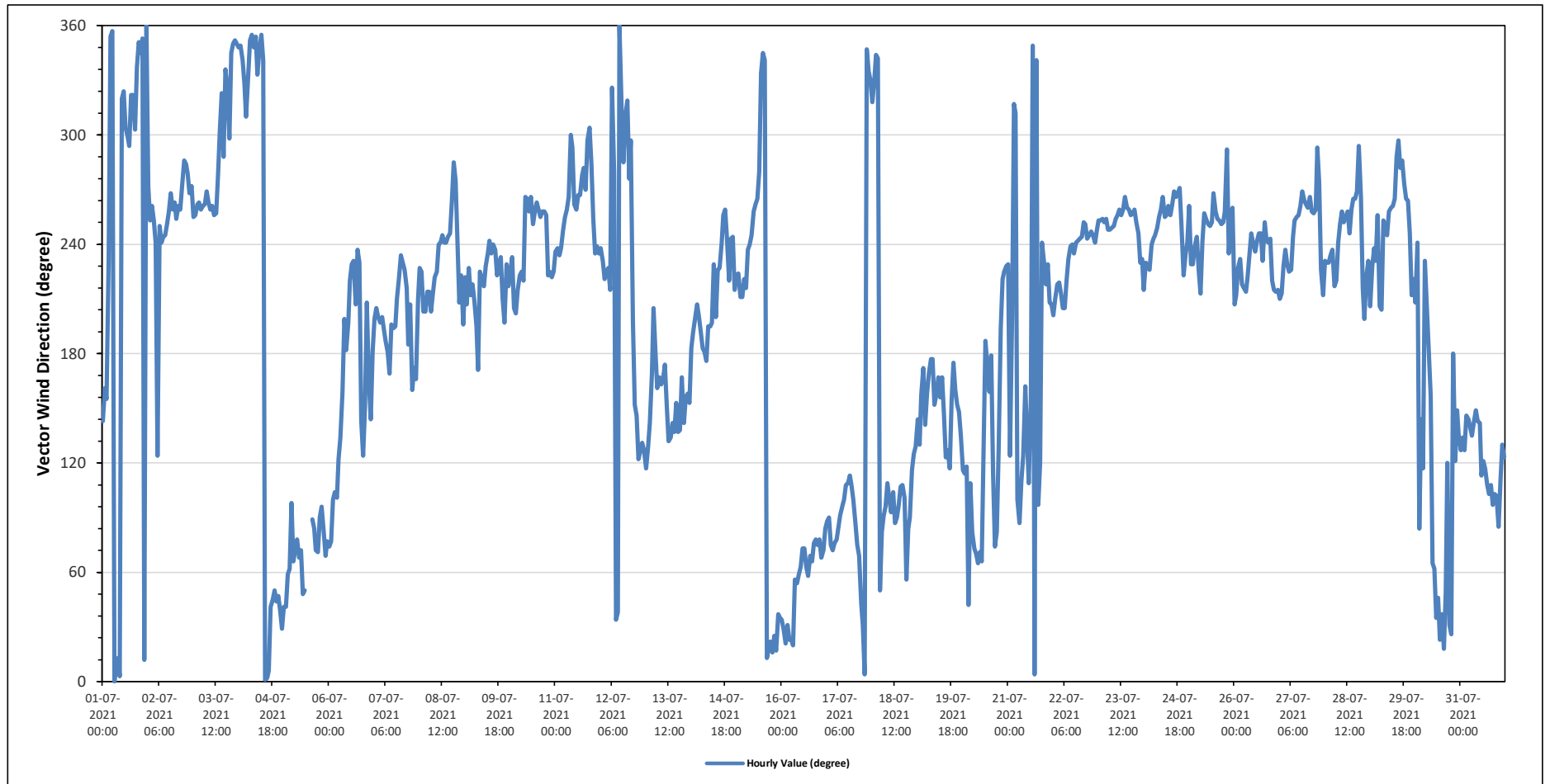
Reno Station - July 2021

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

| Monthly Average:                                                                                        |                                              | 247 (WSW) degree |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |                     |     |     |     |     |     |     |               | Hours in Service:      |          | 744   |  |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------|------------------|-----|-----|-----|-----|-----|-----|-----------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|---------------------|-----|-----|-----|-----|-----|-----|---------------|------------------------|----------|-------|--|
|                                                                                                         |                                              |                  |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |                     |     |     |     |     |     |     |               | Hours of Data:         |          | 741   |  |
|                                                                                                         |                                              |                  |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |                     |     |     |     |     |     |     |               | Hours of Missing Data: |          | 0     |  |
|                                                                                                         |                                              |                  |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |                     |     |     |     |     |     |     |               | Hours of Calibration:  |          | 3     |  |
|                                                                                                         |                                              |                  |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |                     |     |     |     |     |     |     |               | Operational Uptime:    |          | 100.0 |  |
|                                                                                                         |                                              |                  |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |                     |     |     |     |     |     |     |               |                        |          |       |  |
| Day                                                                                                     | Hourly Period Starting at (MST)              |                  |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |                     |     |     |     |     |     |     | Daily Average |                        |          |       |  |
|                                                                                                         | 0                                            | 1                | 2   | 3   | 4   | 5   | 6   | 7   | 8                                                                                       | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16                  | 17  | 18  | 19  | 20  | 21  | 22  | 23            | Degree                 | Quadrant |       |  |
| Jul 1                                                                                                   | SE                                           | SSE              | SSE | SW  | N   | N   | N   | N   | NNE                                                                                     | N   | NW  | NW  | WNW | WNW | WNW | NW  | NW                  | WNW | NNW | N   | NNW | N   | NNE | N             | 341                    | NNW      |       |  |
| Jul 2                                                                                                   | W                                            | WSW              | W   | WSW | WSW | ESE | WSW | WSW | WSW                                                                                     | WSW | WSW | WSW | W   | WSW | W   | WSW | W                   | WSW | W   | WNW | WNW | W   | W   | W             | 259                    | WSW      |       |  |
| Jul 3                                                                                                   | WSW                                          | WSW              | W   | W   | WSW | W   | W   | W   | W                                                                                       | WSW | W   | WSW | WSW | W   | WNW | NW  | WNW                 | NNW | NW  | WNW | NNW | N   | N   | N             | 280                    | W        |       |  |
| Jul 4                                                                                                   | NNW                                          | NNW              | NNW | NNW | NW  | NNW | N   | N   | NNW                                                                                     | N   | NNW | NNW | N   | NNW | N   | N   | N                   | NE  | NE  | NE  | NE  | NE  | NE  | NNE           | 3                      | N        |       |  |
| Jul 5                                                                                                   | NE                                           | NE               | ENE | ENE | E   | ENE | ENE | ENE | ENE                                                                                     | ENE | NE  | NE  | C   | C   | C   | E   | E                   | ENE | ENE | E   | E   | E   | ENE | ENE           | 73                     | ENE      |       |  |
| Jul 6                                                                                                   | ENE                                          | ENE              | E   | ESE | E   | ESE | SE  | SSE | SSW                                                                                     | S   | SSW | SW  | SW  | SW  | SSW | SW  | SW                  | SE  | ESE | SSE | SSW | SSE | SE  | S             | 164                    | SSE      |       |  |
| Jul 7                                                                                                   | SSW                                          | SSW              | SSW | SSW | SSW | S   | S   | S   | SSE                                                                                     | SSW | SSW | SSW | SSW | SW  | SW  | SW  | SW                  | SW  | S   | SSW | SSE | S   | SSE | SSW           | 208                    | SSW      |       |  |
| Jul 8                                                                                                   | SW                                           | SW               | SSW | SSW | SSW | SSW | SSW | SSW | SSW                                                                                     | SW  | SW  | WSW | WSW | WSW | WSW | WSW | WSW                 | W   | WNW | W   | WSW | SSW | SW  | SSW           | 238                    | SW       |       |  |
| Jul 9                                                                                                   | SW                                           | SSW              | SW  | SSW | SW  | SSW | SSW | S   | SW                                                                                      | SW  | SW  | SW  | SW  | WSW | SW  | WSW | SW                  | SW  | SW  | SW  | SSW | SSW | SW  | SW            | 228                    | SW       |       |  |
| Jul 10                                                                                                  | SW                                           | SW               | SSW | SSW | SSW | SW  | SW  | SW  | W                                                                                       | W   | WSW | W   | WSW | WSW | W   | WSW | WSW                 | WSW | WSW | WSW | SW  | SW  | SW  | SW            | 251                    | WSW      |       |  |
| Jul 11                                                                                                  | SW                                           | SW               | SW  | SW  | WSW | WSW | WSW | W   | WNW                                                                                     | WNW | W   | WSW | W   | W   | W   | W   | W                   | WNW | WNW | WNW | WSW | SW  | WSW | SW            | 267                    | W        |       |  |
| Jul 12                                                                                                  | SW                                           | SW               | SW  | SW  | SW  | SSW | NW  | W   | NE                                                                                      | NE  | N   | NW  | WNW | NW  | NW  | W   | WNW                 | SSW | SSE | SE  | ESE | SE  | SE  | SE            | 269                    | W        |       |  |
| Jul 13                                                                                                  | ESE                                          | SE               | SE  | SSE | SSW | S   | SSE | SSE | SSE                                                                                     | SSE | S   | SSE | SE  | SE  | SE  | SE  | SSE                 | SE  | SE  | SSE | SE  | SSE | SSE | SSE           | 148                    | SE       |       |  |
| Jul 14                                                                                                  | S                                            | S                | SSW | SSW | SSW | S   | S   | S   | S                                                                                       | SSW | SSW | SSW | SW  | SSW | SW  | SW  | WSW                 | WSW | WSW | WSW | SW  | WSW | WSW | SSW           | 220                    | SW       |       |  |
| Jul 15                                                                                                  | SW                                           | SW               | SSW | SSW | SW  | SW  | SW  | WSW | WSW                                                                                     | WSW | W   | W   | W   | NNW | NNW | NNW | NNE                 | NNE | NNE | NNE | NNE | NNE | NE  | NE            | 301                    | WNW      |       |  |
| Jul 16                                                                                                  | NE                                           | NNE              | NNE | NNE | NNE | NNE | NNE | NE  | NE                                                                                      | ENE | ENE | ENE | ENE | ENE | ENE | ENE | ENE                 | ENE | ENE | ENE | ENE | ENE | ENE | E             | 59                     | ENE      |       |  |
| Jul 17                                                                                                  | E                                            | E                | ENE | ENE | ENE | ENE | E   | E   | E                                                                                       | E   | ESE | ESE | ESE | ESE | E   | E   | ENE                 | ENE | NE  | NNE | N   | NNW | NNW | NNW           | 84                     | E        |       |  |
| Jul 18                                                                                                  | NW                                           | NNW              | NNW | NNW | NE  | E   | E   | E   | ESE                                                                                     | E   | E   | ESE | E   | E   | E   | ESE | ESE                 | E   | NE  | E   | E   | ESE | SE  | SE            | 94                     | E        |       |  |
| Jul 19                                                                                                  | SE                                           | SE               | SSE | S   | SE  | SSE | SSE | S   | S                                                                                       | SSE | SSE | SSE | SSE | SSE | SE  | ESE | SE                  | ESE | SSE | S   | SSE | SSE | SE  | SE            | 147                    | SE       |       |  |
| Jul 20                                                                                                  | ESE                                          | ESE              | ESE | NE  | ESE | E   | ENE | ENE | ENE                                                                                     | ENE | SE  | S   | S   | SSE | S   | ESE | ENE                 | E   | SE  | SSW | SW  | SW  | SW  | SW            | 94                     | E        |       |  |
| Jul 21                                                                                                  | SW                                           | ESE              | SSW | NW  | NW  | E   | E   | ESE | ESE                                                                                     | SSE | SE  | ESE | SSE | NNW | N   | NNW | E                   | ESE | WSW | SW  | SW  | SW  | SSW | SSW           | 168                    | SSE      |       |  |
| Jul 22                                                                                                  | SSW                                          | SSW              | SW  | SW  | SSW | SSW | SSW | SW  | SW                                                                                      | WSW | WSW | SW  | WSW | WSW | WSW | WSW | WSW                 | WSW | WSW | WSW | WSW | WSW | WSW | WSW           | 239                    | WSW      |       |  |
| Jul 23                                                                                                  | WSW                                          | WSW              | WSW | WSW | WSW | WSW | WSW | WSW | WSW                                                                                     | WSW | WSW | WSW | WSW | WSW | W   | WSW | WSW                 | WSW | WSW | WSW | WSW | WSW | SW  | SW            | 254                    | WSW      |       |  |
| Jul 24                                                                                                  | SSW                                          | SW               | SW  | SW  | WSW | WSW | WSW | WSW | WSW                                                                                     | WSW | W   | WSW | WSW | W   | WSW | W   | W                   | W   | W   | W   | WSW | SW  | SW  | WSW           | 254                    | WSW      |       |  |
| Jul 25                                                                                                  | W                                            | SW               | SW  | WSW | WSW | SW  | SSW | WSW | WSW                                                                                     | WSW | WSW | WSW | WSW | W   | WSW | WSW | WSW                 | WSW | WSW | WSW | WNW | SW  | WSW | WSW           | 250                    | WSW      |       |  |
| Jul 26                                                                                                  | SSW                                          | SSW              | SW  | SW  | SW  | SW  | SSW | SW  | SW                                                                                      | WSW | WSW | WSW | WSW | WSW | SW  | WSW | WSW                 | WSW | WSW | WSW | SW  | SSW | SSW | SSW           | 235                    | SW       |       |  |
| Jul 27                                                                                                  | SSW                                          | SSW              | SW  | SW  | SW  | SW  | SW  | WSW | WSW                                                                                     | WSW | WSW | W   | W   | W   | W   | WSW | W                   | WSW | WSW | WSW | WNW | W   | SW  | SSW           | 253                    | WSW      |       |  |
| Jul 28                                                                                                  | SW                                           | SW               | SW  | SW  | SW  | SW  | SW  | WSW | WSW                                                                                     | WSW | WSW | WSW | WSW | WSW | WSW | W   | W                   | W   | WNW | W   | SW  | SSW | SW  | SW            | 252                    | WSW      |       |  |
| Jul 29                                                                                                  | SSW                                          | SW               | SW  | SW  | WSW | SSW | SSW | WSW | WSW                                                                                     | WSW | WSW | WSW | W   | W   | WNW | WNW | W                   | WNW | W   | W   | WSW | SSW | SW  | SW            | 261                    | W        |       |  |
| Jul 30                                                                                                  | SSW                                          | WSW              | E   | SE  | ESE | SW  | SSW | S   | SSE                                                                                     | ENE | ENE | NE  | NE  | NNE | NE  | NNE | NE                  | ESE | NNE | NNE | S   | ESE | SSE | SE            | 68                     | ENE      |       |  |
| Jul 31                                                                                                  | SE                                           | SE               | SE  | SE  | SE  | SE  | SE  | SE  | SSE                                                                                     | SE  | SE  | ESE | ESE | ESE | ESE | ESE | ESE                 | E   | ESE | E   | E   | ESE | SE  | ESE           | 120                    | ESE      |       |  |
| C                                                                                                       | Monthly Calibration                          |                  |     |     |     |     |     | S   | Daily Zero-Span Check                                                                   |     |     |     |     |     |     | Q   | Quality Assurance   |     |     |     |     |     |     |               |                        |          |       |  |
| K                                                                                                       | Collection Error                             |                  |     |     |     |     |     | N   | No Data (Machine Not in Service)                                                        |     |     |     |     |     |     | Y   | Routine Maintenance |     |     |     |     |     |     | P             | Power Failure          |          |       |  |
| X                                                                                                       | Invalid Data (Machine Malfunction /Recovery) |                  |     |     |     |     |     | NRM | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |     |     |     |     |     |     |     |                     |     |     |     |     |     |     |               |                        |          |       |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                              |                  |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |                     |     |     |     |     |     |     |               |                        |          |       |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                              |                  |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |                     |     |     |     |     |     |     |               |                        |          |       |  |

***Timeseries Chart of Hourly Average for VWD - Reno Station***





## PEACE RIVER AREA MONITORING PROGRAM

Reno Station - July 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr & WIND DIRECTION (VWD) in sector

| WIND SPEED            |                                 |                                |     |     |     |     |     |     |     |      |      |     |      |      |                        |      |     |     |     |      |     |     |     |               |               |               |     |  |
|-----------------------|---------------------------------|--------------------------------|-----|-----|-----|-----|-----|-----|-----|------|------|-----|------|------|------------------------|------|-----|-----|-----|------|-----|-----|-----|---------------|---------------|---------------|-----|--|
| Maximum Hourly Value: |                                 | 18.4 kph on July 22 at hour 14 |     |     |     |     |     |     |     |      |      |     |      |      | Hours in Service:      |      | 744 |     |     |      |     |     |     |               |               |               |     |  |
| Maximum Daily Value:  |                                 | 11.9 kph on July 23            |     |     |     |     |     |     |     |      |      |     |      |      | Hours of Data:         |      | 741 |     |     |      |     |     |     |               |               |               |     |  |
| Minimum Hourly Value: |                                 | 0.0 kph on July 19 at hour 20  |     |     |     |     |     |     |     |      |      |     |      |      | Hours of Missing Data: |      | 0   |     |     |      |     |     |     |               |               |               |     |  |
| Minimum Daily Value:  |                                 | 0.8 kph on July 12             |     |     |     |     |     |     |     |      |      |     |      |      | Hours of Calibration:  |      | 3   |     |     |      |     |     |     |               |               |               |     |  |
| Monthly Average:      |                                 | 2.0 kph                        |     |     |     |     |     |     |     |      |      |     |      |      | Operational Uptime:    |      | 100 |     |     |      |     |     |     |               |               |               |     |  |
| WIND DIRECTION        |                                 |                                |     |     |     |     |     |     |     |      |      |     |      |      |                        |      |     |     |     |      |     |     |     |               |               |               |     |  |
| Monthly Average:      |                                 | 247 (WSW) degree               |     |     |     |     |     |     |     |      |      |     |      |      |                        |      |     |     |     |      |     |     |     |               |               |               |     |  |
| Day                   | Hourly Period Starting at (MST) |                                |     |     |     |     |     |     |     |      |      |     |      |      |                        |      |     |     |     |      |     |     |     | Daily Minimum | Daily Maximum | Daily Average |     |  |
|                       | 0                               | 1                              | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9    | 10   | 11  | 12   | 13   | 14                     | 15   | 16  | 17  | 18  | 19   | 20  | 21  | 22  | 23            |               |               |     |  |
| Jul 1                 | 4.3                             | 2.0                            | 0.5 | 0.3 | 4.8 | 6.2 | 6.1 | 5.4 | 6.3 | 3.9  | 3.5  | 4.7 | 6.3  | 5.3  | 5.1                    | 5.2  | 3.8 | 3.1 | 5.0 | 5.9  | 5.5 | 5.6 | 3.5 | 5.3           | 0.3           | 6.3           | 3.5 |  |
|                       | SE                              | SSE                            | SSE | SW  | N   | N   | N   | N   | NNE | N    | NW   | NW  | WNW  | WNW  | WNW                    | NW   | NW  | WNW | NNW | N    | NNW | N   | NNE | N             |               |               |     |  |
| Jul 2                 | 1.3                             | 6.2                            | 3.6 | 6.1 | 4.0 | 1.2 | 3.1 | 3.1 | 8.4 | 9.7  | 6.6  | 7.9 | 8.2  | 9.9  | 8.6                    | 10.9 | 9.7 | 9.7 | 9.2 | 5.4  | 4.3 | 3.9 | 4.2 | 4.9           | 1.2           | 10.9          | 6.0 |  |
|                       | W                               | WSW                            | W   | WSW | WSW | ESE | WSW | WSW | WSW | WSW  | WSW  | WSW | W    | WSW  | W                      | WSW  | W   | WSW | W   | WNW  | WNW | W   | W   | W             |               |               |     |  |
| Jul 3                 | 5.0                             | 6.3                            | 6.8 | 7.5 | 9.2 | 9.1 | 6.8 | 7.0 | 8.2 | 8.2  | 8.5  | 9.7 | 9.0  | 6.3  | 6.0                    | 3.2  | 4.0 | 5.4 | 3.8 | 3.3  | 5.1 | 5.8 | 5.6 | 4.9           | 3.2           | 9.7           | 5.4 |  |
|                       | WSW                             | WSW                            | W   | W   | WSW | W   | W   | W   | WSW | W    | WSW  | W   | WSW  | WSW  | W                      | WNW  | NW  | WNW | NNW | NW   | WNW | NNW | N   | N             |               |               |     |  |
| Jul 4                 | 3.4                             | 4.3                            | 2.5 | 1.7 | 1.5 | 4.3 | 5.7 | 5.8 | 5.6 | 5.5  | 5.5  | 5.3 | 4.9  | 5.1  | 6.5                    | 7.4  | 4.9 | 5.9 | 8.6 | 7.8  | 2.4 | 2.1 | 1.1 | 0.2           | 0.2           | 8.6           | 4.0 |  |
|                       | NNW                             | NNW                            | NNW | NNW | NW  | NNW | N   | N   | NNW | N    | NNW  | NNW | N    | NNW  | N                      | N    | N   | NE  | NE  | NE   | NE  | NE  | NE  | NNE           |               |               |     |  |
| Jul 5                 | 1.0                             | 1.1                            | 0.2 | 1.5 | 1.2 | 1.6 | 5.2 | 5.9 | 6.3 | 6.2  | 6.5  | 7.4 | C    | C    | C                      | 8.9  | 7.9 | 8.3 | 8.9 | 7.2  | 5.1 | 1.5 | 2.4 | 2.8           | 0.2           | 8.9           | 4.5 |  |
|                       | NE                              | NE                             | ENE | ENE | E   | ENE | ENE | ENE | ENE | ENE  | NE   | NE  | C    | C    | C                      | E    | E   | ENE | ENE | E    | E   | E   | ENE | ENE           |               |               |     |  |
| Jul 6                 | 3.2                             | 4.2                            | 4.2 | 4.5 | 3.3 | 3.3 | 4.0 | 2.6 | 3.2 | 2.7  | 3.4  | 4.0 | 5.0  | 3.6  | 3.3                    | 4.1  | 4.1 | 3.1 | 2.2 | 1.9  | 0.2 | 0.7 | 2.1 | 1.4           | 0.2           | 5.0           | 1.8 |  |
|                       | ENE                             | ENE                            | E   | ESE | E   | ESE | SE  | SSE | SSW | S    | SSW  | SW  | SW   | SW   | SSW                    | SW   | SW  | SE  | ESE | SSE  | SSW | SSE | SE  | S             |               |               |     |  |
| Jul 7                 | 1.2                             | 1.2                            | 1.6 | 1.7 | 1.2 | 1.2 | 1.1 | 2.0 | 2.3 | 2.5  | 3.4  | 4.0 | 4.3  | 5.4  | 6.5                    | 4.8  | 3.9 | 2.6 | 0.5 | 0.5  | 0.5 | 0.5 | 1.2 | 1.2           | 0.5           | 6.5           | 2.2 |  |
|                       | SSW                             | SSW                            | SSW | SSW | SSW | S   | S   | S   | SSE | SSW  | SSW  | SSW | SSW  | SW   | SW                     | SW   | SW  | SW  | S   | SSW  | SSE | S   | SSE | SSW           |               |               |     |  |
| Jul 8                 | 1.4                             | 2.2                            | 1.9 | 0.9 | 1.5 | 1.9 | 2.7 | 3.0 | 4.6 | 5.6  | 6.7  | 8.5 | 7.9  | 7.6  | 6.5                    | 5.7  | 6.1 | 5.4 | 2.7 | 1.5  | 1.7 | 0.9 | 0.8 | 0.1           | 0.1           | 8.5           | 3.5 |  |
|                       | SW                              | SW                             | SSW | SSW | SSW | SSW | SSW | SSW | SW  | SW   | WSW  | WSW | WSW  | WSW  | WSW                    | WSW  | WSW | W   | WNW | W    | WSW | SSW | SW  | SSW           |               |               |     |  |
| Jul 9                 | 0.1                             | 0.1                            | 0.4 | 0.8 | 2.2 | 2.7 | 0.9 | 1.0 | 2.9 | 4.4  | 4.0  | 4.8 | 5.3  | 6.7  | 5.3                    | 6.1  | 4.9 | 4.4 | 4.2 | 0.9  | 0.3 | 0.7 | 0.7 | 1.4           | 0.1           | 6.7           | 2.6 |  |
|                       | SW                              | SSW                            | SW  | SSW | SW  | SSW | SSW | S   | SW  | SW   | SW   | SW  | SW   | WSW  | SW                     | WSW  | SW  | SW  | SW  | SW   | SSW | SSW | SW  | SW            |               |               |     |  |
| Jul 10                | 1.0                             | 1.0                            | 1.0 | 1.1 | 0.9 | 1.4 | 1.8 | 1.2 | 5.1 | 8.5  | 13.2 | 9.2 | 9.0  | 8.9  | 8.4                    | 8.8  | 9.7 | 8.8 | 8.4 | 3.3  | 5.2 | 5.5 | 5.1 | 4.9           | 0.9           | 13.2          | 5.3 |  |
|                       | SW                              | SW                             | SSW | SSW | SSW | SW  | SW  | SW  | W   | W    | WSW  | W   | WSW  | WSW  | W                      | WSW  | WSW | WSW | WSW | WSW  | SW  | SW  | SW  | SW            |               |               |     |  |
| Jul 11                | 4.4                             | 4.9                            | 3.3 | 3.8 | 6.2 | 6.3 | 6.0 | 6.1 | 6.2 | 6.4  | 8.2  | 9.9 | 10.3 | 10.0 | 8.7                    | 9.1  | 7.9 | 7.2 | 6.2 | 3.0  | 2.3 | 1.9 | 2.6 | 2.7           | 1.9           | 10.3          | 5.6 |  |
|                       | SW                              | SW                             | SW  | SW  | WSW | WSW | WSW | W   | WNW | WNW  | W    | WSW | W    | W    | W                      | W    | W   | WNW | WNW | WNW  | WSW | SW  | WSW | SW            |               |               |     |  |
| Jul 12                | 3.1                             | 2.9                            | 3.1 | 2.4 | 2.0 | 2.2 | 1.0 | 1.2 | 3.1 | 2.6  | 3.6  | 3.3 | 4.7  | 1.2  | 4.6                    | 2.8  | 0.7 | 1.3 | 1.7 | 0.5  | 0.7 | 0.5 | 2.4 | 2.7           | 0.5           | 4.7           | 0.8 |  |
|                       | SW                              | SW                             | SW  | SW  | SW  | SSW | NW  | W   | NE  | NE   | N    | NW  | WNW  | NW   | NW                     | W    | WNW | SSW | SSE | SE   | ESE | SE  | SE  | SE            |               |               |     |  |
| Jul 13                | 4.3                             | 3.3                            | 2.5 | 1.3 | 0.9 | 1.0 | 2.3 | 2.8 | 3.1 | 2.8  | 2.5  | 2.9 | 4.2  | 4.7  | 3.8                    | 3.4  | 2.2 | 2.2 | 1.8 | 1.7  | 2.9 | 1.4 | 1.9 | 2.2           | 0.9           | 4.7           | 2.5 |  |
|                       | ESE                             | SE                             | SE  | SSE | SSW | S   | SSE | SSE | SSE | SSE  | S    | SSE | SE   | SE   | SE                     | SE   | SSE | SE  | SE  | SSE  | SE  | SSE | SSE | SSE           |               |               |     |  |
| Jul 14                | 1.4                             | 1.7                            | 1.1 | 1.5 | 1.6 | 1.7 | 1.8 | 2.1 | 2.8 | 3.0  | 2.9  | 3.4 | 5.7  | 2.9  | 4.5                    | 4.6  | 8.4 | 5.5 | 3.7 | 0.9  | 2.6 | 3.9 | 2.5 | 2.3           | 0.9           | 8.4           | 2.7 |  |
|                       | S                               | S                              | SSW | SSW | SSW | S   | S   | S   | S   | SSW  | SSW  | SSW | SW   | SSW  | SW                     | SSW  | WSW | WSW | WSW | WSW  | SW  | WSW | WSW | SSW           |               |               |     |  |
| Jul 15                | 2.4                             | 2.6                            | 2.6 | 2.6 | 2.1 | 2.9 | 5.1 | 6.8 | 7.7 | 10.0 | 11.3 | 8.1 | 7.2  | 8.5  | 7.4                    | 6.6  | 6.7 | 6.7 | 6.4 | 7.4  | 3.9 | 4.0 | 1.7 | 3.8           | 1.7           | 11.3          | 2.7 |  |
|                       | SW                              | SW                             | SSW | SSW | SW  | SW  | SW  | WSW | WSW | WSW  | W    | W   | W    | NNW  | NNW                    | NNW  | NNE | NNE | NNE | NNE  | NNE | NNE | NE  | NE            |               |               |     |  |
| Jul 16                | 4.8                             | 6.7                            | 7.1 | 5.1 | 5.2 | 6.1 | 5.0 | 5.3 | 8.4 | 9.8  | 9.6  | 7.5 | 5.1  | 6.2  | 10.1                   | 7.0  | 7.2 | 7.8 | 8.9 | 10.0 | 7.8 | 7.3 | 7.6 | 9.1           | 4.8           | 10.1          | 6.9 |  |
|                       | NE                              | NNE                            | NNE | NNE | NNE | NNE | NNE | NE  | NE  | ENE  | ENE  | ENE | ENE  | ENE  | ENE                    | ENE  | ENE | ENE | ENE | ENE  | ENE | ENE | ENE | E             |               |               |     |  |
| Jul 17                | 8.9                             | 6.2                            | 7.3 | 9.5 | 8.4 | 7.8 | 8.5 | 6.5 | 6.8 | 6.9  | 8.0  | 7.0 | 6.0  | 6.6  | 5.0                    | 4.4  | 5.2 | 3.7 | 2.8 | 2.3  | 2.3 | 2.7 | 2.7 | 2.0           | 2.0           | 9.5           | 5.0 |  |
|                       | E                               | E                              | ENE | ENE | ENE | ENE | E   | E   | E   | E    | ESE  | ESE | ESE  | ESE  | E                      | E    | ENE | ENE | NE  | NNE  | N   | NNW | NNW | NNW           |               |               |     |  |
| Jul 18                | 2.6                             | 2.7                            | 3.0 | 1.7 | 1.9 | 3.2 | 3.3 | 4.2 | 4.0 | 4.0  | 5.1  | 6.9 | 8.3  | 6.6  | 5.2                    | 7.4  | 6.7 | 2.7 | 1.9 | 3.8  | 5.6 | 5.4 | 5.1 | 4.1           | 1.7           | 8.3           | 3.6 |  |
|                       | NW                              | NNW                            | NNW | NNW | NE  | E   | E   | E   | ESE | E    | E    | ESE | E    | E    | E                      | ESE  | ESE | E   | NE  | E    | E   | ESE | SE  | SE            |               |               |     |  |
| Jul 19                | 3.0                             | 3.9                            | 2.6 | 1.4 | 2.7 | 1.1 | 1.1 | 1.3 | 2.3 | 2.9  | 2.9  | 2.5 | 2.6  | 1.9  | 2.4                    | 3.7  | 3.9 | 4.2 | 1.4 | 0.8  | 0.0 | 0.5 | 1.7 | 1.7           | 0.0           | 4.2           | 2.1 |  |
|                       | SE                              | SE                             | SSE | S   | SE  | SSE | SSE | S   | SSE | SSE  | SSE  | SSE | SSE  | SE   | SE                     | SE   | ESE | SE  | ESE | SSE  | S   | SSE | SSE | SE            | SE            |               |     |  |
| Jul 20                | 2.3                             | 1.4                            | 1.2 | 1.0 | 2.8 | 5.4 | 5.2 | 5.9 | 8.1 | 6.5  | 9.8  | 4.6 | 3.3  | 3.2  | 3.0                    | 1.8  | 2.7 | 4.4 | 4.6 | 2.8  | 0.2 | 0.9 | 0.4 | 0.5           | 0.2           | 9.8           | 2.6 |  |
|                       | ESE                             | ESE                            | ESE | NE  | ESE | E   | ENE | ENE | ENE | ENE  | ENE  | ENE | SE   | S    | S                      | SSE  | S   | ESE | ENE | E    | SE  | SSW | SW  | SW            | SW            |               |     |  |



# PEACE RIVER AREA MONITORING PROGRAM

Reno Station - July 2021

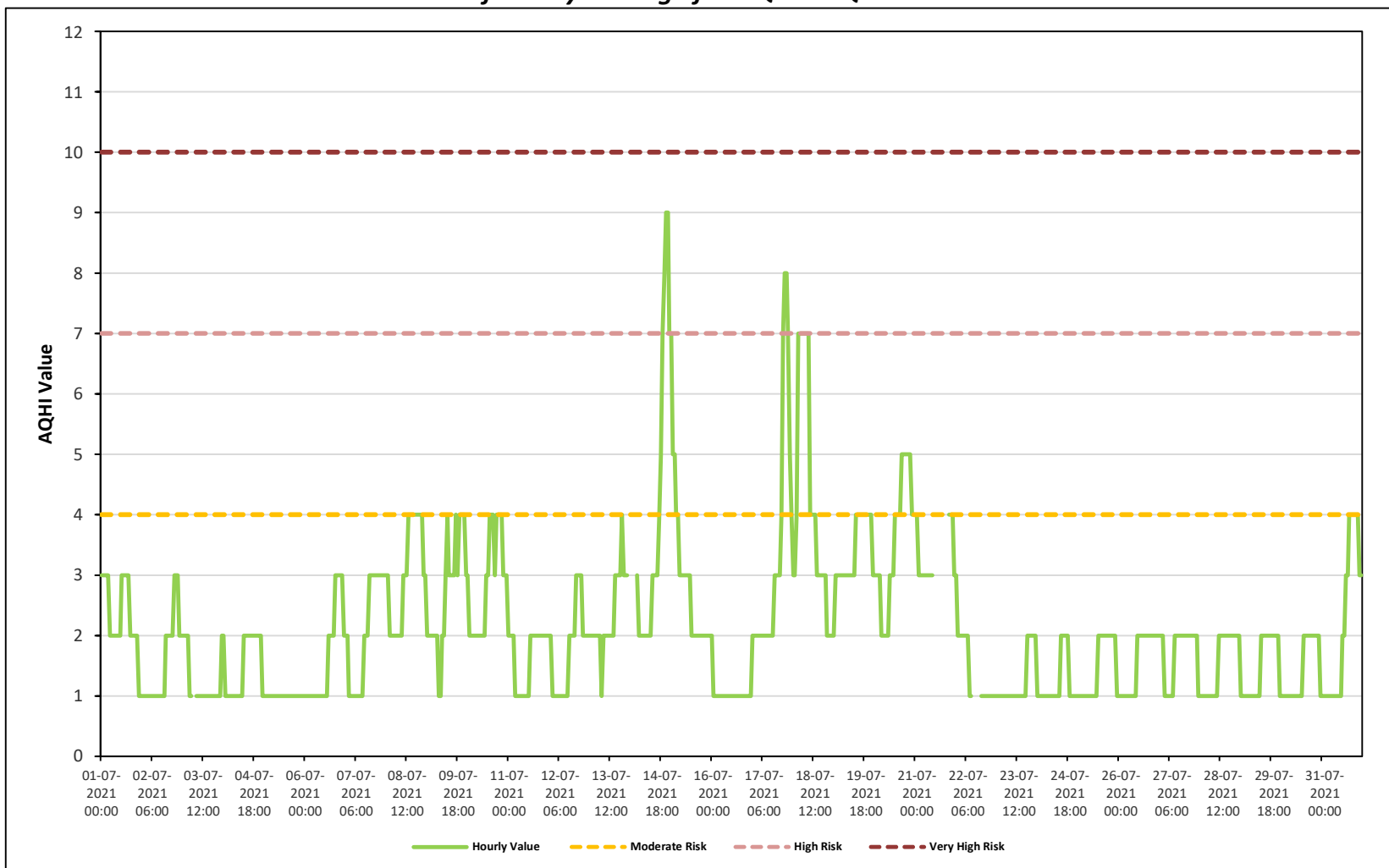
Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr & WIND DIRECTION (VWD) in sector

| WIND SPEED                                                                                              |                                               |      |      |      |      |      |      |      |      |                                                                                          |      |      |                   |      |                       |      |      |      |                     |      |      |      |      |               |                        |               |      |  |     |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------|------|------|------|------|------|------|------|------|------------------------------------------------------------------------------------------|------|------|-------------------|------|-----------------------|------|------|------|---------------------|------|------|------|------|---------------|------------------------|---------------|------|--|-----|
| Maximum Hourly Value:                                                                                   |                                               |      |      |      |      |      |      |      |      |                                                                                          |      |      | 18.4              | kph  | on July 22 at hour 14 |      |      |      |                     |      |      |      |      |               | Hours in Service:      |               |      |  | 744 |
| Maximum Daily Value:                                                                                    |                                               |      |      |      |      |      |      |      |      |                                                                                          |      |      | 11.9              | kph  | on July 23            |      |      |      |                     |      |      |      |      |               | Hours of Data:         |               |      |  | 741 |
| Minimum Hourly Value:                                                                                   |                                               |      |      |      |      |      |      |      |      |                                                                                          |      |      | 0.0               | kph  | on July 19 at hour 20 |      |      |      |                     |      |      |      |      |               | Hours of Missing Data: |               |      |  | 0   |
| Minimum Daily Value:                                                                                    |                                               |      |      |      |      |      |      |      |      |                                                                                          |      |      | 0.8               | kph  | on July 12            |      |      |      |                     |      |      |      |      |               | Hours of Calibration:  |               |      |  | 3   |
| Monthly Average:                                                                                        |                                               |      |      |      |      |      |      |      |      |                                                                                          |      |      | 2.0               | kph  |                       |      |      |      |                     |      |      |      |      |               | Operational Uptime:    |               |      |  | 100 |
| WIND DIRECTION                                                                                          |                                               |      |      |      |      |      |      |      |      |                                                                                          |      |      |                   |      |                       |      |      |      |                     |      |      |      |      |               |                        |               |      |  |     |
| Monthly Average:                                                                                        |                                               |      |      |      |      |      |      |      |      |                                                                                          |      |      | 247 (WSW, degree) |      |                       |      |      |      |                     |      |      |      |      |               |                        |               |      |  |     |
| Day                                                                                                     | Hourly Period Starting at (MST)               |      |      |      |      |      |      |      |      |                                                                                          |      |      |                   |      |                       |      |      |      |                     |      |      |      |      | Daily Minimum | Daily Maximum          | Daily Average |      |  |     |
|                                                                                                         | 0                                             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9                                                                                        | 10   | 11   | 12                | 13   | 14                    | 15   | 16   | 17   | 18                  | 19   | 20   | 21   | 22   | 23            |                        |               |      |  |     |
| Jul 21                                                                                                  | 0.5                                           | 0.2  | 1.1  | 0.5  | 0.3  | 1.2  | 1.7  | 2.5  | 3.8  | 2.3                                                                                      | 2.6  | 4.6  | 2.2               | 1.0  | 1.5                   | 1.2  | 2.6  | 2.4  | 4.7                 | 4.1  | 1.4  | 4.4  | 3.6  | 2.4           | 0.2                    | 4.7           | 1.0  |  |     |
| Jul 22                                                                                                  | SW                                            | ESE  | SSW  | NW   | NW   | E    | E    | ESE  | ESE  | SSE                                                                                      | SE   | ESE  | SSE               | NNW  | N                     | NNW  | E    | ESE  | WSW                 | SW   | SW   | SW   | SSW  | SSW           | 2.0                    | 18.4          | 11.0 |  |     |
|                                                                                                         | 2.0                                           | 3.9  | 5.0  | 4.4  | 4.1  | 4.4  | 4.8  | 7.0  | 10.5 | 13.6                                                                                     | 16.3 | 14.8 | 14.3              | 14.9 | 18.4                  | 18.1 | 17.8 | 12.4 | 12.6                | 14.7 | 14.0 | 14.0 | 12.2 | 15.9          |                        |               |      |  |     |
| Jul 23                                                                                                  | SSW                                           | SSW  | SW   | SW   | SSW  | SSW  | SSW  | SW   | SW   | WSW                                                                                      | WSW  | SW   | WSW               | WSW  | WSW                   | WSW  | WSW  | WSW  | WSW                 | WSW  | WSW  | WSW  | WSW  | WSW           | 4.3                    | 17.3          | 11.9 |  |     |
|                                                                                                         | 17.3                                          | 14.7 | 12.9 | 12.1 | 13.2 | 11.7 | 12.0 | 13.7 | 14.0 | 13.7                                                                                     | 12.5 | 13.4 | 12.1              | 13.8 | 11.4                  | 13.6 | 12.8 | 13.7 | 15.0                | 10.7 | 8.4  | 4.3  | 4.7  | 4.8           |                        |               |      |  |     |
| Jul 24                                                                                                  | WSW                                           | WSW  | WSW  | WSW  | WSW  | WSW  | WSW  | WSW  | WSW  | WSW                                                                                      | WSW  | WSW  | WSW               | WSW  | W                     | WSW  | WSW  | WSW  | WSW                 | WSW  | WSW  | WSW  | SW   | SW            | 1.5                    | 13.6          | 7.7  |  |     |
|                                                                                                         | 3.7                                           | 3.8  | 3.8  | 4.6  | 8.3  | 9.3  | 9.2  | 10.0 | 13.6 | 12.6                                                                                     | 10.2 | 13.0 | 13.0              | 11.2 | 11.3                  | 11.5 | 9.8  | 9.5  | 7.7                 | 3.7  | 1.5  | 1.7  | 3.4  | 3.4           |                        |               |      |  |     |
| Jul 25                                                                                                  | SSW                                           | SW   | SW   | SW   | WSW  | WSW  | WSW  | WSW  | WSW  | WSW                                                                                      | W    | WSW  | WSW               | W    | WSW                   | W    | W    | W    | W                   | W    | WSW  | SW   | SW   | WSW           | 0.8                    | 10.6          | 5.4  |  |     |
|                                                                                                         | 3.7                                           | 2.2  | 3.9  | 6.8  | 6.2  | 3.6  | 2.9  | 4.2  | 8.2  | 8.1                                                                                      | 8.7  | 9.9  | 10.6              | 6.6  | 7.7                   | 9.8  | 7.3  | 6.7  | 4.4                 | 1.5  | 2.5  | 2.5  | 3.4  | 0.8           |                        |               |      |  |     |
| Jul 26                                                                                                  | W                                             | SW   | SW   | WSW  | WSW  | SW   | SSW  | WSW  | WSW  | WSW                                                                                      | WSW  | WSW  | WSW               | W    | WSW                   | WSW  | WSW  | WSW  | WSW                 | WSW  | WNW  | SW   | WSW  | WSW           | 0.7                    | 9.3           | 5.2  |  |     |
|                                                                                                         | 0.7                                           | 2.0  | 2.8  | 3.5  | 3.3  | 3.5  | 3.8  | 5.3  | 6.8  | 9.3                                                                                      | 8.3  | 8.7  | 9.3               | 7.7  | 8.0                   | 5.6  | 7.6  | 6.3  | 7.7                 | 4.7  | 2.3  | 3.2  | 3.2  | 3.5           |                        |               |      |  |     |
| Jul 27                                                                                                  | SSW                                           | SSW  | SW   | SW   | SW   | SSW  | SW   | SW   | WSW  | WSW                                                                                      | WSW  | WSW  | WSW               | WSW  | SW                    | WSW  | WSW  | WSW  | WSW                 | WSW  | SW   | SSW  | SSW  | SSW           | 0.3                    | 12.6          | 6.0  |  |     |
|                                                                                                         | 2.8                                           | 3.5  | 3.6  | 3.4  | 2.7  | 3.3  | 3.9  | 8.6  | 12.6 | 12.0                                                                                     | 11.2 | 11.0 | 9.0               | 10.4 | 9.8                   | 9.0  | 7.6  | 9.3  | 8.0                 | 3.3  | 1.1  | 0.3  | 0.9  | 1.6           |                        |               |      |  |     |
| Jul 28                                                                                                  | SSW                                           | SSW  | SW   | SW   | SW   | SW   | SW   | WSW  | WSW  | WSW                                                                                      | WSW  | W    | W                 | W    | W                     | WSW  | W    | WSW  | WSW                 | WSW  | WNW  | W    | SW   | SSW           | 0.3                    | 7.7           | 3.8  |  |     |
|                                                                                                         | 2.3                                           | 2.1  | 1.8  | 1.1  | 1.6  | 2.7  | 3.6  | 5.4  | 7.3  | 6.9                                                                                      | 7.7  | 7.2  | 7.0               | 6.8  | 6.1                   | 5.8  | 6.8  | 6.5  | 3.7                 | 1.1  | 0.3  | 0.5  | 0.3  | 1.1           |                        |               |      |  |     |
| Jul 29                                                                                                  | SW                                            | SW   | SW   | SW   | SW   | SW   | SW   | WSW  | WSW  | WSW                                                                                      | WSW  | WSW  | WSW               | WSW  | WSW                   | W    | W    | W    | WNW                 | W    | SW   | SSW  | SW   | SW            | 0.6                    | 8.5           | 3.7  |  |     |
|                                                                                                         | 1.8                                           | 0.9  | 0.8  | 0.6  | 1.1  | 1.0  | 2.3  | 5.4  | 6.3  | 7.1                                                                                      | 7.9  | 7.7  | 8.5               | 7.6  | 5.3                   | 5.5  | 5.8  | 5.7  | 5.3                 | 3.6  | 1.9  | 1.3  | 0.9  | 1.3           |                        |               |      |  |     |
| Jul 30                                                                                                  | SSW                                           | SW   | SW   | SW   | WSW  | SSW  | SSW  | WSW  | WSW  | WSW                                                                                      | WSW  | WSW  | W                 | W    | NNW                   | NNW  | W    | WNW  | W                   | W    | W    | WSW  | SSW  | SW            | 0.2                    | 3.9           | 1.1  |  |     |
|                                                                                                         | 0.5                                           | 0.3  | 0.2  | 2.0  | 1.8  | 0.5  | 1.1  | 1.5  | 1.6  | 3.6                                                                                      | 2.9  | 2.8  | 3.9               | 3.4  | 3.1                   | 2.0  | 3.7  | 0.9  | 2.8                 | 1.3  | 0.4  | 1.7  | 1.2  | 1.9           |                        |               |      |  |     |
| Jul 31                                                                                                  | SSW                                           | WSW  | E    | SE   | ESE  | SW   | SSW  | S    | SSE  | ENE                                                                                      | ENE  | NE   | NE                | NNE  | NE                    | NNE  | NE   | ESE  | NNE                 | NNE  | S    | ESE  | SSE  | SE            | 0.8                    | 6.7           | 3.3  |  |     |
|                                                                                                         | 1.7                                           | 2.2  | 3.5  | 1.4  | 1.9  | 2.0  | 2.5  | 3.2  | 3.1  | 3.1                                                                                      | 3.9  | 6.7  | 5.0               | 5.8  | 6.1                   | 5.7  | 5.6  | 5.0  | 4.0                 | 3.8  | 0.8  | 1.5  | 2.3  | 2.4           |                        |               |      |  |     |
|                                                                                                         | SE                                            | SE   | SE   | SE   | SE   | SE   | SE   | SE   | SSE  | SE                                                                                       | SE   | ESE  | ESE               | ESE  | ESE                   | ESE  | ESE  | E    | ESE                 | E    | E    | ESE  | ESE  | ESE           |                        |               |      |  |     |
| C                                                                                                       | Monthly Calibration                           |      |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                    |      |      |                   |      |                       |      |      | Q    | Quality Assurance   |      |      |      |      |               |                        |               |      |  |     |
| K                                                                                                       | Collection Error                              |      |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                         |      |      |                   |      |                       |      |      | Y    | Routine Maintenance |      |      |      |      |               |                        |               |      |  |     |
| X                                                                                                       | Invalid Data (Equipment Malfunction/Recovery) |      |      |      |      |      |      |      | NRM  | Unit/Maint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |                   |      |                       |      |      | P    | Power Failure       |      |      |      |      |               |                        |               |      |  |     |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                               |      |      |      |      |      |      |      |      |                                                                                          |      |      |                   |      |                       |      |      |      |                     |      |      |      |      |               |                        |               |      |  |     |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                               |      |      |      |      |      |      |      |      |                                                                                          |      |      |                   |      |                       |      |      |      |                     |      |      |      |      |               |                        |               |      |  |     |

## AQHI CADOTTE LAKE STATION

***Timeseries Chart of Hourly Average for AQHI - AQHI - Cadotte Lake Station***







# PEACE RIVER AREA MONITORING PROGRAM

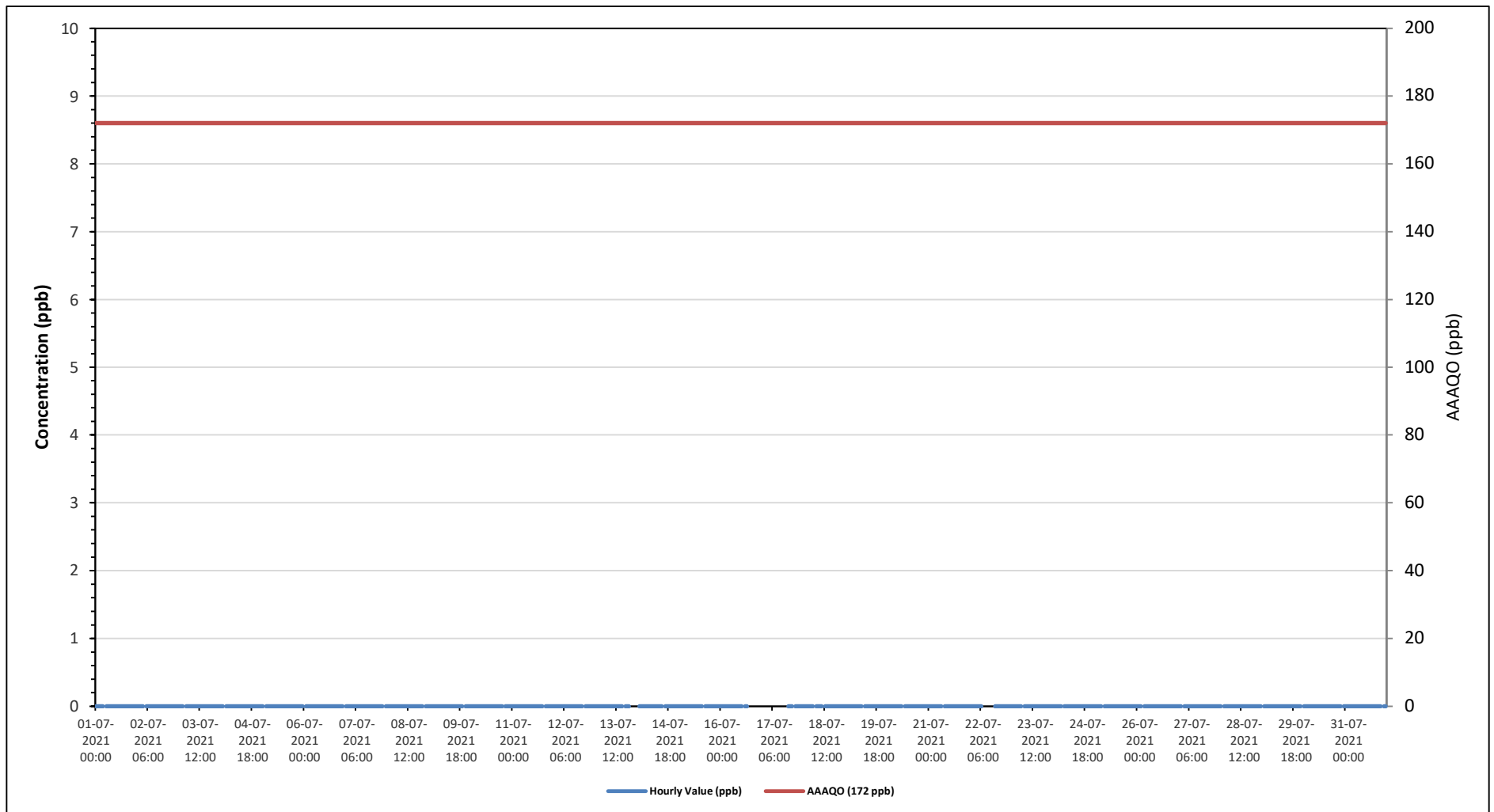
AQHI - Cadotte Lake Station - July 2021

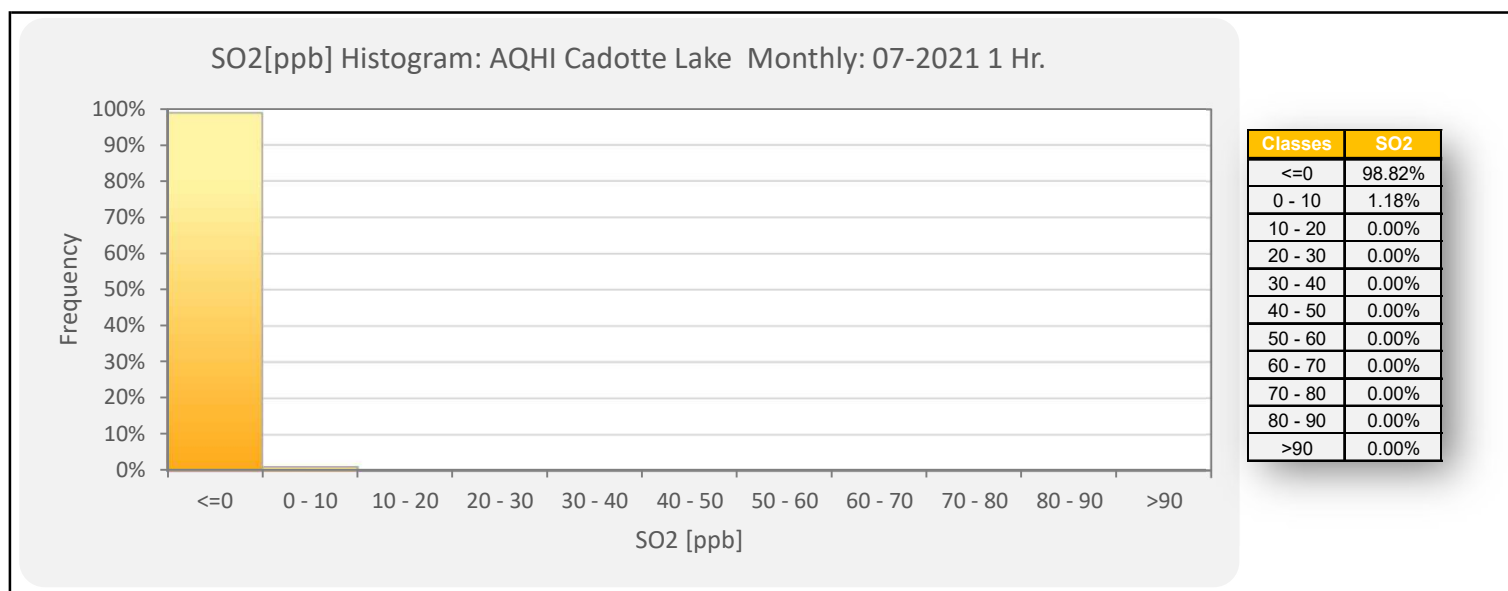
Summary of Hourly Averages

SULPHUR DIOXIDE (SO<sub>2</sub>) in ppb

| Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 172 ppb, 24-Hour 48 ppb, 30-Day 11 ppb           |                                                |     |                           |     |     |                                |     |                                                                                         |      |     |     |                    |     |     |                     |     |     |     |     |     |     |               |     |               |               |               |     |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|-----|---------------------------|-----|-----|--------------------------------|-----|-----------------------------------------------------------------------------------------|------|-----|-----|--------------------|-----|-----|---------------------|-----|-----|-----|-----|-----|-----|---------------|-----|---------------|---------------|---------------|-----|--|
| Number of 1-Hour Exceedances:                                                                           |                                                |     | 0                         |     |     | Number of 24-Hour Exceedances: |     |                                                                                         | 0    |     |     | 30-Day Exceedance: |     |     | 0                   |     |     |     |     |     |     |               |     |               |               |               |     |  |
| Maximum Hourly Value:                                                                                   |                                                |     | 0 ppb on July 1 at hour 0 |     |     | Hours in Service:              |     |                                                                                         | 744  |     |     |                    |     |     |                     |     |     |     |     |     |     |               |     |               |               |               |     |  |
| Maximum Daily Value:                                                                                    |                                                |     | 0.0 ppb on July 1         |     |     | Hours of Data:                 |     |                                                                                         | 676  |     |     |                    |     |     |                     |     |     |     |     |     |     |               |     |               |               |               |     |  |
| Minimum Hourly Value:                                                                                   |                                                |     | 0 ppb on July 1 at hour 0 |     |     | Hours of Missing Data:         |     |                                                                                         | 29   |     |     |                    |     |     |                     |     |     |     |     |     |     |               |     |               |               |               |     |  |
| Minimum Daily Value:                                                                                    |                                                |     | 0.0 ppb on July 1         |     |     | Hours of Calibration:          |     |                                                                                         | 39   |     |     |                    |     |     |                     |     |     |     |     |     |     |               |     |               |               |               |     |  |
| Monthly Average:                                                                                        |                                                |     | 0.0 ppb                   |     |     | Operational Uptime:            |     |                                                                                         | 96.1 |     |     |                    |     |     |                     |     |     |     |     |     |     |               |     |               |               |               |     |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |     |                           |     |     |                                |     |                                                                                         |      |     |     |                    |     |     |                     |     |     |     |     |     |     |               |     | Daily Minimum | Daily Maximum | Daily Average |     |  |
|                                                                                                         | 0                                              | 1   | 2                         | 3   | 4   | 5                              | 6   | 7                                                                                       | 8    | 9   | 10  | 11                 | 12  | 13  | 14                  | 15  | 16  | 17  | 18  | 19  | 20  | 21            | 22  | 23            |               |               |     |  |
| Jul 1                                                                                                   | 0                                              | 0   | 0                         | 0   | 0   | S                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 2                                                                                                   | 0                                              | 0   | 0                         | 0   | S   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 3                                                                                                   | 0                                              | 0   | 0                         | S   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 4                                                                                                   | 0                                              | 0   | S                         | 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 |  |
| Jul 5                                                                                                   | 0                                              | S   | 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 |  |
| Jul 6                                                                                                   | S                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | S             | 0             | 0.0 |  |
| Jul 7                                                                                                   | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | S   | 0             | 0             | 0             | 0.0 |  |
| Jul 8                                                                                                   | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | S   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 9                                                                                                   | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | S   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 10                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | S   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 11                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | S   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 12                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | S   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 13                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | S   | 0   | 0   | 0   | P   | P   | P             | P   | 0             | 0             | 0             | 0.0 |  |
| Jul 14                                                                                                  | P                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | S                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 15                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | S   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 16                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | S                  | 0   | 0   | X                   | X   | X   | X   | X   | X   | X   | X             | X   | X             | 0             | 0             | -   |  |
| Jul 17                                                                                                  | X                                              | X   | X                         | X   | X   | X                              | X   | X                                                                                       | X    | X   | X   | X                  | X   | X   | 0                   | 0   | 0   | S   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0   |  |
| Jul 18                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | 0                              | NRM | 0                                                                                       | 0    | 0   | 0   | S                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 19                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | S   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 20                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | S   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 21                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | S    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 22                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | S                                                                                       | C    | C   | C   | C                  | C   | C   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | -   |  |
| Jul 23                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | 0                              | S   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 24                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | S                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 25                                                                                                  | 0                                              | 0   | 0                         | 0   | S   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 26                                                                                                  | 0                                              | 0   | 0                         | S   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Jul 27                                                                                                  | 0                                              | 0   | S                         | 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 |  |
| Jul 28                                                                                                  | 0                                              | S   | 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 |  |
| Jul 29                                                                                                  | S                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0   | S             | 0             | 0             | 0.0 |  |
| Jul 30                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | S   | 0             | 0             | 0             | 0.0 |  |
| Jul 31                                                                                                  | 0                                              | 0   | 0                         | 0   | 0   | 0                              | 0   | 0                                                                                       | 0    | 0   | 0   | 0                  | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | S   | 0             | 0   | 0             | 0             | 0             | 0.0 |  |
| Diurnal Maximum                                                                                         | 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   |  |
| Diurnal Average                                                                                         | 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 | 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 |  |
| C                                                                                                       | Monthly Calibration                            |     |                           |     |     |                                | S   | Daily Zero-Span Check                                                                   |      |     |     |                    |     | Q   | Quality Assurance   |     |     |     |     |     |     |               |     |               |               |               |     |  |
| K                                                                                                       | Collection Error                               |     |                           |     |     |                                | N   | No Data (Machine Not in Service)                                                        |      |     |     |                    |     | Y   | Routine Maintenance |     |     |     |     |     | P   | Power Failure |     |               |               |               |     |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |     |                           |     |     |                                | NRM | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |     |     |                    |     |     |                     |     |     |     |     |     |     |               |     |               |               |               |     |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |     |                           |     |     |                                |     |                                                                                         |      |     |     |                    |     |     |                     |     |     |     |     |     |     |               |     |               |               |               |     |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |     |                           |     |     |                                |     |                                                                                         |      |     |     |                    |     |     |                     |     |     |     |     |     |     |               |     |               |               |               |     |  |

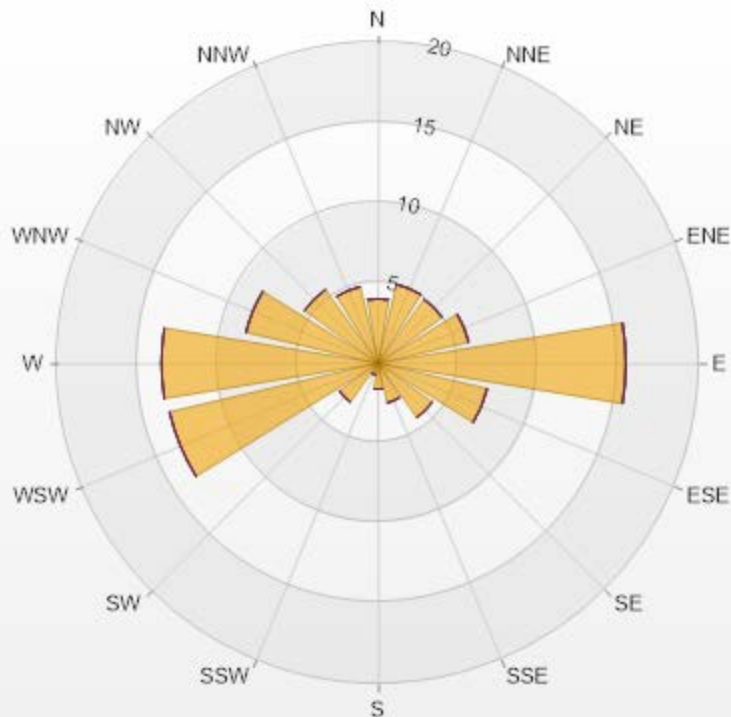
***Timeseries Chart of Hourly Average for SO<sub>2</sub> - AQHI - Cadotte Lake Station***





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-SO2[ppb] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 90.59% Calm Avg: 0.00 [ppb]

| Direction | 0-10  | 10-50 | 50-100 | 100-172 | >172.0 | Total |
|-----------|-------|-------|--------|---------|--------|-------|
| N         | 4.01  | 0     | 0      | 0       | 0      | 4.01  |
| NNE       | 5.04  | 0     | 0      | 0       | 0      | 5.04  |
| NE        | 4.9   | 0     | 0      | 0       | 0      | 4.9   |
| ENE       | 5.79  | 0     | 0      | 0       | 0      | 5.79  |
| E         | 15.43 | 0     | 0      | 0       | 0      | 15.43 |
| ESE       | 6.97  | 0     | 0      | 0       | 0      | 6.97  |
| SE        | 4.15  | 0     | 0      | 0       | 0      | 4.15  |
| SSE       | 2.52  | 0     | 0      | 0       | 0      | 2.52  |
| S         | 1.63  | 0     | 0      | 0       | 0      | 1.63  |
| SSW       | 0.74  | 0     | 0      | 0       | 0      | 0.74  |
| SW        | 2.97  | 0     | 0      | 0       | 0      | 2.97  |
| WSW       | 13.35 | 0     | 0      | 0       | 0      | 13.35 |
| W         | 13.5  | 0     | 0      | 0       | 0      | 13.5  |
| WNW       | 8.46  | 0     | 0      | 0       | 0      | 8.46  |
| NW        | 5.64  | 0     | 0      | 0       | 0      | 5.64  |
| NNW       | 4.9   | 0     | 0      | 0       | 0      | 4.9   |
| Summary   | 100   | 0     | 0      | 0       | 0      | 100   |



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% Icon Classes (ppb)

100 0-10

0 10-50

0 50-100

0 100-172

0 >172.0



# PEACE RIVER AREA MONITORING PROGRAM

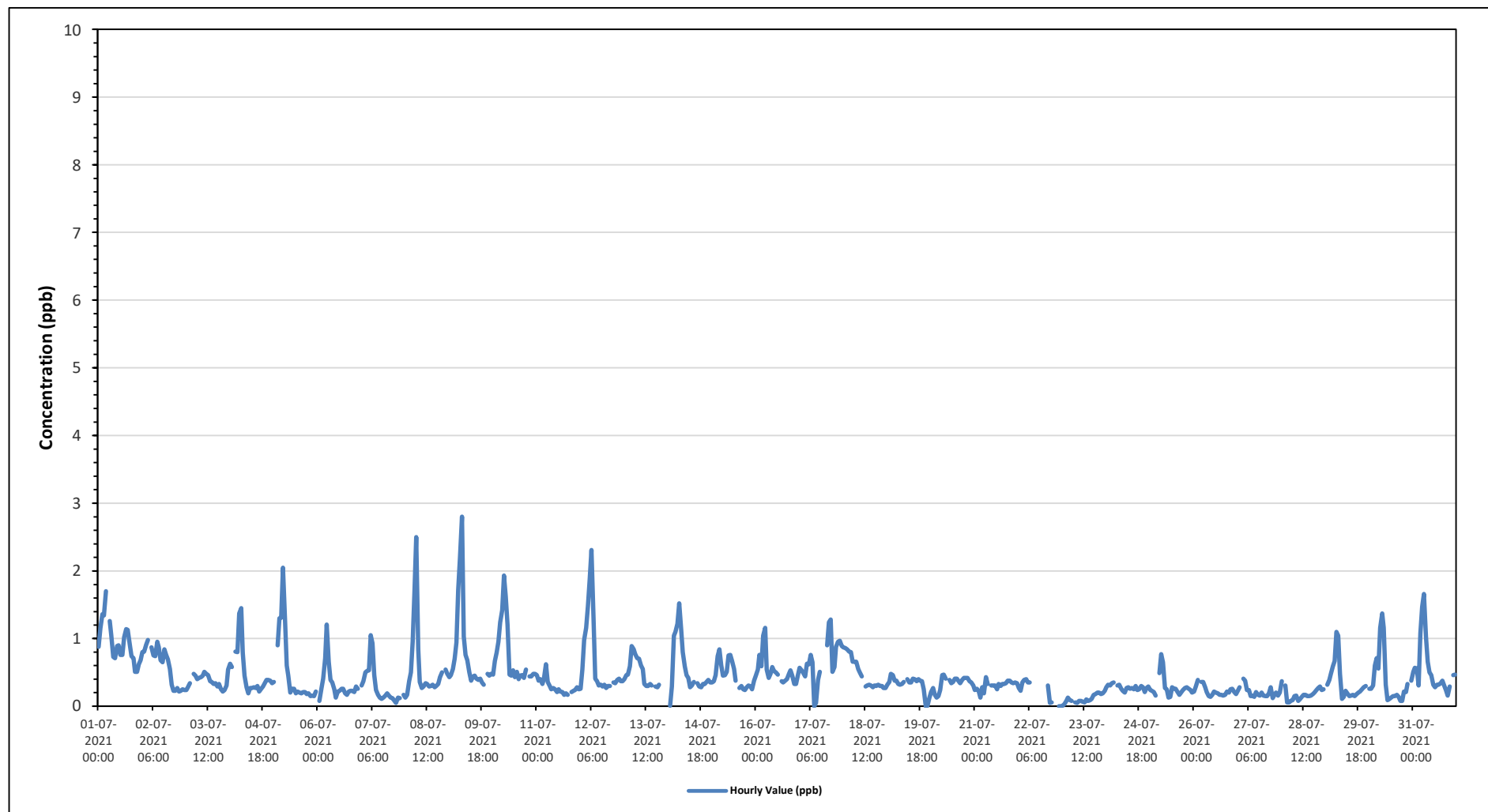
AQHI - Cadotte Lake Station - July 2021

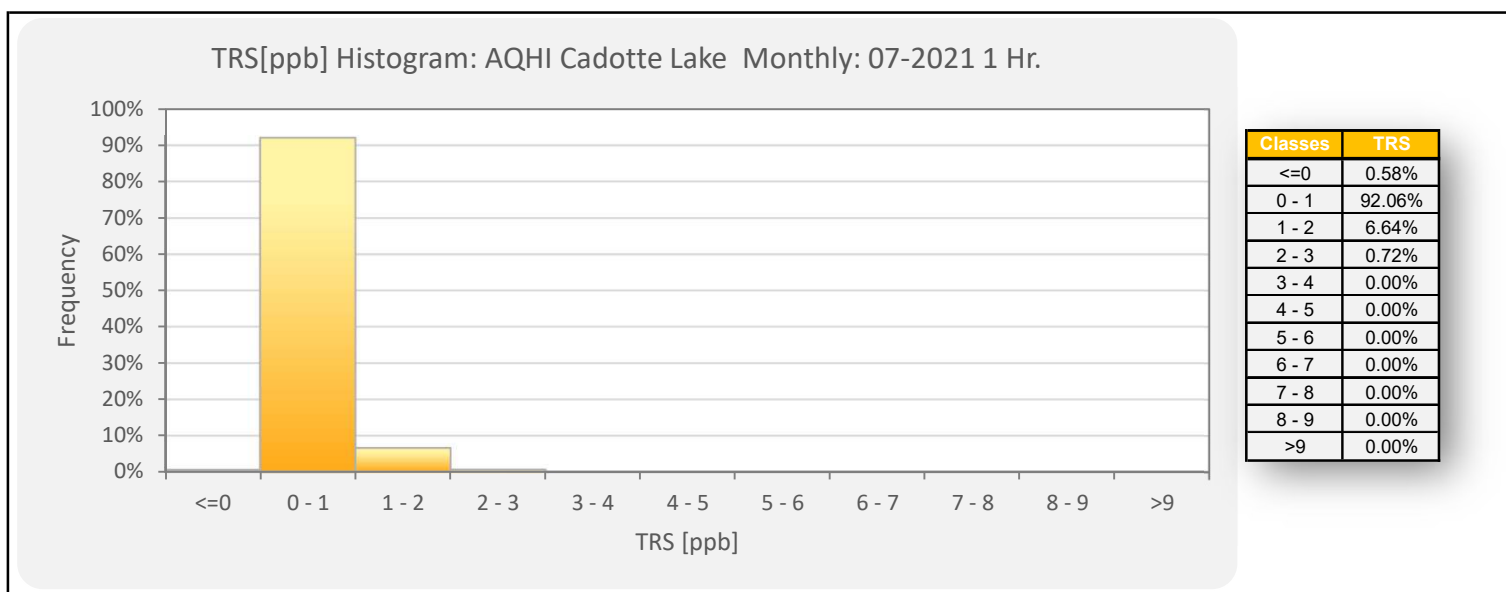
Summary of Hourly Averages

TOTAL REDUCED SULPHUR (TRS) in ppb

|                                                                                                         |                                                |      |                      |                        |      |      |      |      |                                                                                         |      |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |   |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|----------------------|------------------------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|------|------|------|---------------------|------|------|------|------|------|------|---------------|---------------|---------------|------|---|
| Maximum Hourly Value:                                                                                   | 2.80                                           | ppb  | on July 9 at hour 7  | Hours in Service:      | 744  |      |      |      |                                                                                         |      |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |   |
| Maximum Daily Value:                                                                                    | 0.93                                           | ppb  | on July 1            | Hours of Data:         | 693  |      |      |      |                                                                                         |      |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |   |
| Minimum Hourly Value:                                                                                   | 0.00                                           | ppb  | on July 17 at hour 8 | Hours of Missing Data: | 10   |      |      |      |                                                                                         |      |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |   |
| Minimum Daily Value:                                                                                    | 0.11                                           | ppb  | on July 23           | Hours of Calibration:  | 41   |      |      |      |                                                                                         |      |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |   |
| Monthly Average:                                                                                        | 0.44                                           | ppb  |                      | Operational Uptime:    | 98.7 |      |      |      |                                                                                         |      |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |   |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |                      |                        |      |      |      |      |                                                                                         |      |      |      |      |      |      |      |                     |      |      |      |      |      |      | Daily Minimum | Daily Maximum | Daily Average |      |   |
| Jul 1                                                                                                   | 0.88                                           | 1.15 | 1.36                 | 1.34                   | 1.7  | S    | 1.26 | 1.05 | 0.73                                                                                    | 0.71 | 0.89 | 0.9  | 0.76 | 0.76 | 1.02 | 1.14 | 1.13                | 0.92 | 0.74 | 0.71 | 0.51 | 0.51 | 0.62 | 0.68          | 0.51          | 1.70          | 0.93 |   |
| Jul 2                                                                                                   | 0.8                                            | 0.81 | 0.91                 | 0.98                   | S    | 0.87 | 0.75 | 0.74 | 0.95                                                                                    | 0.87 | 0.68 | 0.65 | 0.84 | 0.76 | 0.69 | 0.55 | 0.32                | 0.23 | 0.23 | 0.27 | 0.22 | 0.23 | 0.25 | 0.24          | 0.22          | 0.98          | 0.60 |   |
| Jul 3                                                                                                   | 0.24                                           | 0.28 | 0.34                 | S                      | 0.48 | 0.45 | 0.4  | 0.42 | 0.43                                                                                    | 0.45 | 0.51 | 0.48 | 0.46 | 0.37 | 0.36 | 0.33 | 0.34                | 0.29 | 0.33 | 0.25 | 0.22 | 0.24 | 0.31 | 0.54          | 0.22          | 0.54          | 0.37 |   |
| Jul 4                                                                                                   | 0.63                                           | 0.58 | S                    | 0.81                   | 0.8  | 1.37 | 1.45 | 0.79 | 0.45                                                                                    | 0.28 | 0.19 | 0.27 | 0.27 | 0.28 | 0.27 | 0.3  | 0.22                | 0.26 | 0.29 | 0.34 | 0.39 | 0.39 | 0.38 | 0.34          | 0.19          | 1.45          | 0.49 |   |
| Jul 5                                                                                                   | 0.36                                           | S    | 0.9                  | 1.3                    | 1.31 | 2.05 | 1.29 | 0.6  | 0.45                                                                                    | 0.2  | 0.26 | 0.26 | 0.19 | 0.22 | 0.2  | 0.19 | 0.21                | 0.21 | 0.18 | 0.19 | 0.15 | 0.16 | 0.15 | 0.22          | 0.15          | 2.05          | 0.49 |   |
| Jul 6                                                                                                   | S                                              | 0.08 | 0.26                 | 0.41                   | 0.71 | 1.21 | 0.66 | 0.39 | 0.35                                                                                    | 0.25 | 0.13 | 0.22 | 0.23 | 0.26 | 0.26 | 0.19 | 0.17                | 0.22 | 0.23 | 0.23 | 0.21 | 0.29 | 0.26 | S             | 0.08          | 1.21          | 0.33 |   |
| Jul 7                                                                                                   | 0.31                                           | 0.37 | 0.5                  | 0.52                   | 0.53 | 1.05 | 0.93 | 0.46 | 0.24                                                                                    | 0.17 | 0.13 | 0.11 | 0.13 | 0.16 | 0.19 | 0.16 | 0.13                | 0.12 | 0.08 | 0.05 | 0.13 | 0.12 | S    | 0.17          | 0.05          | 1.05          | 0.29 |   |
| Jul 8                                                                                                   | 0.13                                           | 0.17 | 0.37                 | 0.5                    | 0.95 | 1.68 | 2.5  | 0.84 | 0.36                                                                                    | 0.27 | 0.29 | 0.34 | 0.33 | 0.29 | 0.3  | 0.32 | 0.28                | 0.3  | 0.33 | 0.43 | 0.5  | S    | 0.54 | 0.48          | 0.13          | 2.50          | 0.54 |   |
| Jul 9                                                                                                   | 0.43                                           | 0.46 | 0.55                 | 0.7                    | 0.94 | 1.72 | 2.19 | 2.8  | 1.03                                                                                    | 0.76 | 0.68 | 0.5  | 0.38 | 0.44 | 0.45 | 0.41 | 0.39                | 0.41 | 0.35 | 0.32 | S    | 0.48 | 0.45 | 0.48          | 0.32          | 2.80          | 0.75 |   |
| Jul 10                                                                                                  | 0.47                                           | 0.67 | 0.79                 | 0.95                   | 1.24 | 1.42 | 1.93 | 1.62 | 1.21                                                                                    | 0.47 | 0.45 | 0.53 | 0.43 | 0.51 | 0.4  | 0.45 | 0.46                | 0.42 | 0.54 | S    | 0.44 | 0.44 | 0.48 | 0.48          | 0.40          | 1.93          | 0.73 |   |
| Jul 11                                                                                                  | 0.46                                           | 0.38 | 0.4                  | 0.33                   | 0.41 | 0.62 | 0.36 | 0.3  | 0.25                                                                                    | 0.27 | 0.25 | 0.21 | 0.25 | 0.22 | 0.21 | 0.17 | 0.19                | 0.17 | S    | 0.21 | 0.23 | 0.24 | 0.28 | 0.25          | 0.17          | 0.62          | 0.29 |   |
| Jul 12                                                                                                  | 0.26                                           | 0.54 | 0.98                 | 1.16                   | 1.48 | 1.87 | 2.31 | 1.32 | 0.41                                                                                    | 0.37 | 0.31 | 0.32 | 0.29 | 0.32 | 0.27 | 0.3  | 0.3                 | S    | 0.35 | 0.34 | 0.39 | 0.41 | 0.37 | 0.37          | 0.26          | 2.31          | 0.65 |   |
| Jul 13                                                                                                  | 0.4                                            | 0.46 | 0.47                 | 0.59                   | 0.89 | 0.84 | 0.77 | 0.71 | 0.7                                                                                     | 0.6  | 0.55 | 0.33 | 0.3  | 0.3  | 0.33 | 0.31 | S                   | 0.29 | 0.28 | 0.32 | P    | P    | P    | P             | 0.28          | 0.89          | 0.50 |   |
| Jul 14                                                                                                  | P                                              | 0.01 | 0.29                 | 1.04                   | 1.1  | 1.22 | 1.52 | 1.12 | 0.8                                                                                     | 0.59 | 0.46 | 0.42 | 0.28 | 0.31 | 0.36 | S    | 0.34                | 0.29 | 0.28 | 0.33 | 0.33 | 0.36 | 0.39 | 0.35          | 0.01          | 1.52          | 0.55 |   |
| Jul 15                                                                                                  | 0.35                                           | 0.37 | 0.46                 | 0.74                   | 0.84 | 0.61 | 0.45 | 0.46 | 0.51                                                                                    | 0.75 | 0.76 | 0.67 | 0.55 | 0.38 | S    | 0.27 | 0.3                 | 0.25 | 0.24 | 0.28 | 0.31 | 0.29 | 0.25 | 0.38          | 0.24          | 0.84          | 0.46 |   |
| Jul 16                                                                                                  | 0.45                                           | 0.54 | 0.76                 | 0.59                   | 1.04 | 1.16 | 0.54 | 0.42 | 0.48                                                                                    | 0.58 | 0.52 | 0.5  | 0.47 | S    | 0.37 | 0.35 | 0.38                | 0.4  | 0.48 | 0.53 | 0.45 | 0.33 | 0.33 | 0.45          | 0.33          | 1.16          | 0.53 |   |
| Jul 17                                                                                                  | 0.57                                           | 0.53 | 0.49                 | 0.44                   | 0.63 | 0.62 | 0.76 | 0.65 | 0                                                                                       | 0.05 | 0.39 | 0.51 | S    | NRM  | NRM  | 0.9  | 1.24                | 1.28 | 0.51 | 0.58 | 0.88 | 0.95 | 0.97 | 0.89          | 0.00          | 1.28          | 0.66 |   |
| Jul 18                                                                                                  | 0.87                                           | 0.86 | 0.84                 | 0.81                   | 0.8  | 0.66 | 0.66 | 0.66 | 0.55                                                                                    | 0.5  | 0.44 | S    | 0.29 | 0.31 | 0.32 | 0.31 | 0.28                | 0.31 | 0.3  | 0.32 | 0.3  | 0.3  | 0.27 | 0.27          | 0.27          | 0.87          | 0.49 |   |
| Jul 19                                                                                                  | 0.32                                           | 0.36 | 0.48                 | 0.46                   | 0.38 | 0.38 | 0.33 | 0.32 | 0.33                                                                                    | 0.36 | S    | 0.4  | 0.35 | 0.35 | 0.41 | 0.4  | 0.37                | 0.4  | 0.38 | 0.37 | 0.25 | 0    | 0.01 | 0.12          | 0.00          | 0.48          | 0.33 |   |
| Jul 20                                                                                                  | 0.21                                           | 0.27 | 0.17                 | 0.13                   | 0.15 | 0.24 | 0.46 | 0.47 | 0.41                                                                                    | S    | 0.39 | 0.34 | 0.36 | 0.41 | 0.41 | 0.37 | 0.34                | 0.39 | 0.42 | 0.42 | 0.42 | 0.37 | 0.35 | 0.31          | 0.13          | 0.47          | 0.34 |   |
| Jul 21                                                                                                  | 0.24                                           | 0.26 | 0.23                 | 0.13                   | 0.28 | 0.19 | 0.43 | 0.33 | S                                                                                       | 0.31 | 0.31 | 0.31 | 0.25 | 0.33 | 0.3  | 0.33 | 0.33                | 0.34 | 0.38 | 0.38 | 0.35 | 0.34 | 0.35 | 0.34          | 0.13          | 0.43          | 0.31 |   |
| Jul 22                                                                                                  | 0.27                                           | 0.23 | 0.35                 | 0.39                   | 0.4  | 0.35 | 0.35 | S    | C                                                                                       | C    | C    | C    | C    | C    | C    | C    | C                   | 0.31 | 0.05 | 0.06 | X    | X    | X    | 0             | 0             | 0.00          | 0.40 | - |
| Jul 23                                                                                                  | 0.01                                           | 0.03 | 0.08                 | 0.13                   | 0.09 | 0.08 | S    | 0.06 | 0.05                                                                                    | 0.08 | 0.08 | 0.07 | 0.06 | 0.1  | 0.08 | 0.09 | 0.11                | 0.17 | 0.18 | 0.2  | 0.2  | 0.18 | 0.19 | 0.23          | 0.01          | 0.23          | 0.11 |   |
| Jul 24                                                                                                  | 0.28                                           | 0.32 | 0.31                 | 0.34                   | 0.35 | S    | 0.31 | 0.32 | 0.26                                                                                    | 0.23 | 0.2  | 0.27 | 0.28 | 0.26 | 0.27 | 0.25 | 0.3                 | 0.24 | 0.25 | 0.3  | 0.28 | 0.21 | 0.27 | 0.29          | 0.20          | 0.35          | 0.28 |   |
| Jul 25                                                                                                  | 0.24                                           | 0.23 | 0.21                 | 0.16                   | S    | 0.49 | 0.77 | 0.65 | 0.27                                                                                    | 0.25 | 0.13 | 0.14 | 0.28 | 0.26 | 0.26 | 0.21 | 0.17                | 0.21 | 0.24 | 0.27 | 0.28 | 0.26 | 0.24 | 0.2           | 0.13          | 0.77          | 0.28 |   |
| Jul 26                                                                                                  | 0.22                                           | 0.29 | 0.39                 | S                      | 0.36 | 0.36 | 0.28 | 0.21 | 0.15                                                                                    | 0.14 | 0.17 | 0.22 | 0.2  | 0.19 | 0.17 | 0.17 | 0.16                | 0.17 | 0.22 | 0.2  | 0.25 | 0.26 | 0.21 | 0.18          | 0.14          | 0.39          | 0.22 |   |
| Jul 27                                                                                                  | 0.23                                           | 0.28 | S                    | 0.41                   | 0.38 | 0.24 | 0.24 | 0.15 | 0.16                                                                                    | 0.14 | 0.21 | 0.17 | 0.16 | 0.2  | 0.16 | 0.15 | 0.15                | 0.19 | 0.28 | 0.12 | 0.17 | 0.2  | 0.16 | 0.2           | 0.12          | 0.41          | 0.21 |   |
| Jul 28                                                                                                  | 0.37                                           | S    | 0.31                 | 0.06                   | 0.06 | 0.08 | 0.09 | 0.15 | 0.16                                                                                    | 0.08 | 0.1  | 0.14 | 0.17 | 0.17 | 0.15 | 0.15 | 0.16                | 0.18 | 0.2  | 0.24 | 0.27 | 0.29 | 0.24 | 0.25          | 0.06          | 0.37          | 0.18 |   |
| Jul 29                                                                                                  | S                                              | 0.32 | 0.39                 | 0.48                   | 0.59 | 0.67 | 1.1  | 1.04 | 0.48                                                                                    | 0.11 | 0.14 | 0.23 | 0.19 | 0.15 | 0.16 | 0.17 | 0.15                | 0.18 | 0.2  | 0.22 | 0.25 | 0.28 | 0.3  | S             | 0.11          | 1.10          | 0.35 |   |
| Jul 30                                                                                                  | 0.26                                           | 0.26 | 0.31                 | 0.6                    | 0.71 | 0.56 | 1.16 | 1.37 | 1.16                                                                                    | 0.32 | 0.09 | 0.11 | 0.13 | 0.15 | 0.15 | 0.17 | 0.14                | 0.08 | 0.08 | 0.22 | 0.21 | 0.33 | S    | 0.38          | 0.08          | 1.37          | 0.39 |   |
| Jul 31                                                                                                  | 0.51                                           | 0.57 | 0.56                 | 0.31                   | 1.08 | 1.47 | 1.66 | 1.03 | 0.66                                                                                    | 0.5  | 0.46 | 0.32 | 0.28 | 0.32 | 0.32 | 0.34 | 0.38                | 0.31 | 0.24 | 0.16 | 0.29 | S    | 0.46 | 0.47          | 0.16          | 1.66          | 0.55 |   |
| Diurnal Maximum                                                                                         | 0.88                                           | 1.15 | 1.36                 | 1.34                   | 1.70 | 2.05 | 2.50 | 2.80 | 1.21                                                                                    | 0.87 | 0.89 | 0.90 | 0.84 | 0.76 | 1.02 | 1.14 | 1.24                | 1.28 | 0.74 | 0.71 | 0.88 | 0.95 | 0.97 | 0.89          |               |               |      |   |
| Diurnal Average                                                                                         | 0.38                                           | 0.40 | 0.50                 | 0.58                   | 0.71 | 0.85 | 0.93 | 0.72 | 0.48                                                                                    | 0.37 | 0.35 | 0.34 | 0.32 | 0.31 | 0.32 | 0.33 | 0.33                | 0.31 | 0.30 | 0.30 | 0.32 | 0.31 | 0.32 | 0.34          |               |               |      |   |
| C                                                                                                       | Monthly Calibration                            |      |                      |                        |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |      |      | Q    | Quality Assurance   |      |      |      |      |      |      |               |               |               |      |   |
| K                                                                                                       | Collection Error                               |      |                      |                        |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |      |      | Y    | Routine Maintenance |      |      |      |      |      |      |               |               |               |      |   |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |                      |                        |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |   |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |                      |                        |      |      |      |      |                                                                                         |      |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |   |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |                      |                        |      |      |      |      |                                                                                         |      |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |   |

***Timeseries Chart of Hourly Average for TRS - AQHI - Cadotte Lake Station***

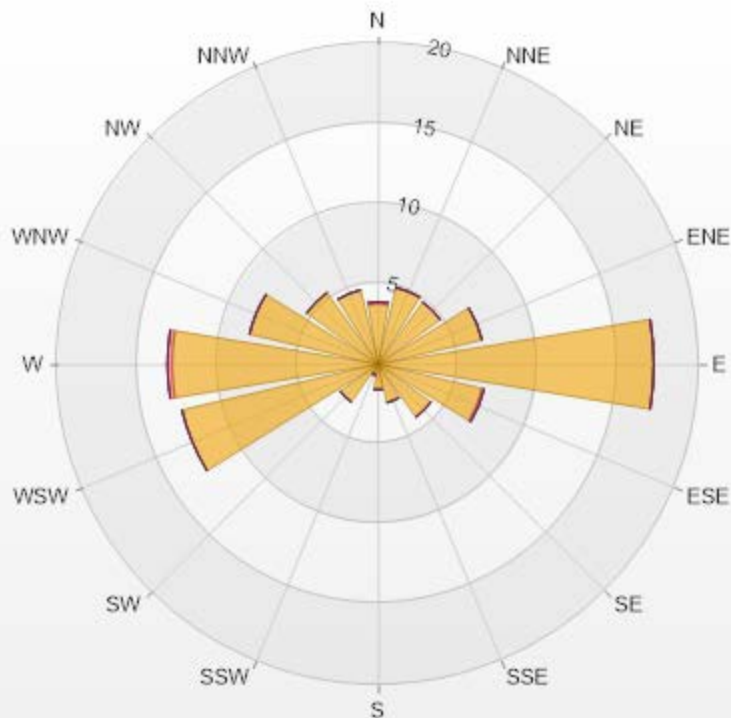






Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-TRS[ppb] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.15% Calm Avg: 0.00 [ppb]

| Direction | 0-2   | 2-5  | 5-10 | 10-50 | >50.0 | Total |
|-----------|-------|------|------|-------|-------|-------|
| N         | 3.75  | 0.14 | 0    | 0     | 0     | 3.89  |
| NNE       | 4.91  | 0    | 0    | 0     | 0     | 4.91  |
| NE        | 4.76  | 0    | 0    | 0     | 0     | 4.76  |
| ENE       | 6.64  | 0    | 0    | 0     | 0     | 6.64  |
| E         | 17.17 | 0    | 0    | 0     | 0     | 17.17 |
| ESE       | 6.64  | 0.14 | 0    | 0     | 0     | 6.78  |
| SE        | 4.04  | 0    | 0    | 0     | 0     | 4.04  |
| SSE       | 2.45  | 0    | 0    | 0     | 0     | 2.45  |
| S         | 1.59  | 0    | 0    | 0     | 0     | 1.59  |
| SSW       | 0.58  | 0.14 | 0    | 0     | 0     | 0.72  |
| SW        | 2.89  | 0    | 0    | 0     | 0     | 2.89  |
| WSW       | 12.55 | 0    | 0    | 0     | 0     | 12.55 |
| W         | 12.84 | 0.29 | 0    | 0     | 0     | 13.13 |
| WNW       | 8.23  | 0    | 0    | 0     | 0     | 8.23  |
| NW        | 5.48  | 0    | 0    | 0     | 0     | 5.48  |
| NNW       | 4.76  | 0    | 0    | 0     | 0     | 4.76  |
| Summary   | 99.28 | 0.71 | 0    | 0     | 0     | 100   |



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% Icon Classes (ppb)

99 0-2

1 2-5

0 5-10

0 10-50

0 >50.0



# PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - July 2021

Summary of Hourly Averages

OXIDES OF NITROGEN (NOx) in ppb

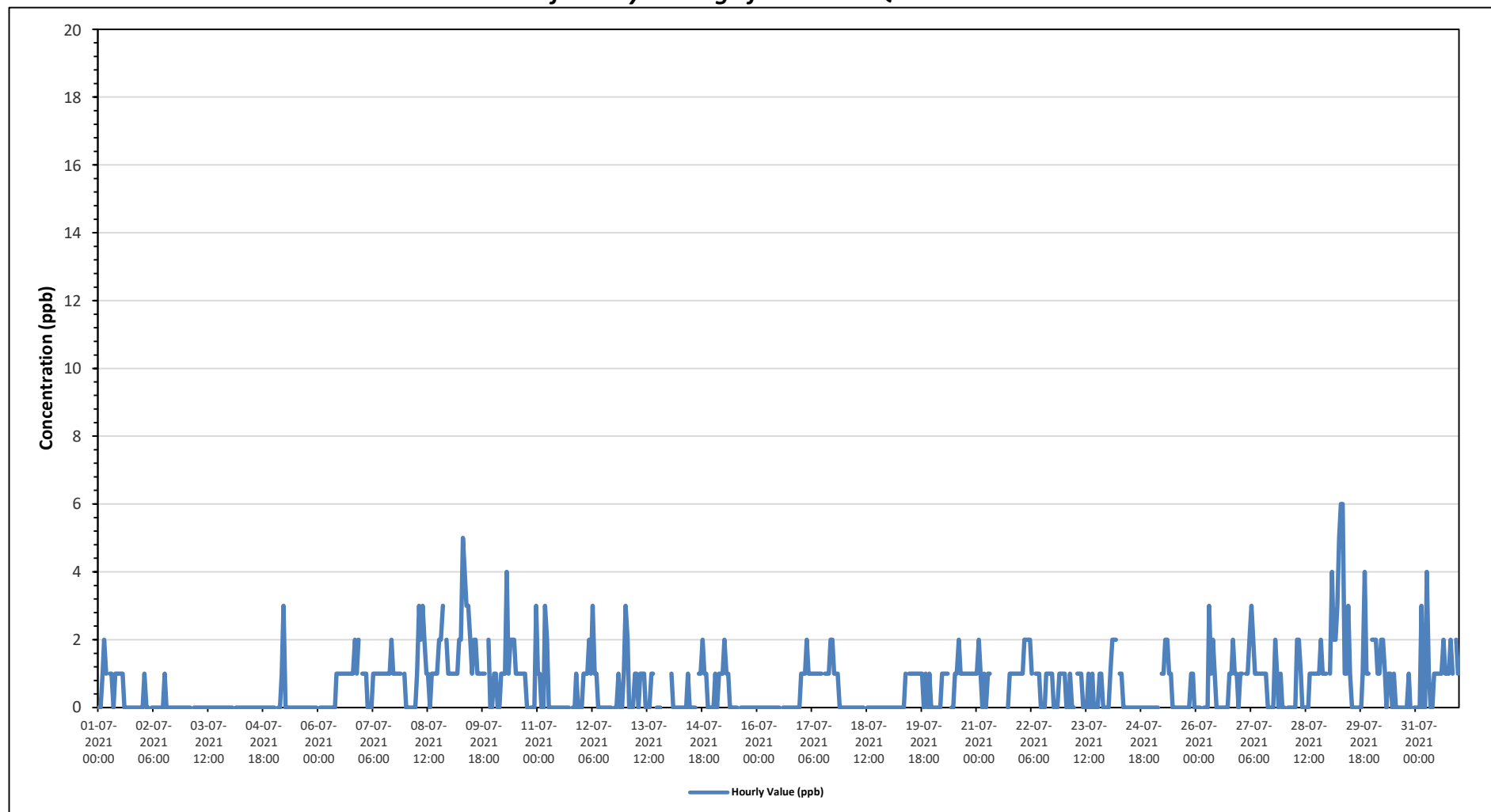
|                       |     |     |                      |                        |      |
|-----------------------|-----|-----|----------------------|------------------------|------|
| Maximum Hourly Value: | 6   | ppb | on July 29 at hour 7 | Hours in Service:      | 744  |
| Maximum Daily Value:  | 1.9 | ppb | on July 29           | Hours of Data:         | 698  |
| Minimum Hourly Value: | 0   | ppb | on July 1 at hour 0  | Hours of Missing Data: | 5    |
| Minimum Daily Value:  | 0.0 | ppb | on July 3            | Hours of Calibration:  | 41   |
| Monthly Average:      | 0.6 | ppb |                      | Operational Uptime:    | 99.3 |

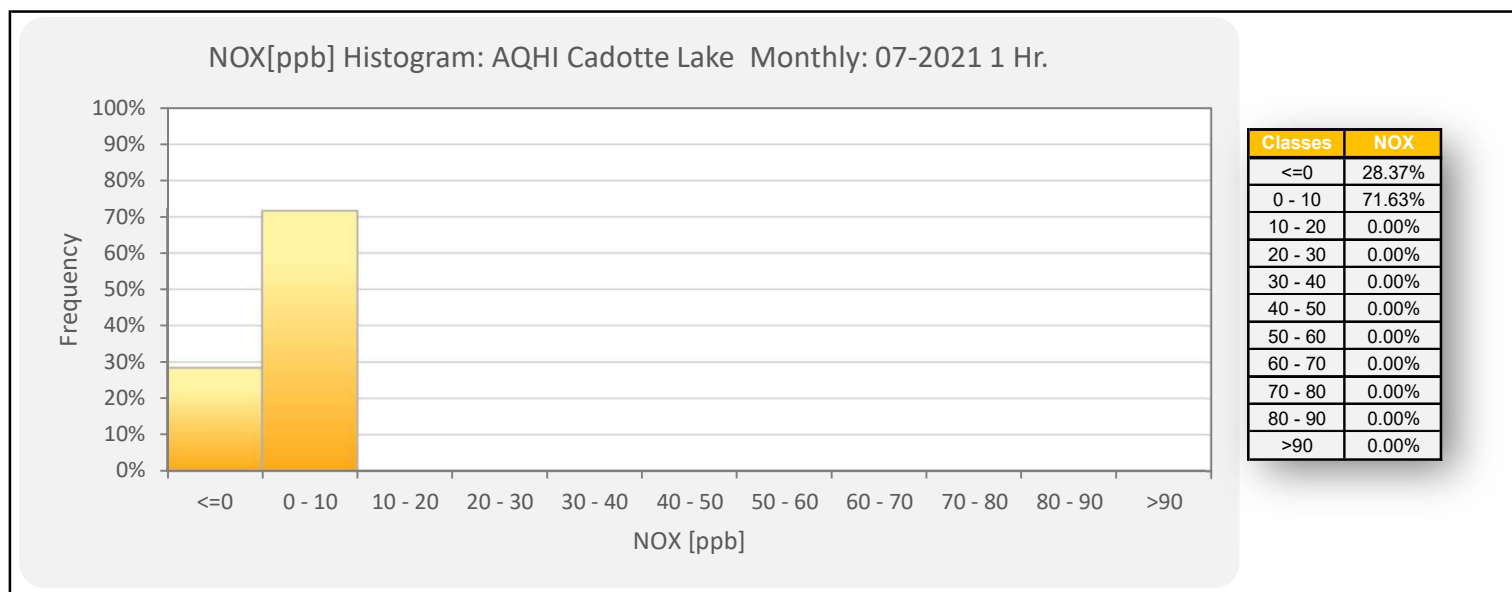
| Day             | Hourly Period Starting at (MST) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | Daily Minimum | Daily Maximum | Daily Average |     |
|-----------------|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|---------------|---------------|-----|
|                 | 0                               | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  |               |               |               |     |
| Jul 1           | 0                               | 0   | 1   | 2   | 1   | S   | 1   | 1   | 0   | 1   | 1   | 1   | 1   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 2             | 0.5 |
| Jul 2           | 0                               | 1   | 0   | 0   | S   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 1             | 0.1           |     |
| Jul 3           | 0                               | 0   | 0   | S   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0.0           |     |
| Jul 4           | 0                               | 0   | S   | 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           |     |
| Jul 5           | 0                               | S   | 0   | 0   | 1   | 3   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 3             | 0.2           |     |
| Jul 6           | S                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 2   | 1   | 2   | S   | 0             | 2             | 0.7           |     |
| Jul 7           | 1                               | 1   | 1   | 0   | 0   | 0   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 2   | 1   | 1   | 1   | 1   | 1   | S   | 1   | 0             | 2             | 0.9           |     |
| Jul 8           | 0                               | 0   | 0   | 0   | 0   | 0   | 1   | 3   | 2   | 3   | 2   | 1   | 1   | 0   | 1   | 1   | 1   | 1   | 2   | 2   | 3   | S   | 2   | 1   | 0             | 3             | 1.2           |     |
| Jul 9           | 1                               | 1   | 1   | 1   | 1   | 2   | 2   | 5   | 4   | 3   | 3   | 2   | 1   | 2   | 2   | 1   | 1   | 1   | 1   | 1   | S   | 2   | 0   | 0   | 0             | 5             | 1.7           |     |
| Jul 10          | 1                               | 1   | 0   | 0   | 1   | 1   | 1   | 4   | 1   | 2   | 2   | 2   | 1   | 1   | 1   | 1   | 1   | 1   | 0   | S   | 0   | 0   | 0   | 3   | 0             | 4             | 1.1           |     |
| Jul 11          | 1                               | 1   | 0   | 0   | 3   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | S   | 0   | 0   | 1   | 0   | 0   | 0             | 3             | 0.3           |     |
| Jul 12          | 0                               | 1   | 1   | 1   | 2   | 1   | 3   | 1   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | S   | 0   | 0   | 1   | 0   | 0   | 1   | 0             | 3             | 0.6           |     |
| Jul 13          | 3                               | 2   | 0   | 0   | 0   | 1   | 1   | 0   | 1   | 1   | 1   | 0   | 0   | 0   | 1   | 1   | S   | 0   | 0   | 0   | P   | P   | P   | P   | 0             | 3             | 0.6           |     |
| Jul 14          | P                               | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 0   | 0   | S   | 1   | 1   | 2   | 1   | 1   | 0   | 0   | 0   | 0             | 2             | 0.4           |     |
| Jul 15          | 0                               | 1   | 0   | 1   | 1   | 1   | 2   | 1   | 1   | 0   | 0   | 0   | 0   | 0   | S   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 2             | 0.3           |     |
| Jul 16          | 0                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | S   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0.0           |     |
| Jul 17          | 1                               | 1   | 1   | 2   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | S   | 0   | 1   | 1   | 2   | 2   | 1   | 1   | 1   | 0   | 0   | 0   | 0             | 2             | 1.0           |     |
| Jul 18          | 0                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | S   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0.0           |     |
| Jul 19          | 0                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | S   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 0   | 1   | 0   | 1   | 0   | 0             | 1             | 0.5           |     |
| Jul 20          | 0                               | 0   | 0   | 0   | 0   | 1   | 1   | 1   | 1   | S   | 0   | 0   | 1   | 1   | 2   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 0             | 2             | 0.7           |     |
| Jul 21          | 1                               | 2   | 1   | 0   | 1   | 0   | 1   | 1   | S   | C   | C   | C   | C   | C   | C   | C   | C   | C   | 0   | 1   | 1   | 1   | 1   | 1   | 0             | 2             | -             |     |
| Jul 22          | 1                               | 1   | 2   | 2   | 2   | 2   | 1   | S   | 1   | 1   | 1   | 0   | 0   | 0   | 0   | 1   | 1   | 1   | 0   | 0   | 0   | 1   | 1   | 1   | 0             | 2             | 0.9           |     |
| Jul 23          | 1                               | 0   | 0   | 1   | 0   | 0   | S   | 1   | 1   | 1   | 0   | 0   | 0   | 0   | 1   | 0   | 1   | 0   | 0   | 0   | 1   | 1   | 0   | 0   | 0             | 1             | 0.4           |     |
| Jul 24          | 0                               | 1   | 2   | 2   | 2   | S   | 1   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 2             | 0.4           |     |
| Jul 25          | 0                               | 0   | 0   | 0   | S   | 1   | 1   | 2   | 2   | 1   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 1   | 0   | 0             | 2             | 0.4           |     |
| Jul 26          | 0                               | 0   | 0   | S   | 0   | 0   | 0   | 3   | 1   | 2   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 1   | 2   | 1   | 1   | 0   | 0             | 3             | 0.6           |     |
| Jul 27          | 1                               | 1   | S   | 1   | 1   | 2   | 3   | 2   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 0   | 0   | 0   | 0   | 2   | 1   | 0   | 1   | 0   | 0             | 3             | 1.0           |     |
| Jul 28          | 0                               | S   | 0   | 0   | 0   | 0   | 0   | 2   | 2   | 1   | 0   | 0   | 0   | 0   | 1   | 1   | 1   | 1   | 1   | 1   | 2   | 1   | 1   | 1   | 0             | 2             | 0.7           |     |
| Jul 29          | S                               | 1   | 4   | 2   | 2   | 3   | 5   | 6   | 6   | 1   | 1   | 3   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 4   | 1   | 1   | S   | 0             | 6             | 1.9           |     |
| Jul 30          | 2                               | 2   | 2   | 1   | 1   | 2   | 2   | 1   | 0   | 1   | 1   | 0   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 0   | S   | 0   | 0             | 2             | 0.7           |     |
| Jul 31          | 0                               | 0   | 0   | 3   | 0   | 0   | 4   | 1   | 0   | 0   | 1   | 1   | 1   | 1   | 1   | 2   | 1   | 1   | 1   | 2   | 1   | S   | 2   | 1   | 0             | 4             | 1.0           |     |
| Diurnal Maximum | 3                               | 2   | 4   | 3   | 3   | 3   | 5   | 6   | 6   | 3   | 3   | 3   | 1   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 4   | 2   | 2   | 3   |               |               |               |     |
| Diurnal Average | 0.5                             | 0.7 | 0.6 | 0.7 | 0.7 | 0.8 | 1.1 | 1.3 | 0.9 | 0.8 | 0.7 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.6 | 0.8 | 0.4 | 0.5 | 0.4 |               |               |               |     |

|                                                         |                                                                                                    |                              |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------|
| <b>C</b> Monthly Calibration                            | <b>S</b> Daily Zero-Span Check                                                                     | <b>Q</b> Quality Assurance   |
| <b>K</b> Collection Error                               | <b>N</b> No Data (Machine Not in Service)                                                          | <b>Y</b> Routine Maintenance |
| <b>X</b> InValid Data (Equipment Malfunction /Recovery) | <b>NRM</b> UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) | <b>P</b> Power Failure       |

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.  
Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

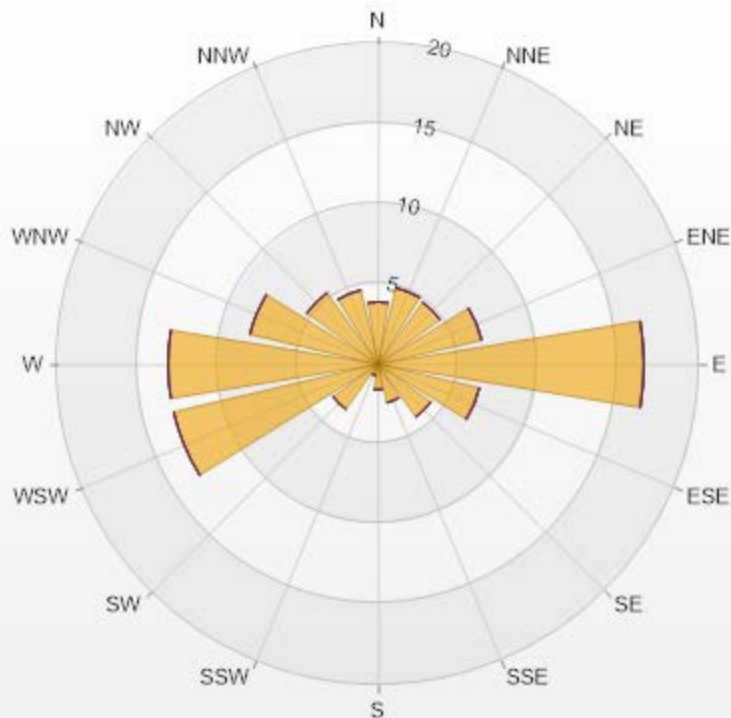
***Timeseries Chart of Hourly Average for NOx - AQHI - Cadotte Lake Station***





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NOX[ppb] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.41% Calm Avg: 0.00 [ppb]

| Direction | 0-30  | 30-50 | 50-76 | 76-159 | >159.0 | Total |
|-----------|-------|-------|-------|--------|--------|-------|
| N         | 3.88  | 0     | 0     | 0      | 0      | 3.88  |
| NNE       | 4.89  | 0     | 0     | 0      | 0      | 4.89  |
| NE        | 4.75  | 0     | 0     | 0      | 0      | 4.75  |
| ENE       | 6.62  | 0     | 0     | 0      | 0      | 6.62  |
| E         | 16.55 | 0     | 0     | 0      | 0      | 16.55 |
| ESE       | 6.47  | 0     | 0     | 0      | 0      | 6.47  |
| SE        | 4.03  | 0     | 0     | 0      | 0      | 4.03  |
| SSE       | 2.45  | 0     | 0     | 0      | 0      | 2.45  |
| S         | 1.58  | 0     | 0     | 0      | 0      | 1.58  |
| SSW       | 0.72  | 0     | 0     | 0      | 0      | 0.72  |
| SW        | 3.45  | 0     | 0     | 0      | 0      | 3.45  |
| WSW       | 13.09 | 0     | 0     | 0      | 0      | 13.09 |
| W         | 13.09 | 0     | 0     | 0      | 0      | 13.09 |
| WNW       | 8.2   | 0     | 0     | 0      | 0      | 8.2   |
| NW        | 5.47  | 0     | 0     | 0      | 0      | 5.47  |
| NNW       | 4.75  | 0     | 0     | 0      | 0      | 4.75  |
| Summary   | 100   | 0     | 0     | 0      | 0      | 100   |



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% Icon Classes (ppb)

100

0-30

0

30-50

0

50-76

0

76-159

0

>159.0



## PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - July 2021

Summary of Hourly Averages

NITRIC OXIDE (NO) in ppb

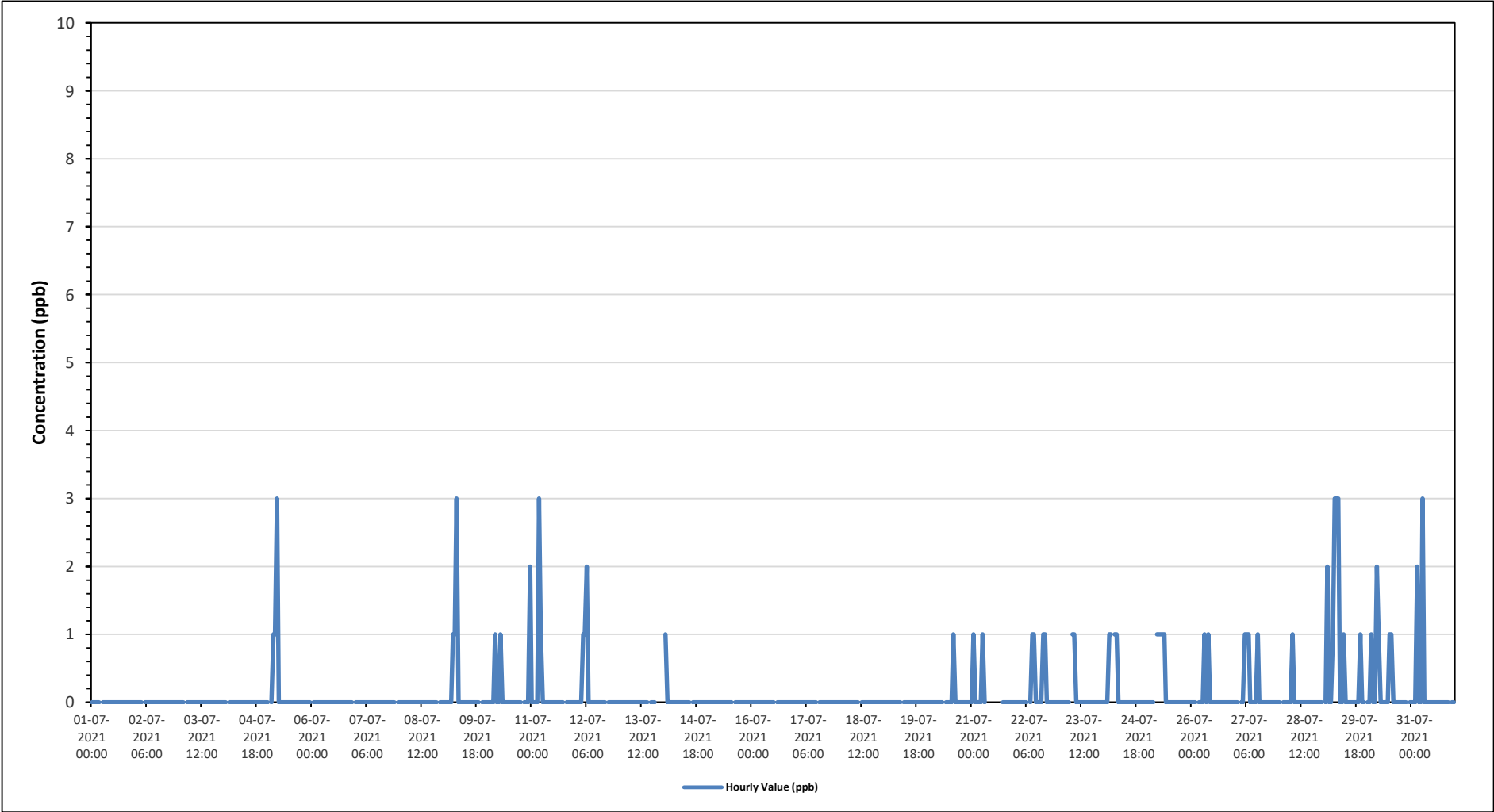
|                       |     |     |                     |                        |      |
|-----------------------|-----|-----|---------------------|------------------------|------|
| Maximum Hourly Value: | 3   | ppb | on July 5 at hour 5 | Hours in Service:      | 744  |
| Maximum Daily Value:  | 0.6 | ppb | on July 29          | Hours of Data:         | 698  |
| Minimum Hourly Value: | 0   | ppb | on July 1 at hour 0 | Hours of Missing Data: | 5    |
| Minimum Daily Value:  | 0.0 | ppb | on July 1           | Hours of Calibration:  | 41   |
| Monthly Average:      | 0.1 | ppb |                     | Operational Uptime:    | 99.3 |

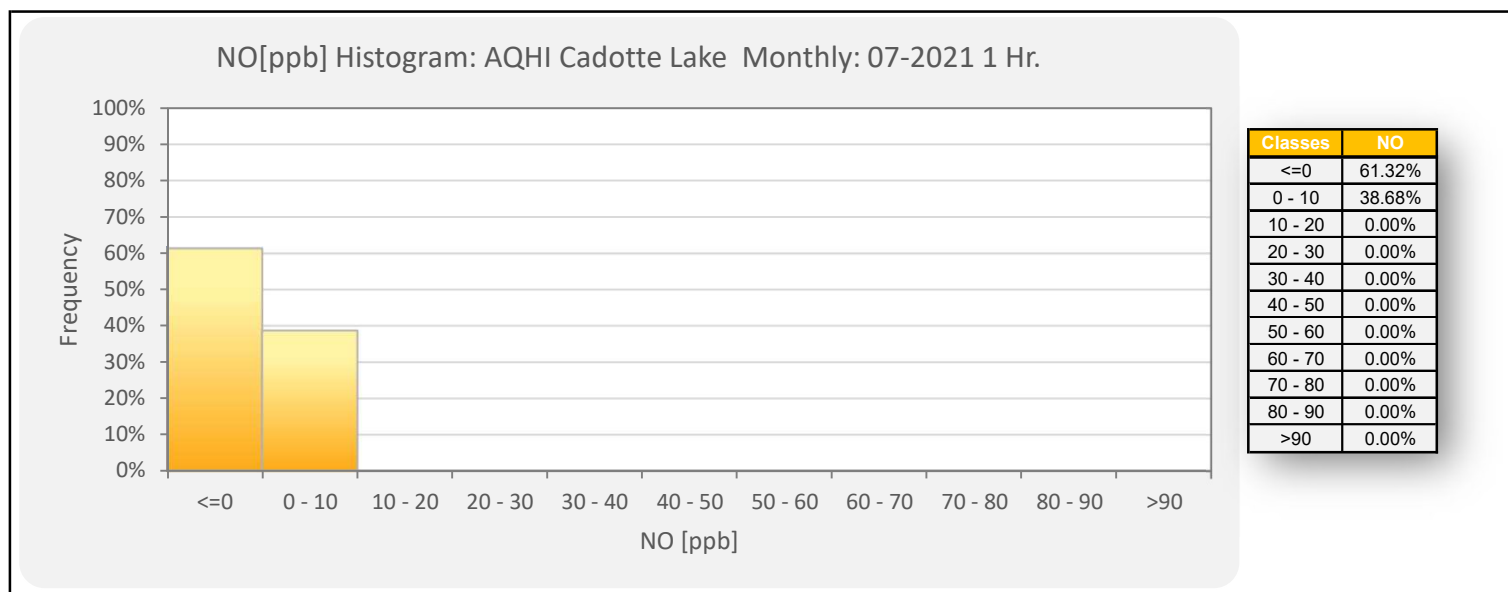
| Day             | Hourly Period Starting at (MST)               |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |                     |     |     |     |     |     |     |     | Daily Minimum | Daily Maximum | Daily Average |   |     |     |
|-----------------|-----------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|---------------------|-----|-----|-----|-----|-----|-----|-----|---------------|---------------|---------------|---|-----|-----|
|                 | 0                                             | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8                                                                                       | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16                  | 17  | 18  | 19  | 20  | 21  | 22  | 23  |               |               |               |   |     |     |
| Jul 1           | 0                                             | 0   | 0   | 0   | 0   | S   | 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 |
| Jul 2           | 0                                             | 0   | 0   | 0   | 0   | S   | 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 |
| Jul 3           | 0                                             | 0   | 0   | S   | 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 |
| Jul 4           | 0                                             | 0   | S   | 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 |
| Jul 5           | 0                                             | S   | 0   | 1   | 1   | 3   | 0   | 0   | 0                                                                                       | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 3   | 0.2 |
| Jul 6           | S                                             | 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             | S | 0   | 0.0 |
| Jul 7           | 0                                             | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | S   | 0             | 0             | 0             | 0 | 0   | 0.0 |
| Jul 8           | 0                                             | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | S   | 0   | 0   | 0             | 0             | 0             | 0 | 0   | 0.0 |
| Jul 9           | 0                                             | 0   | 0   | 0   | 0   | 1   | 1   | 3   | 0                                                                                       | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | S   | S   | 0   | 0   | 0             | 0             | 0             | 0 | 0   | 0.2 |
| Jul 10          | 0                                             | 0   | 0   | 0   | 1   | 0   | 0   | 1   | 0                                                                                       | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | S   | 0   | 0   | 0   | 0   | 0             | 2             | 0             | 0 | 2   | 0.2 |
| Jul 11          | 0                                             | 0   | 0   | 0   | 3   | 1   | 0   | 0   | 0                                                                                       | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                   | 0   | S   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 3   | 0.2 |
| Jul 12          | 0                                             | 0   | 0   | 0   | 1   | 1   | 2   | 0   | 0                                                                                       | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                   | S   | S   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 2   | 0.2 |
| Jul 13          | 0                                             | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0   | 0   | 0   | 0   | 0   | 0   | S   | S                   | 0   | 0   | 0   | P   | P   | P   | P   | 0             | 0             | 0             | 0 | 0   | 0.0 |
| Jul 14          | P                                             | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0   | 0   | 0   | 0   | 0   | 0   | S   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 1   | 0.0 |
| Jul 15          | 0                                             | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0   | 0   | 0   | 0   | 0   | S   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 0   | 0.0 |
| Jul 16          | 0                                             | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0   | 0   | 0   | 0   | S   | S   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 0   | 0.0 |
| Jul 17          | 0                                             | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0   | 0   | 0   | S   | S   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 0   | 0.0 |
| Jul 18          | 0                                             | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0   | 0   | S   | S   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 0   | 0.0 |
| Jul 19          | 0                                             | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                                                                                       | 0   | S   | S   | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 0   | 0.0 |
| Jul 20          | 0                                             | 0   | 0   | 0   | 0   | 0   | 0   | 0   | S                                                                                       | 0   | 0   | 0   | 0   | 0   | 1   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 1   | 0.0 |
| Jul 21          | 0                                             | 1   | 0   | 0   | 0   | 0   | 1   | 0   | S                                                                                       | C   | C   | C   | C   | C   | C   | C   | C                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 1   | -   |
| Jul 22          | 0                                             | 0   | 0   | 0   | 0   | 0   | 0   | S   | 0                                                                                       | 1   | 1   | 0   | 0   | 0   | 0   | 1   | 1                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 1   | 0.2 |
| Jul 23          | 0                                             | 0   | 0   | 0   | 0   | 0   | S   | 1   | 1                                                                                       | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 1   | 0.1 |
| Jul 24          | 0                                             | 0   | 0   | 1   | 1   | S   | 1   | 1   | 0                                                                                       | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 1   | 0.2 |
| Jul 25          | 0                                             | 0   | 0   | 0   | S   | 1   | 1   | 1   | 1                                                                                       | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 1   | 0.2 |
| Jul 26          | 0                                             | 0   | 0   | S   | 0   | 0   | 0   | 1   | 0                                                                                       | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 1   | 0.1 |
| Jul 27          | 0                                             | 0   | S   | 0   | 0   | 1   | 1   | 1   | 0                                                                                       | 0   | 0   | 0   | 1   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 0 | 1   | 0.2 |
| Jul 28          | 0                                             | S   | 0   | 0   | 0   | 0   | 0   | 1   | 0                                                                                       | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0             | 0             | 0             | 1 | 0.0 |     |
| Jul 29          | S                                             | 0   | 2   | 0   | 0   | 1   | 3   | 3   | 3                                                                                       | 0   | 0   | 1   | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 1   | 0   | 0   | S   | 0             | 0             | 0             | 3 | 0.6 |     |
| Jul 30          | 0                                             | 0   | 1   | 0   | 0   | 2   | 1   | 0   | 0                                                                                       | 0   | 0   | 0   | 1   | 1   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | 0   | S   | 0   | 0             | 0             | 0             | 2 | 0.3 |     |
| Jul 31          | 0                                             | 0   | 0   | 2   | 0   | 0   | 3   | 0   | 0                                                                                       | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                   | 0   | 0   | 0   | 0   | S   | 0   | 0   | 0             | 0             | 0             | 3 | 0.2 |     |
| Diurnal Maximum | 0                                             | 1   | 2   | 2   | 3   | 3   | 3   | 3   | 3                                                                                       | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1                   | 0   | 0   | 0   | 1   | 0   | 0   | 2   |               |               |               |   |     |     |
| Diurnal Average | 0.0                                           | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.5 | 0.4 | 0.2                                                                                     | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0                 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |               |               |               |   |     |     |
| C               | Monthly Calibration                           |     |     |     |     |     |     | S   | Daily Zero-Span Check                                                                   |     |     |     |     |     |     | Q   | Quality Assurance   |     |     |     |     |     |     |     |               |               |               |   |     |     |
| K               | Collection Error                              |     |     |     |     |     |     | N   | No Data (Machine Not in Service)                                                        |     |     |     |     |     |     | Y   | Routine Maintenance |     |     |     |     |     |     |     |               |               |               |   |     |     |
| X               | Invalid Data (Equipment Malfunction/Recovery) |     |     |     |     |     |     | NRM | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |     |     |     |     |     |     |     |                     |     |     |     |     |     |     |     |               | P             | Power Failure |   |     |     |

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.  
 Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.



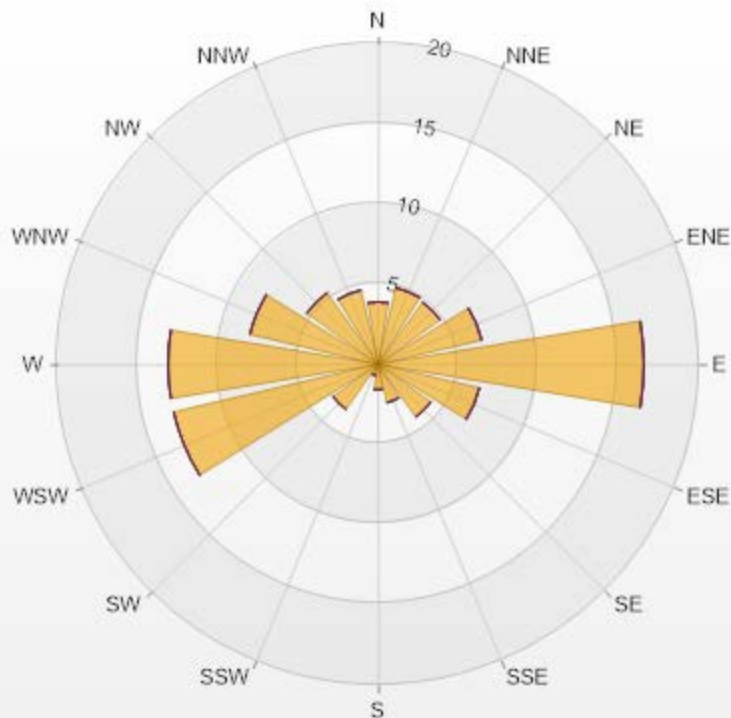
*Timeseries Chart of Hourly Average for NO - AQHI - Cadotte Lake Station*





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NO[ppb] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.41% Calm Avg: 0.00 [ppb]

| Direction | 0-30  | 30-50 | 50-76 | 76-159 | >159.0 | Total |
|-----------|-------|-------|-------|--------|--------|-------|
| N         | 3.88  | 0     | 0     | 0      | 0      | 3.88  |
| NNE       | 4.89  | 0     | 0     | 0      | 0      | 4.89  |
| NE        | 4.75  | 0     | 0     | 0      | 0      | 4.75  |
| ENE       | 6.62  | 0     | 0     | 0      | 0      | 6.62  |
| E         | 16.55 | 0     | 0     | 0      | 0      | 16.55 |
| ESE       | 6.47  | 0     | 0     | 0      | 0      | 6.47  |
| SE        | 4.03  | 0     | 0     | 0      | 0      | 4.03  |
| SSE       | 2.45  | 0     | 0     | 0      | 0      | 2.45  |
| S         | 1.58  | 0     | 0     | 0      | 0      | 1.58  |
| SSW       | 0.72  | 0     | 0     | 0      | 0      | 0.72  |
| SW        | 3.45  | 0     | 0     | 0      | 0      | 3.45  |
| WSW       | 13.09 | 0     | 0     | 0      | 0      | 13.09 |
| W         | 13.09 | 0     | 0     | 0      | 0      | 13.09 |
| WNW       | 8.2   | 0     | 0     | 0      | 0      | 8.2   |
| NW        | 5.47  | 0     | 0     | 0      | 0      | 5.47  |
| NNW       | 4.75  | 0     | 0     | 0      | 0      | 4.75  |
| Summary   | 100   | 0     | 0     | 0      | 0      | 100   |



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% Icon Classes (ppb)

100

0-30

0

30-50

0

50-76

0

76-159

0

>159.0



# PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - July 2021

Summary of Hourly Averages

NITROGEN DIOXIDE (NO<sub>2</sub>) in ppb

Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 159 ppb

Number of 1-Hour Exceedances: 0

Maximum Hourly Value: 4 ppb on July 9 at hour 8

Hours in Service: 744

Maximum Daily Value: 1.4 ppb on July 9

Hours of Data: 698

Minimum Hourly Value: 0 ppb on July 1 at hour 0

Hours of Missing Data: 5

Minimum Daily Value: 0.0 ppb on July 3

Hours of Calibration: 41

Monthly Average: 0.5 ppb

Operational Uptime: 99.3

| Day    | Hourly Period Starting at (MST) |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    | Daily Minimum | Daily Maximum | Daily Average |     |     |
|--------|---------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|---------------|---------------|---------------|-----|-----|
|        | 0                               | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23            |               |               |     |     |
| Jul 1  | 0                               | 0 | 1 | 2 | 1 | S | 1 | 1 | 0 | 1 | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0             | 0             | 0             | 2   | 0.5 |
| Jul 2  | 0                               | 1 | 0 | 0 | S | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0             | 0             | 1             | 0.1 |     |
| Jul 3  | 0                               | 0 | 0 | S | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0             | 0             | 0             | 0.0 |     |
| Jul 4  | 0                               | 0 | S | 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 |     |
| Jul 5  | 0                               | S | 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 |     |
| Jul 6  | S                               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 2  | 1  | 2  | S             | 0             | 2             | 0.7 |     |
| Jul 7  | 1                               | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | S  | 1             | 0             | 1             | 0.8 |     |
| Jul 8  | 0                               | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 2 | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 2  | 2  | 3  | S  | 2  | 1             | 0             | 3             | 1.0 |     |
| Jul 9  | 1                               | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 4 | 3 | 3  | 2  | 1  | 2  | 2  | 1  | 1  | 1  | 1  | 1  | S  | 2  | 0  | 0             | 0             | 4             | 1.4 |     |
| Jul 10 | 1                               | 1 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 2 | 2  | 2  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | S  | 0  | 0  | 0  | 2             | 0             | 2             | 1.0 |     |
| Jul 11 | 1                               | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | S  | 0  | 0  | 1  | 0  | 0             | 0             | 1             | 0.1 |     |
| Jul 12 | 0                               | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | S  | 0  | 0  | 0  | 0  | 0  | 1             | 0             | 1             | 0.3 |     |
| Jul 13 | 3                               | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1  | 0  | 0  | 0  | 1  | 1  | S  | 0  | 0  | 0  | P  | P  | P  | P             | 0             | 3             | 0.6 |     |
| Jul 14 | P                               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 0  | 0  | 0  | 0  | S  | 1  | 1  | 2  | 1  | 1  | 0  | 0  | 0             | 0             | 2             | 0.3 |     |
| Jul 15 | 0                               | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 0  | 0  | 0  | 0  | S  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0             | 0             | 2             | 0.3 |     |
| Jul 16 | 0                               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | S  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0             | 0             | 0             | 0.0 |     |
| Jul 17 | 1                               | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | S  | 1  | 1  | 1  | 2  | 2  | 1  | 1  | 1  | 0  | 0  | 0             | 0             | 2             | 1.0 |     |
| Jul 18 | 0                               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | S  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0             | 0             | 0             | 0.0 |     |
| Jul 19 | 0                               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | S  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 0  | 0  | 0             | 0             | 1             | 0.4 |     |
| Jul 20 | 0                               | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | S | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1             | 0             | 1             | 0.6 |     |
| Jul 21 | 1                               | 1 | 1 | 0 | 1 | 0 | 1 | 1 | S | C | C  | C  | C  | C  | C  | C  | C  | C  | 0  | 1  | 1  | 1  | 1  | 1             | 0             | 1             | -   |     |
| Jul 22 | 1                               | 1 | 2 | 2 | 2 | 2 | 1 | S | 1 | 0 | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 1  | 0  | 0  | 0  | 1  | 1             | 1             | 0             | 2   | 0.7 |
| Jul 23 | 1                               | 0 | 0 | 1 | 0 | 0 | S | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0             | 0             | 1             | 0.1 |     |
| Jul 24 | 0                               | 1 | 2 | 1 | 1 | S | 1 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0             | 0             | 2             | 0.3 |     |
| Jul 25 | 0                               | 0 | 0 | 0 | S | 0 | 0 | 0 | 1 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 0             | 0             | 1             | 0.1 |     |
| Jul 26 | 0                               | 0 | 0 | S | 0 | 0 | 0 | 2 | 1 | 1 | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 2  | 1  | 1  | 0             | 0             | 2             | 0.5 |     |
| Jul 27 | 1                               | 1 | S | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 2  | 1  | 0  | 0  | 0             | 0             | 2             | 0.8 |     |
| Jul 28 | 0                               | S | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0  | 0  | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 2  | 1  | 1  | 1             | 0             | 2             | 0.7 |     |
| Jul 29 | S                               | 1 | 2 | 2 | 2 | 1 | 1 | 3 | 3 | 1 | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 3  | 1  | 1  | S             | 0             | 3             | 1.1 |     |
| Jul 30 | 2                               | 2 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | S  | 0             | 0             | 2             | 0.4 |     |
| Jul 31 | 0                               | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 2  | 1  | S  | 1  | 1             | 0             | 2             | 0.7 |     |

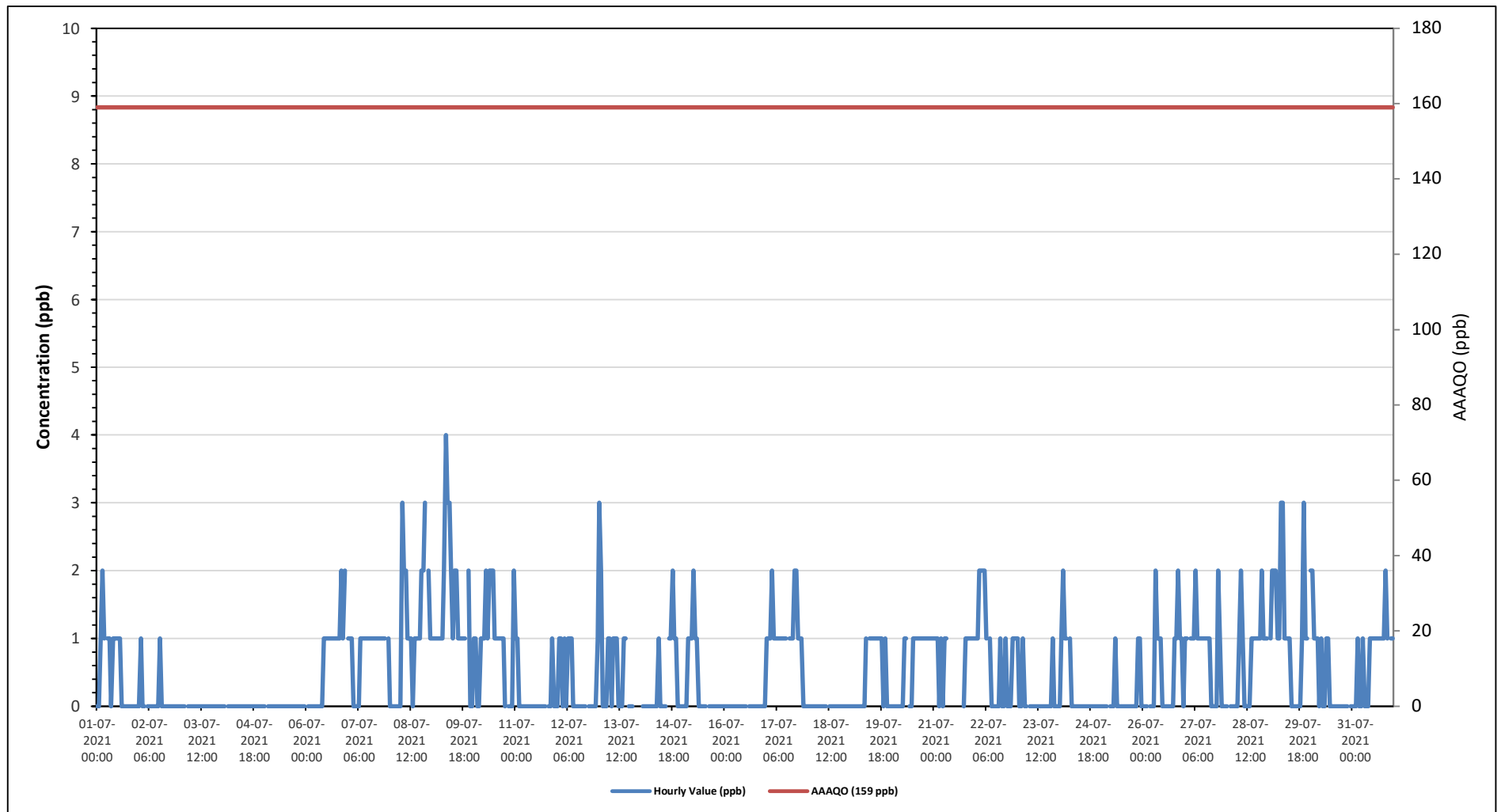
|                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Diurnal Maximum | 3   | 2   | 2   | 2   | 2   | 2   | 2   | 3   | 4   | 3   | 3   | 2   | 1   | 2   | 2   | 1   | 2   | 2   | 2   | 2   | 3   | 2   | 2   | 2   |  |  |
| Diurnal Average | 0.5 | 0.6 | 0.4 | 0.5 | 0.5 | 0.3 | 0.5 | 0.7 | 0.7 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.7 | 0.4 | 0.4 | 0.4 |  |  |

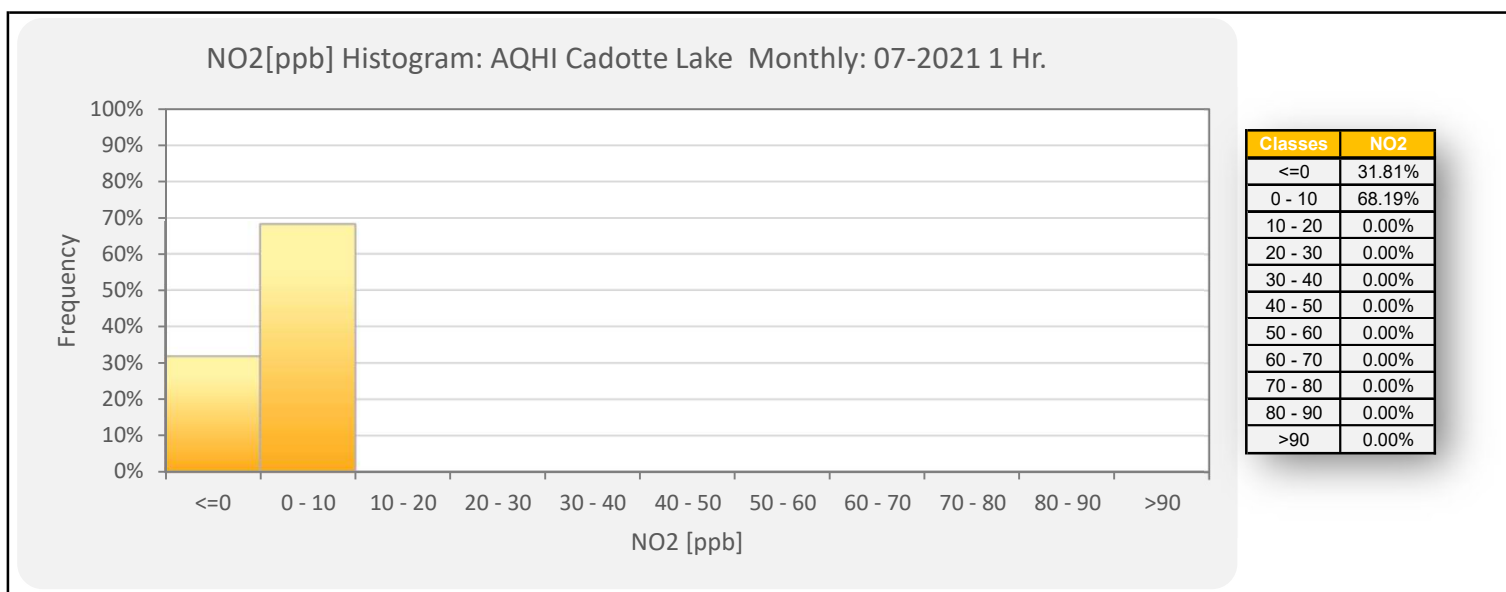
|   |                                                |     |                                                                                         |   |                     |   |               |
|---|------------------------------------------------|-----|-----------------------------------------------------------------------------------------|---|---------------------|---|---------------|
| C | Monthly Calibration                            | S   | Daily Zero-Span Check                                                                   | Q | Quality Assurance   |   |               |
| K | Collection Error                               | N   | No Data (Machine Not in Service)                                                        | Y | Routine Maintenance | P | Power Failure |
| X | InValid Data (Equipment Malfunction /Recovery) | NRM | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |   |                     |   |               |

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

***Timeseries Chart of Hourly Average for NO2 - AQHI - Cadotte Lake Station***

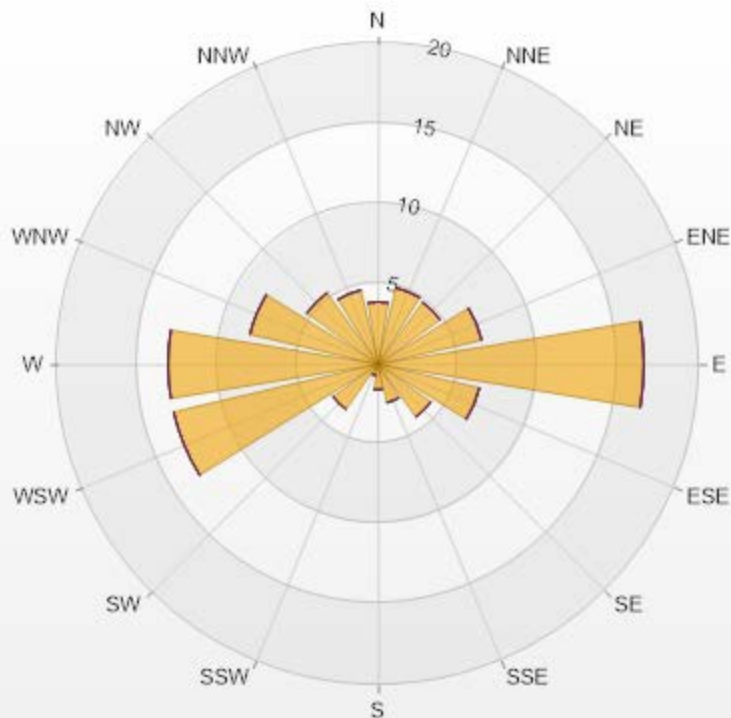




Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NO2[ppb] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.41% Calm Avg: 0.00 [ppb]

| Direction | 0-30  | 30-50 | 50-76 | 76-159 | >159.0 | Total |
|-----------|-------|-------|-------|--------|--------|-------|
| N         | 3.88  | 0     | 0     | 0      | 0      | 3.88  |
| NNE       | 4.89  | 0     | 0     | 0      | 0      | 4.89  |
| NE        | 4.75  | 0     | 0     | 0      | 0      | 4.75  |
| ENE       | 6.62  | 0     | 0     | 0      | 0      | 6.62  |
| E         | 16.55 | 0     | 0     | 0      | 0      | 16.55 |
| ESE       | 6.47  | 0     | 0     | 0      | 0      | 6.47  |
| SE        | 4.03  | 0     | 0     | 0      | 0      | 4.03  |
| SSE       | 2.45  | 0     | 0     | 0      | 0      | 2.45  |
| S         | 1.58  | 0     | 0     | 0      | 0      | 1.58  |
| SSW       | 0.72  | 0     | 0     | 0      | 0      | 0.72  |
| SW        | 3.45  | 0     | 0     | 0      | 0      | 3.45  |
| WSW       | 13.09 | 0     | 0     | 0      | 0      | 13.09 |
| W         | 13.09 | 0     | 0     | 0      | 0      | 13.09 |
| WNW       | 8.2   | 0     | 0     | 0      | 0      | 8.2   |
| NW        | 5.47  | 0     | 0     | 0      | 0      | 5.47  |
| NNW       | 4.75  | 0     | 0     | 0      | 0      | 4.75  |
| Summary   | 100   | 0     | 0     | 0      | 0      | 100   |





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% Icon Classes (ppb)

100

0-30

0

30-50

0

50-76

0

76-159

0

>159.0



# PEACE RIVER AREA MONITORING PROGRAM

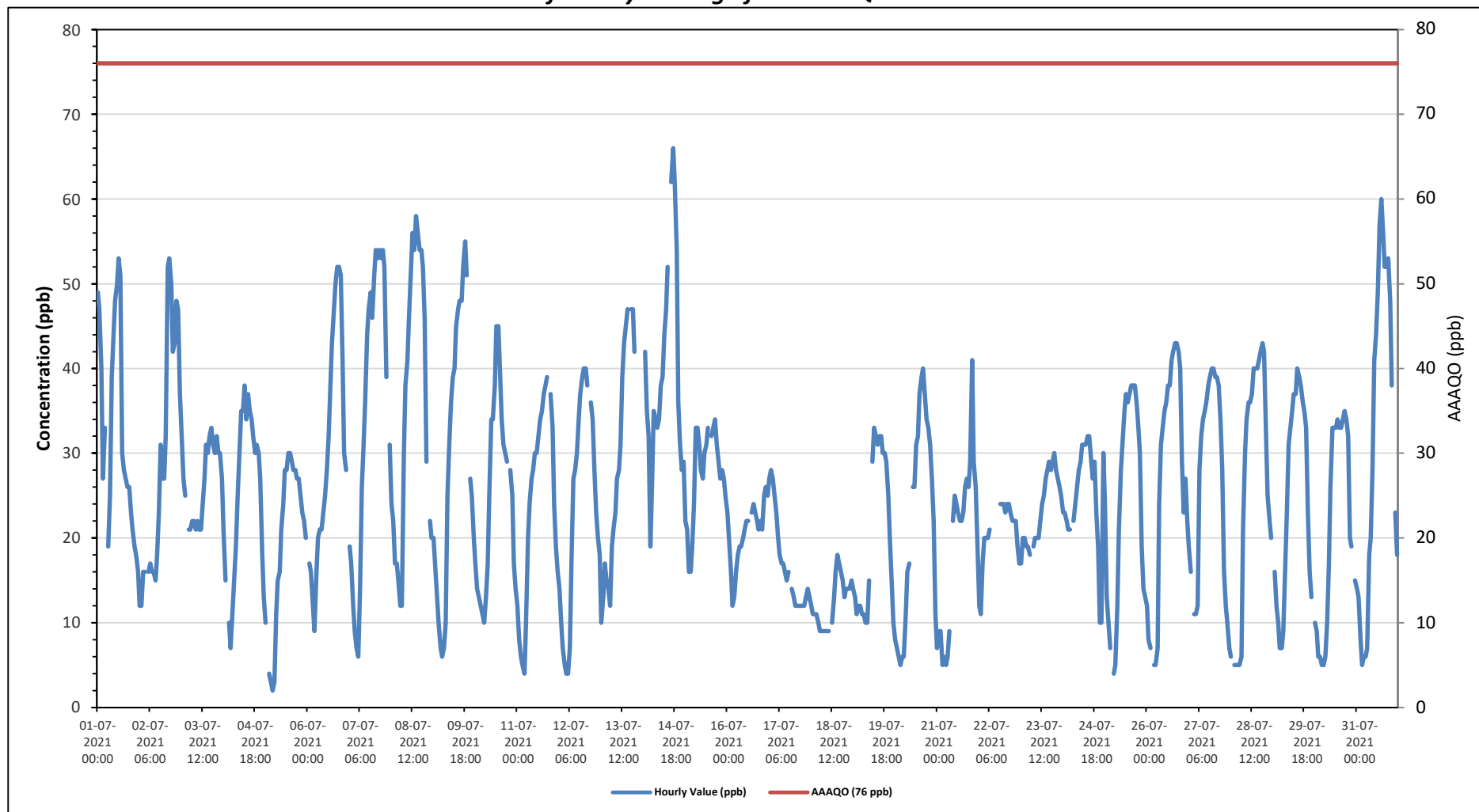
AQHI - Cadotte Lake Station - July 2021

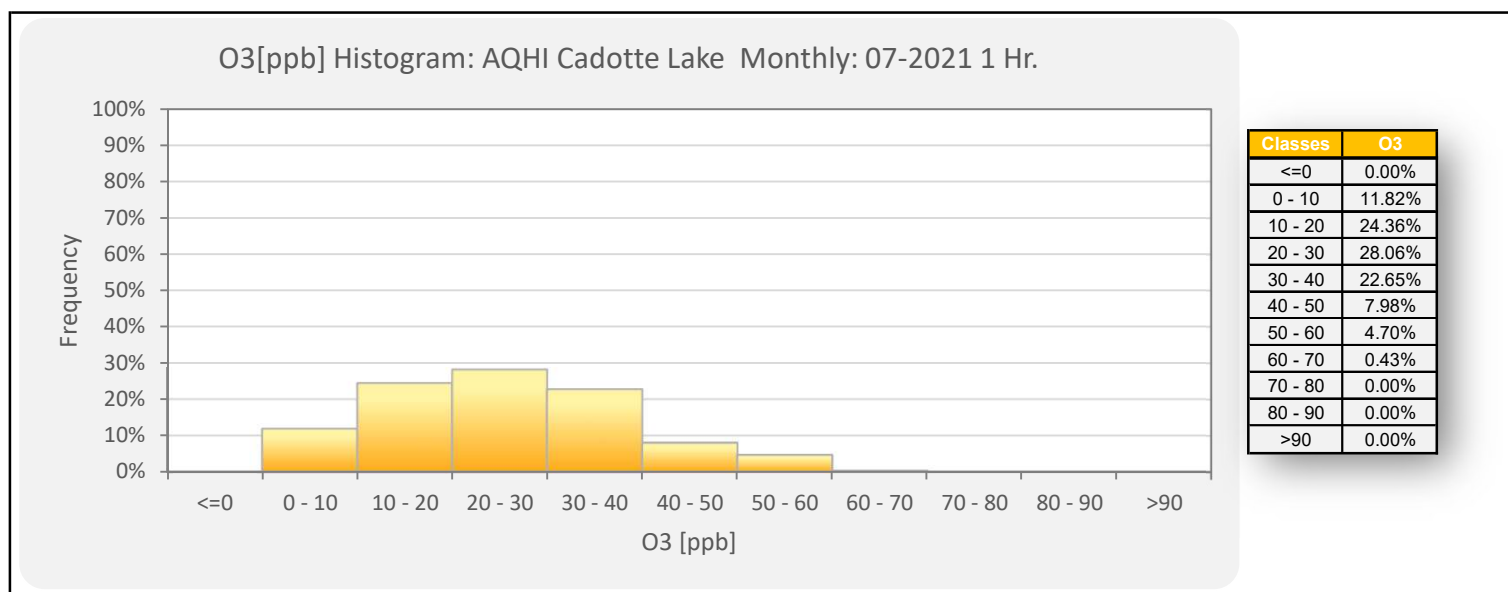
Summary of Hourly Averages

OZONE (O<sub>3</sub>) in ppb

| Alberta Ambient Air Quality Objectives (AAAQO): 1-Hour 76 ppb                                           |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |                          |      |      |      |      |      |                     |      |      |      |               |               |               |      |      |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|--------------------------|------|------|------|------|------|---------------------|------|------|------|---------------|---------------|---------------|------|------|--|
| Number of 1-Hour Exceedances:                                                                           |                                                | 0    |      |      |      |      |      |      |                                                                                         |      |      |      |      |                          |      |      |      |      |      |                     |      |      |      |               |               |               |      |      |  |
| Maximum Hourly Value: 66 ppb on July 14 at hour 17                                                      |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |      |      | Hours in Service: 744    |      |      |      |      |      |                     |      |      |      |               |               |               |      |      |  |
| Maximum Daily Value: 40.0 ppb on July 14                                                                |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |      |      | Hours of Data: 702       |      |      |      |      |      |                     |      |      |      |               |               |               |      |      |  |
| Minimum Hourly Value: 2 ppb on July 5 at hour 4                                                         |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |      |      | Hours of Missing Data: 5 |      |      |      |      |      |                     |      |      |      |               |               |               |      |      |  |
| Minimum Daily Value: 12.3 ppb on July 18                                                                |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |      |      | Hours of Calibration: 37 |      |      |      |      |      |                     |      |      |      |               |               |               |      |      |  |
| Monthly Average: 25.6 ppb                                                                               |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |      |      | Operational Uptime: 99.3 |      |      |      |      |      |                     |      |      |      |               |               |               |      |      |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |                          |      |      |      |      |      |                     |      |      |      | Daily Minimum | Daily Maximum | Daily Average |      |      |  |
| Jul 1                                                                                                   | 49                                             | 47   | 40   | 27   | 33   | S    | 19   | 25   | 39                                                                                      | 44   | 48   | 50   | 53   | 51                       | 30   | 28   | 27   | 26   | 26   | 23                  | 21   | 19   | 18   | 16            | 16.0          | 53.0          | 33.0 |      |  |
| Jul 2                                                                                                   | 12                                             | 12   | 16   | 16   | S    | 16   | 17   | 16   | 16                                                                                      | 15   | 18   | 23   | 31   | 27                       | 27   | 32   | 52   | 53   | 50   | 42                  | 43   | 48   | 47   | 37            | 12.0          | 53.0          | 29.0 |      |  |
| Jul 3                                                                                                   | 32                                             | 27   | 25   | S    | 21   | 21   | 22   | 22   | 21                                                                                      | 22   | 21   | 21   | 24   | 27                       | 31   | 30   | 32   | 33   | 31   | 30                  | 32   | 30   | 30   | 27            | 21.0          | 33.0          | 26.6 |      |  |
| Jul 4                                                                                                   | 21                                             | 15   | S    | 10   | 7    | 11   | 15   | 19   | 25                                                                                      | 30   | 35   | 35   | 38   | 34                       | 37   | 35   | 34   | 32   | 30   | 31                  | 30   | 27   | 18   | 13            | 7.0           | 38.0          | 25.3 |      |  |
| Jul 5                                                                                                   | 10                                             | S    | 4    | 3    | 2    | 3    | 11   | 15   | 16                                                                                      | 21   | 24   | 28   | 28   | 30                       | 30   | 29   | 28   | 28   | 27   | 27                  | 25   | 23   | 22   | 20            | 2.0           | 30.0          | 19.7 |      |  |
| Jul 6                                                                                                   | S                                              | 17   | 16   | 12   | 9    | 16   | 20   | 21   | 21                                                                                      | 23   | 25   | 28   | 32   | 38                       | 43   | 47   | 50   | 52   | 52   | 51                  | 41   | 30   | 28   | S             | 9.0           | 52.0          | 30.5 |      |  |
| Jul 7                                                                                                   | 19                                             | 17   | 12   | 9    | 7    | 6    | 14   | 26   | 31                                                                                      | 36   | 44   | 47   | 49   | 46                       | 51   | 54   | 53   | 54   | 53   | 54                  | 52   | 39   | S    | 31            | 6.0           | 54.0          | 35.0 |      |  |
| Jul 8                                                                                                   | 24                                             | 22   | 17   | 17   | 15   | 12   | 12   | 30   | 38                                                                                      | 41   | 46   | 51   | 56   | 54                       | 58   | 56   | 54   | 54   | 52   | 46                  | 29   | S    | 22   | 20            | 12.0          | 58.0          | 35.9 |      |  |
| Jul 9                                                                                                   | 20                                             | 17   | 13   | 10   | 7    | 6    | 7    | 10   | 25                                                                                      | 31   | 36   | 39   | 40   | 45                       | 47   | 48   | 48   | 52   | 55   | 51                  | S    | 27   | 25   | 20            | 6.0           | 55.0          | 29.5 |      |  |
| Jul 10                                                                                                  | 17                                             | 14   | 13   | 12   | 11   | 10   | 13   | 17   | 25                                                                                      | 34   | 34   | 38   | 45   | 45                       | 40   | 34   | 31   | 30   | 29   | S                   | 28   | 25   | 17   | 14            | 10.0          | 45.0          | 25.0 |      |  |
| Jul 11                                                                                                  | 12                                             | 8    | 6    | 5    | 4    | 10   | 20   | 24   | 27                                                                                      | 28   | 30   | 30   | 32   | 34                       | 35   | 37   | 38   | 39   | S    | 37                  | 33   | 24   | 19   | 16            | 4.0           | 39.0          | 23.8 |      |  |
| Jul 12                                                                                                  | 14                                             | 10   | 7    | 5    | 4    | 4    | 7    | 18   | 27                                                                                      | 28   | 30   | 34   | 37   | 39                       | 40   | 40   | 38   | S    | 36   | 34                  | 28   | 23   | 20   | 18            | 4.0           | 40.0          | 23.5 |      |  |
| Jul 13                                                                                                  | 10                                             | 13   | 17   | 15   | 14   | 12   | 19   | 21   | 23                                                                                      | 27   | 28   | 31   | 39   | 43                       | 45   | 47   | S    | 47   | 47   | 42                  | P    | P    | P    | P             | 10.0          | 47.0          | 28.4 |      |  |
| Jul 14                                                                                                  | P                                              | 42   | 35   | 32   | 19   | 27   | 35   | 34   | 33                                                                                      | 34   | 38   | 39   | 44   | 47                       | 52   | S    | 62   | 66   | 62   | 54                  | 36   | 31   | 28   | 29            | 19.0          | 66.0          | 40.0 |      |  |
| Jul 15                                                                                                  | 22                                             | 21   | 16   | 16   | 19   | 24   | 33   | 33   | 31                                                                                      | 28   | 27   | 30   | 31   | 33                       | S    | 32   | 33   | 34   | 31   | 29                  | 27   | 28   | 27   | 25            | 16.0          | 34.0          | 27.4 |      |  |
| Jul 16                                                                                                  | 23                                             | 20   | 16   | 12   | 13   | 16   | 18   | 19   | 19                                                                                      | 20   | 21   | 22   | 22   | S                        | 23   | 24   | 23   | 23   | 22   | 21                  | 22   | 25   | 26   | 25            | 12.0          | 26.0          | 20.6 |      |  |
| Jul 17                                                                                                  | 27                                             | 28   | 27   | 25   | 23   | 20   | 18   | 17   | 17                                                                                      | 16   | 15   | 16   | S    | 14                       | 13   | 12   | 12   | 12   | 12   | 12                  | 12   | 13   | 14   | 13            | 12.0          | 28.0          | 16.9 |      |  |
| Jul 18                                                                                                  | 12                                             | 11   | 11   | 11   | 10   | 9    | 9    | 9    | 9                                                                                       | 9    | 9    | S    | 10   | 13                       | 16   | 18   | 17   | 16   | 15   | 13                  | 14   | 14   | 14   | 15            | 9.0           | 18.0          | 12.3 |      |  |
| Jul 19                                                                                                  | 14                                             | 13   | 11   | 12   | 12   | 11   | 11   | 10   | 10                                                                                      | 15   | S    | 29   | 33   | 32                       | 31   | 32   | 32   | 30   | 30   | 29                  | 25   | 20   | 15   | 10            | 10.0          | 33.0          | 20.3 |      |  |
| Jul 20                                                                                                  | 8                                              | 7    | 6    | 5    | 6    | 6    | 11   | 16   | 17                                                                                      | S    | 26   | 26   | 31   | 32                       | 37   | 39   | 40   | 37   | 34   | 33                  | 31   | 27   | 22   | 11            | 5.0           | 40.0          | 22.1 |      |  |
| Jul 21                                                                                                  | 7                                              | 9    | 9    | 5    | 6    | 5    | 6    | 9    | S                                                                                       | 22   | 25   | 24   | 23   | 22                       | 22   | 23   | 26   | 27   | 26   | 29                  | 41   | 29   | 26   | 20            | 5.0           | 41.0          | 19.2 |      |  |
| Jul 22                                                                                                  | 12                                             | 11   | 17   | 20   | 20   | 20   | 21   | S    | C                                                                                       | C    | C    | C    | 24   | 24                       | 24   | 23   | 24   | 24   | 23   | 22                  | 22   | 22   | 19   | 17            | 11.0          | 24.0          | 20.5 |      |  |
| Jul 23                                                                                                  | 17                                             | 20   | 20   | 19   | 19   | 18   | S    | 19   | 20                                                                                      | 20   | 20   | 22   | 24   | 25                       | 27   | 28   | 29   | 28   | 29   | 30                  | 28   | 27   | 26   | 25            | 17.0          | 30.0          | 23.5 |      |  |
| Jul 24                                                                                                  | 23                                             | 23   | 22   | 21   | 21   | S    | 22   | 24   | 26                                                                                      | 28   | 29   | 31   | 31   | 31                       | 32   | 32   | 29   | 27   | 29   | 23                  | 19   | 10   | 10   | 30            | 10.0          | 32.0          | 24.9 |      |  |
| Jul 25                                                                                                  | 24                                             | 13   | 10   | 7    | S    | 4    | 5    | 12   | 21                                                                                      | 28   | 31   | 35   | 37   | 36                       | 37   | 38   | 38   | 38   | 36   | 33                  | 30   | 19   | 14   | 13            | 4.0           | 38.0          | 24.3 |      |  |
| Jul 26                                                                                                  | 12                                             | 8    | 7    | S    | 5    | 5    | 7    | 24   | 31                                                                                      | 33   | 35   | 36   | 38   | 38                       | 41   | 42   | 43   | 43   | 42   | 40                  | 29   | 23   | 27   | 22            | 5.0           | 43.0          | 27.4 |      |  |
| Jul 27                                                                                                  | 19                                             | 16   | S    | 11   | 11   | 12   | 28   | 32   | 34                                                                                      | 35   | 36   | 38   | 39   | 40                       | 40   | 39   | 39   | 38   | 34   | 28                  | 16   | 12   | 10   | 7             | 7.0           | 40.0          | 26.7 |      |  |
| Jul 28                                                                                                  | 6                                              | S    | 5    | 5    | 5    | 5    | 6    | 21   | 30                                                                                      | 34   | 36   | 36   | 37   | 40                       | 40   | 40   | 41   | 42   | 43   | 42                  | 32   | 25   | 22   | 20            | 5.0           | 43.0          | 26.7 |      |  |
| Jul 29                                                                                                  | S                                              | 16   | 12   | 10   | 7    | 7    | 9    | 16   | 23                                                                                      | 31   | 33   | 35   | 37   | 37                       | 40   | 39   | 38   | 36   | 35   | 33                  | 23   | 16   | 13   | S             | 7.0           | 40.0          | 24.8 |      |  |
| Jul 30                                                                                                  | 10                                             | 9    | 6    | 6    | 5    | 5    | 6    | 10   | 17                                                                                      | 26   | 33   | 33   | 33   | 33                       | 34   | 33   | 33   | 34   | 35   | 34                  | 32   | 20   | 19   | S             | 15            | 5.0           | 35.0 | 21.2 |  |
| Jul 31                                                                                                  | 14                                             | 13   | 8    | 5    | 6    | 6    | 7    | 18   | 20                                                                                      | 28   | 41   | 44   | 49   | 57                       | 60   | 56   | 52   | 52   | 53   | 48                  | 38   | S    | 23   | 18            | 5.0           | 60.0          | 31.1 |      |  |
| Diurnal Maximum                                                                                         | 49                                             | 47   | 40   | 32   | 33   | 27   | 35   | 34   | 39                                                                                      | 44   | 48   | 51   | 56   | 57                       | 60   | 56   | 62   | 66   | 62   | 54                  | 52   | 48   | 47   | 37            |               |               |      |      |  |
| Diurnal Average                                                                                         | 17.5                                           | 17.2 | 14.6 | 12.5 | 11.8 | 11.3 | 14.9 | 19.6 | 23.9                                                                                    | 27.1 | 30.1 | 32.8 | 34.9 | 35.6                     | 36.1 | 35.6 | 36.6 | 36.9 | 35.9 | 34.0                | 28.5 | 24.1 | 21.5 | 19.5          |               |               |      |      |  |
| C                                                                                                       | Monthly Calibration                            |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |                          |      |      |      |      | Q    | Quality Assurance   |      |      |      |               |               |               |      |      |  |
| K                                                                                                       | Collection Error                               |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |                          |      |      |      |      | Y    | Routine Maintenance |      |      |      |               |               |               |      |      |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |                          |      |      |      |      | P    | Power Failure       |      |      |      |               |               |               |      |      |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |                          |      |      |      |      |      |                     |      |      |      |               |               |               |      |      |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |                          |      |      |      |      |      |                     |      |      |      |               |               |               |      |      |  |

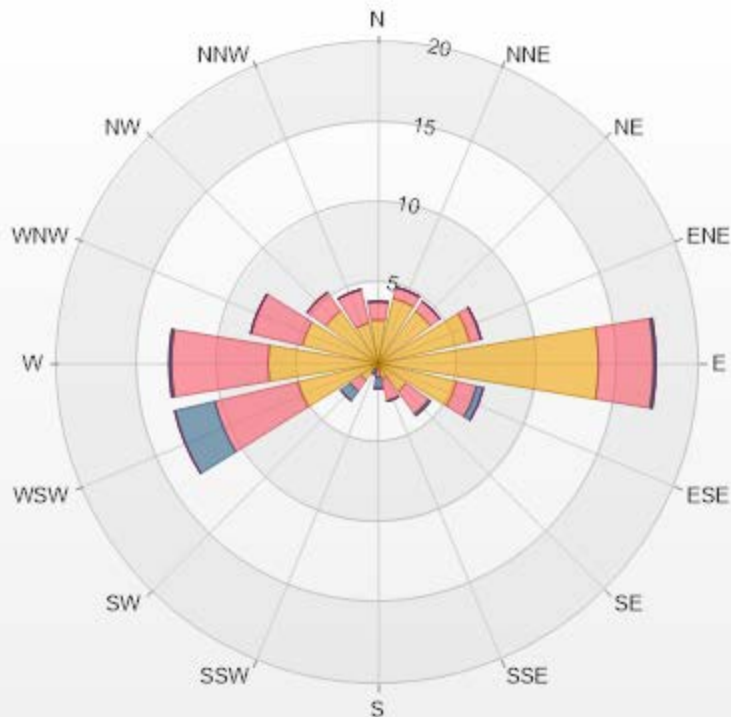
*Timeseries Chart of Hourly Average for O3 - AQHI - Cadotte Lake Station*





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-O3[ppb] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 93.95% Calm Avg: 0.00 [ppb]

| Direction | 0-30  | 30-50 | 50-76 | 76-159 | >159.0 | Total |
|-----------|-------|-------|-------|--------|--------|-------|
| N         | 2.72  | 1.14  | 0     | 0      | 0      | 3.86  |
| NNE       | 4.15  | 0.72  | 0     | 0      | 0      | 4.87  |
| NE        | 4.01  | 0.72  | 0     | 0      | 0      | 4.73  |
| ENE       | 5.87  | 0.72  | 0     | 0      | 0      | 6.59  |
| E         | 13.73 | 3.43  | 0.14  | 0      | 0      | 17.3  |
| ESE       | 5.01  | 1.29  | 0.43  | 0      | 0      | 6.73  |
| SE        | 2.15  | 1.72  | 0.14  | 0      | 0      | 4.01  |
| SSE       | 1     | 1.43  | 0     | 0      | 0      | 2.43  |
| S         | 0.29  | 0.57  | 0.72  | 0      | 0      | 1.58  |
| SSW       | 0.43  | 0     | 0.29  | 0      | 0      | 0.72  |
| SW        | 1.29  | 0.86  | 0.72  | 0      | 0      | 2.87  |
| WSW       | 5.15  | 5.29  | 2.58  | 0      | 0      | 13.02 |
| W         | 6.87  | 6.01  | 0.14  | 0      | 0      | 13.02 |
| WNW       | 4.86  | 3.29  | 0     | 0      | 0      | 8.15  |
| NW        | 4.01  | 1.43  | 0     | 0      | 0      | 5.44  |
| NNW       | 2.58  | 2.15  | 0     | 0      | 0      | 4.73  |
| Summary   | 64.12 | 30.77 | 5.16  | 0      | 0      | 100   |



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| % Icon Classes (ppb) | 64 | 31 | 5 | 0 | 0 |
|----------------------|----|----|---|---|---|
| 0-30                 | 64 | 31 | 5 | 0 | 0 |
| 30-50                | 31 | 31 | 5 | 0 | 0 |
| 50-76                | 5  | 31 | 5 | 0 | 0 |
| 76-159               | 0  | 31 | 5 | 0 | 0 |
| >159.0               | 0  | 31 | 5 | 0 | 0 |



# PEACE RIVER AREA MONITORING PROGRAM

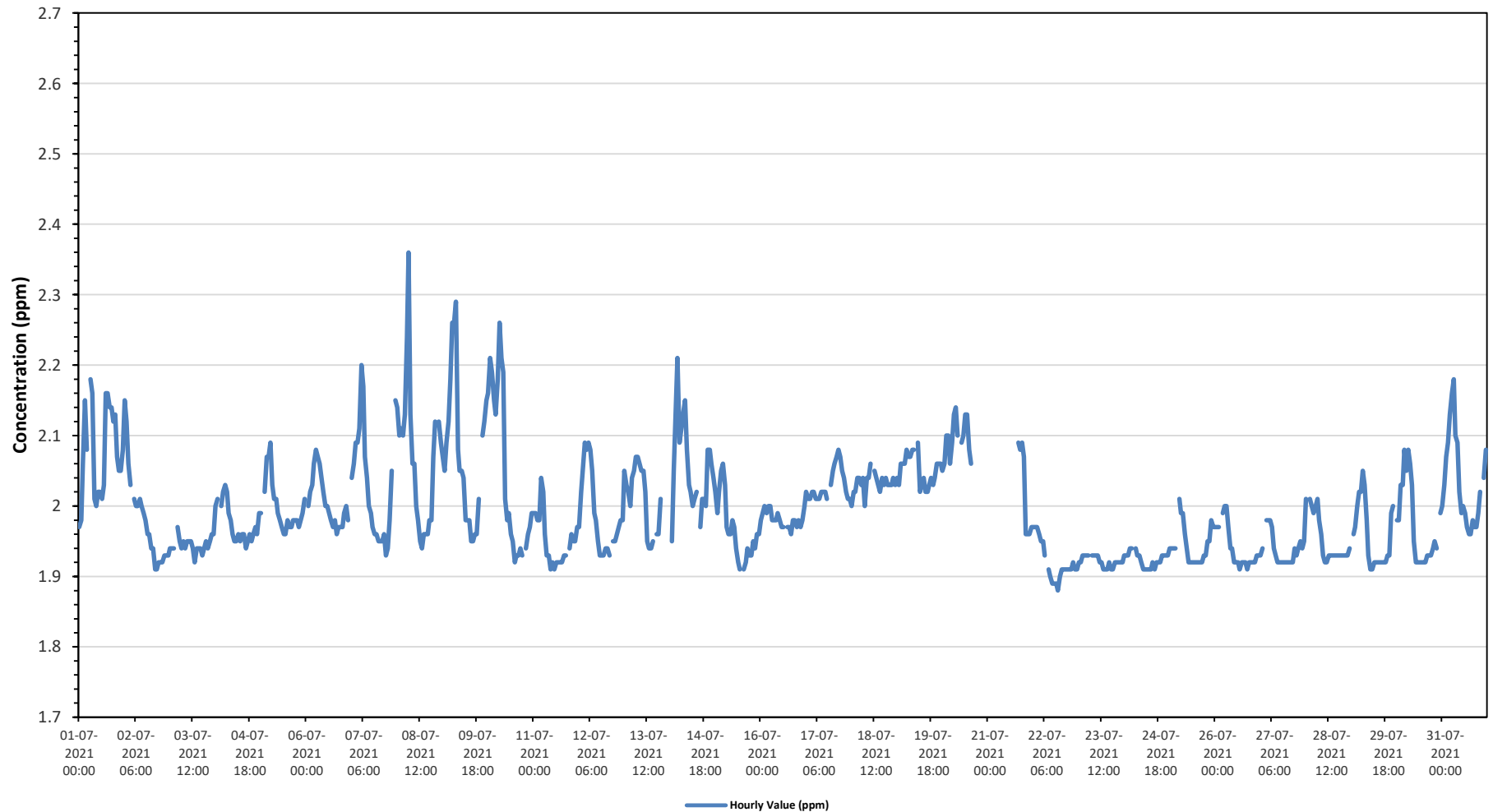
AQHI - Cadotte Lake Station - July 2021

Summary of Hourly Averages

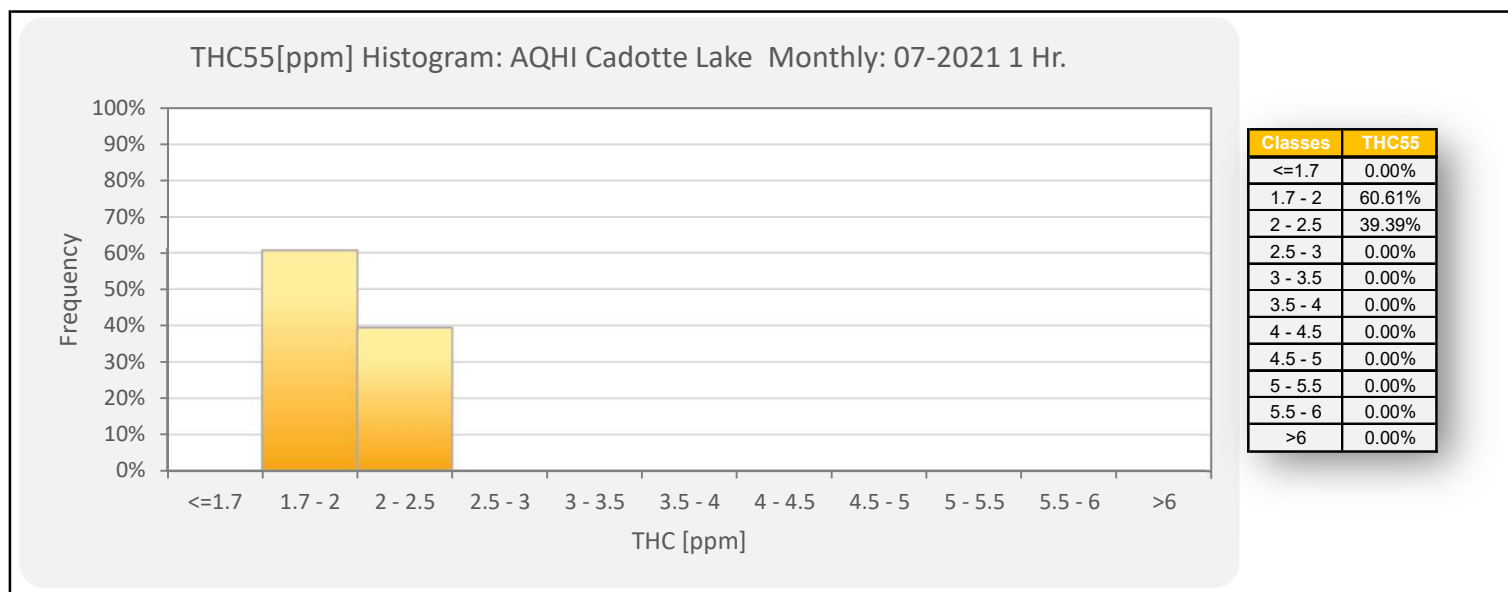
TOTAL HYDROCARBONS (THC) in ppm

|                                                                                                         |                                                |      |      |      |      |      |      |      |                                                                                         |                                |      |      |      |      |      |      |                     |      |      |                        |      |      |      |       |         |         |         |      |  |      |  |  |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|--------------------------------|------|------|------|------|------|------|---------------------|------|------|------------------------|------|------|------|-------|---------|---------|---------|------|--|------|--|--|--|--|--|--|--|--|--|
| Maximum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |                                                                                         | 2.36 ppm on July 8 at hour 6   |      |      |      |      |      |      |                     |      |      | Hours in Service:      |      |      |      |       |         |         |         |      |  | 744  |  |  |  |  |  |  |  |  |  |
| Maximum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | 2.08 ppm on July 1             |      |      |      |      |      |      |                     |      |      | Hours of Data:         |      |      |      |       |         |         |         |      |  | 683  |  |  |  |  |  |  |  |  |  |
| Minimum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |                                                                                         | 1.88 ppm on July 22 at hour 13 |      |      |      |      |      |      |                     |      |      | Hours of Missing Data: |      |      |      |       |         |         |         |      |  | 23   |  |  |  |  |  |  |  |  |  |
| Minimum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | 1.92 ppm on July 22            |      |      |      |      |      |      |                     |      |      | Hours of Calibration:  |      |      |      |       |         |         |         |      |  | 38   |  |  |  |  |  |  |  |  |  |
| Monthly Average:                                                                                        |                                                |      |      |      |      |      |      |      |                                                                                         | 1.99 ppm                       |      |      |      |      |      |      |                     |      |      | Operational Uptime:    |      |      |      |       |         |         |         |      |  | 96.9 |  |  |  |  |  |  |  |  |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |      |      |      |      |                                                                                         |                                |      |      |      |      |      |      |                     |      |      |                        |      |      |      | Daily | Daily   | Daily   |         |      |  |      |  |  |  |  |  |  |  |  |  |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8                                                                                       | 9                              | 10   | 11   | 12   | 13   | 14   | 15   | 16                  | 17   | 18   | 19                     | 20   | 21   | 22   | 23    | Minimum | Maximum | Average |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 1                                                                                                   | 1.97                                           | 1.98 | 2.06 | 2.15 | 2.08 | S    | 2.18 | 2.16 | 2.01                                                                                    | 2.00                           | 2.02 | 2.02 | 2.01 | 2.03 | 2.16 | 2.16 | 2.14                | 2.14 | 2.12 | 2.13                   | 2.07 | 2.05 | 2.05 | 2.08  | 1.97    | 2.18    | 2.08    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 2                                                                                                   | 2.15                                           | 2.12 | 2.06 | 2.03 | S    | 2.01 | 2.00 | 2.00 | 2.01                                                                                    | 2.00                           | 1.99 | 1.98 | 1.96 | 1.96 | 1.94 | 1.94 | 1.91                | 1.91 | 1.92 | 1.92                   | 1.92 | 1.93 | 1.93 | 1.93  | 1.91    | 2.15    | 1.98    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 3                                                                                                   | 1.94                                           | 1.94 | 1.94 | S    | 1.97 | 1.95 | 1.94 | 1.95 | 1.94                                                                                    | 1.95                           | 1.95 | 1.95 | 1.94 | 1.92 | 1.94 | 1.94 | 1.94                | 1.93 | 1.94 | 1.95                   | 1.94 | 1.95 | 1.96 | 1.96  | 1.92    | 1.97    | 1.94    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 4                                                                                                   | 2.00                                           | 2.01 | S    | 2.00 | 2.02 | 2.03 | 2.02 | 1.99 | 1.98                                                                                    | 1.96                           | 1.95 | 1.95 | 1.96 | 1.95 | 1.96 | 1.96 | 1.94                | 1.95 | 1.96 | 1.95                   | 1.96 | 1.97 | 1.96 | 1.99  | 1.94    | 2.03    | 1.97    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 5                                                                                                   | 1.99                                           | S    | 2.02 | 2.07 | 2.07 | 2.09 | 2.03 | 2.01 | 2.01                                                                                    | 1.99                           | 1.98 | 1.97 | 1.96 | 1.96 | 1.98 | 1.97 | 1.97                | 1.98 | 1.98 | 1.98                   | 1.97 | 1.98 | 1.99 | 2.01  | 1.96    | 2.09    | 2.00    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 6                                                                                                   | S                                              | 2.00 | 2.02 | 2.03 | 2.06 | 2.08 | 2.07 | 2.06 | 2.04                                                                                    | 2.02                           | 2.00 | 2.00 | 1.99 | 1.98 | 1.97 | 1.98 | 1.96                | 1.97 | 1.97 | 1.97                   | 1.99 | 2.00 | 1.98 | S     | 1.96    | 2.08    | 2.01    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 7                                                                                                   | 2.04                                           | 2.06 | 2.09 | 2.09 | 2.11 | 2.20 | 2.17 | 2.07 | 2.04                                                                                    | 2.00                           | 1.99 | 1.97 | 1.96 | 1.96 | 1.95 | 1.95 | 1.95                | 1.96 | 1.93 | 1.94                   | 1.98 | 2.05 | S    | 2.15  | 1.93    | 2.20    | 2.03    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 8                                                                                                   | 2.14                                           | 2.10 | 2.11 | 2.10 | 2.13 | 2.24 | 2.36 | 2.13 | 2.06                                                                                    | 2.06                           | 2.00 | 1.98 | 1.95 | 1.94 | 1.96 | 1.96 | 1.96                | 1.98 | 1.98 | 2.07                   | 2.12 | S    | 2.12 | 2.09  | 1.94    | 2.36    | 2.07    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 9                                                                                                   | 2.07                                           | 2.05 | 2.09 | 2.12 | 2.18 | 2.26 | 2.26 | 2.29 | 2.08                                                                                    | 2.05                           | 2.05 | 2.04 | 1.98 | 1.98 | 1.98 | 1.95 | 1.95                | 1.96 | 1.96 | 2.01                   | S    | 2.10 | 2.12 | 2.15  | 1.95    | 2.29    | 2.07    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 10                                                                                                  | 2.16                                           | 2.21 | 2.19 | 2.15 | 2.13 | 2.18 | 2.26 | 2.21 | 2.19                                                                                    | 2.01                           | 1.98 | 1.99 | 1.96 | 1.95 | 1.92 | 1.93 | 1.93                | 1.94 | 1.93 | S                      | 1.94 | 1.96 | 1.97 | 1.99  | 1.92    | 2.26    | 2.05    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 11                                                                                                  | 1.99                                           | 1.99 | 1.98 | 1.98 | 2.04 | 2.02 | 1.96 | 1.93 | 1.93                                                                                    | 1.91                           | 1.92 | 1.91 | 1.92 | 1.92 | 1.92 | 1.92 | 1.93                | 1.93 | S    | 1.94                   | 1.96 | 1.95 | 1.95 | 1.97  | 1.91    | 2.04    | 1.95    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 12                                                                                                  | 1.97                                           | 2.02 | 2.05 | 2.09 | 2.08 | 2.09 | 2.08 | 2.05 | 1.99                                                                                    | 1.98                           | 1.95 | 1.93 | 1.93 | 1.93 | 1.94 | 1.94 | 1.93                | S    | 1.95 | 1.95                   | 1.96 | 1.97 | 1.98 | 1.98  | 1.93    | 2.09    | 1.99    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 13                                                                                                  | 2.05                                           | 2.03 | 2.02 | 2.00 | 2.04 | 2.05 | 2.07 | 2.07 | 2.06                                                                                    | 2.05                           | 2.05 | 2.02 | 1.95 | 1.94 | 1.94 | 1.95 | S                   | 1.96 | 1.96 | 2.01                   | P    | P    | P    | P     | 1.94    | 2.07    | 2.01    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 14                                                                                                  | P                                              | 1.95 | 2.05 | 2.13 | 2.21 | 2.09 | 2.11 | 2.13 | 2.15                                                                                    | 2.08                           | 2.03 | 2.02 | 2.00 | 2.01 | 2.02 | S    | 1.97                | 2.01 | 2.01 | 2.00                   | 2.08 | 2.08 | 2.06 | 2.04  | 1.95    | 2.21    | 2.06    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 15                                                                                                  | 2.02                                           | 1.99 | 2.02 | 2.05 | 2.06 | 2.03 | 1.97 | 1.96 | 1.96                                                                                    | 1.98                           | 1.97 | 1.94 | 1.92 | 1.91 | S    | 1.91 | 1.92                | 1.94 | 1.93 | 1.93                   | 1.95 | 1.94 | 1.96 | 1.96  | 1.91    | 2.06    | 1.97    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 16                                                                                                  | 1.98                                           | 1.99 | 2.00 | 1.99 | 2.00 | 2.00 | 1.98 | 1.98 | 1.98                                                                                    | 1.99                           | 1.98 | 1.97 | 1.97 | S    | 1.97 | 1.97 | 1.96                | 1.98 | 1.98 | 1.97                   | 1.98 | 1.97 | 1.98 | 2.00  | 1.96    | 2.00    | 1.98    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 17                                                                                                  | 2.02                                           | 2.01 | 2.01 | 2.02 | 2.02 | 2.01 | 2.01 | 2.01 | 2.02                                                                                    | 2.02                           | 2.02 | 2.01 | S    | 2.03 | 2.05 | 2.06 | 2.07                | 2.08 | 2.07 | 2.05                   | 2.04 | 2.02 | 2.01 | 2.01  | 2.01    | 2.01    | 2.08    | 2.03 |  |      |  |  |  |  |  |  |  |  |  |
| Jul 18                                                                                                  | 2.00                                           | 2.02 | 2.02 | 2.04 | 2.04 | 2.03 | 2.04 | 2.00 | 2.04                                                                                    | 2.04                           | 2.06 | S    | 2.05 | 2.04 | 2.03 | 2.02 | 2.04                | 2.03 | 2.04 | 2.03                   | 2.03 | 2.03 | 2.04 | 2.03  | 2.00    | 2.06    | 2.03    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 19                                                                                                  | 2.04                                           | 2.03 | 2.06 | 2.06 | 2.06 | 2.08 | 2.07 | 2.07 | 2.08                                                                                    | 2.08                           | S    | 2.09 | 2.02 | 2.03 | 2.04 | 2.02 | 2.02                | 2.03 | 2.04 | 2.03                   | 2.04 | 2.06 | 2.06 | 2.06  | 2.02    | 2.09    | 2.05    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 20                                                                                                  | 2.05                                           | 2.06 | 2.10 | 2.10 | 2.06 | 2.09 | 2.13 | 2.14 | 2.10                                                                                    | S                              | 2.09 | 2.10 | 2.13 | 2.13 | 2.08 | 2.06 | Y                   | X    | X    | Y                      | X    | X    | Y    | Y     | 2.05    | 2.14    | -       |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 21                                                                                                  | Y                                              | X    | X    | X    | X    | X    | X    | X    | X                                                                                       | X                              | C    | C    | C    | C    | C    | C    | 2.09                | 2.08 | 2.09 | 2.07                   | 1.96 | 1.96 | 1.96 | 1.97  | 1.96    | 2.09    | -       |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 22                                                                                                  | 1.97                                           | 1.97 | 1.97 | 1.96 | 1.95 | 1.95 | 1.93 | S    | 1.91                                                                                    | 1.90                           | 1.89 | 1.89 | 1.89 | 1.88 | 1.90 | 1.91 | 1.91                | 1.91 | 1.91 | 1.91                   | 1.91 | 1.92 | 1.91 | 1.91  | 1.88    | 1.97    | 1.92    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 23                                                                                                  | 1.92                                           | 1.92 | 1.93 | 1.93 | 1.93 | 1.93 | S    | 1.93 | 1.93                                                                                    | 1.93                           | 1.93 | 1.92 | 1.92 | 1.91 | 1.91 | 1.91 | 1.92                | 1.91 | 1.91 | 1.92                   | 1.92 | 1.92 | 1.92 | 1.92  | 1.91    | 1.93    | 1.92    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 24                                                                                                  | 1.93                                           | 1.93 | 1.93 | 1.94 | 1.94 | S    | 1.94 | 1.93 | 1.93                                                                                    | 1.92                           | 1.91 | 1.91 | 1.91 | 1.91 | 1.91 | 1.92 | 1.91                | 1.92 | 1.92 | 1.92                   | 1.93 | 1.93 | 1.93 | 1.93  | 1.91    | 1.94    | 1.92    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 25                                                                                                  | 1.94                                           | 1.94 | 1.94 | 1.94 | S    | 2.01 | 1.99 | 1.99 | 1.96                                                                                    | 1.94                           | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92                | 1.92 | 1.93 | 1.93                   | 1.95 | 1.95 | 1.98 | 1.97  | 1.92    | 2.01    | 1.94    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 26                                                                                                  | 1.97                                           | 1.97 | 1.97 | S    | 1.99 | 2.00 | 2.00 | 1.97 | 1.94                                                                                    | 1.94                           | 1.92 | 1.92 | 1.92 | 1.91 | 1.92 | 1.92 | 1.92                | 1.91 | 1.92 | 1.92                   | 1.92 | 1.92 | 1.93 | 1.93  | 1.91    | 2.00    | 1.94    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 27                                                                                                  | 1.93                                           | 1.94 | S    | 1.98 | 1.98 | 1.98 | 1.97 | 1.94 | 1.93                                                                                    | 1.92                           | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92                | 1.92 | 1.94 | 1.93                   | 1.94 | 1.95 | 1.94 | 1.95  | 1.92    | 1.98    | 1.94    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 28                                                                                                  | 2.01                                           | S    | 2.01 | 2.00 | 1.99 | 2.00 | 2.01 | 1.98 | 1.96                                                                                    | 1.93                           | 1.92 | 1.92 | 1.93 | 1.93 | 1.93 | 1.93 | 1.93                | 1.93 | 1.93 | 1.93                   | 1.93 | 1.93 | 1.93 | 1.94  | 1.92    | 2.01    | 1.95    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 29                                                                                                  | S                                              | 1.96 | 1.97 | 2.00 | 2.02 | 2.02 | 2.05 | 2.03 | 1.98                                                                                    | 1.93                           | 1.91 | 1.91 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92                | 1.92 | 1.92 | 1.93                   | 1.99 | 2.00 | S    | 1.91  | 2.05    | 1.96    |         |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 30                                                                                                  | 1.98                                           | 1.98 | 2.03 | 2.03 | 2.08 | 2.05 | 2.08 | 2.06 | 2.03                                                                                    | 1.95                           | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.92 | 1.93                | 1.93 | 1.93 | 1.94                   | 1.95 | 1.94 | S    | 1.99  | 1.92    | 2.08    | 1.97    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 31                                                                                                  | 2.00                                           | 2.03 | 2.07 | 2.09 | 2.13 | 2.16 | 2.18 | 2.10 | 2.09                                                                                    | 2.02                           | 1.99 | 2.00 | 1.99 | 1.97 | 1.96 | 1.96 | 1.98                | 1.97 | 1.97 | 1.99                   | 2.02 | S    | 2.04 | 2.08  | 1.96    | 2.18    | 2.03    |      |  |      |  |  |  |  |  |  |  |  |  |
| Diurnal Maximum                                                                                         | 2.16                                           | 2.21 | 2.19 | 2.15 | 2.21 | 2.26 | 2.36 | 2.29 | 2.19                                                                                    | 2.08                           | 2.09 | 2.10 | 2.13 | 2.13 | 2.16 | 2.16 | 2.14                | 2.14 | 2.12 | 2.13                   | 2.12 | 2.10 | 2.12 | 2.15  |         |         |         |      |  |      |  |  |  |  |  |  |  |  |  |
| Diurnal Average                                                                                         | 2.01                                           | 2.01 | 2.03 | 2.04 | 2.05 | 2.06 | 2.06 | 2.04 | 2.01                                                                                    | 1.98                           | 1.97 | 1.97 | 1.96 | 1.96 | 1.96 | 1.96 | 1.96                | 1.97 | 1.97 | 1.97                   | 1.97 | 1.98 | 1.99 | 2.00  |         |         |         |      |  |      |  |  |  |  |  |  |  |  |  |
| C                                                                                                       | Monthly Calibration                            |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |                                |      |      |      |      |      | Q    | Quality Assurance   |      |      |                        |      |      |      |       |         |         |         |      |  |      |  |  |  |  |  |  |  |  |  |
| K                                                                                                       | Collection Error                               |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |                                |      |      |      |      |      | Y    | Routine Maintenance |      |      |                        |      |      |      |       |         |         |         |      |  |      |  |  |  |  |  |  |  |  |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |                                |      |      |      |      |      |      | Power Failure       |      |      |                        |      |      |      |       |         |         |         |      |  |      |  |  |  |  |  |  |  |  |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |                                |      |      |      |      |      |      |                     |      |      |                        |      |      |      |       |         |         |         |      |  |      |  |  |  |  |  |  |  |  |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |                                |      |      |      |      |      |      |                     |      |      |                        |      |      |      |       |         |         |         |      |  |      |  |  |  |  |  |  |  |  |  |

***Timeseries Chart of Hourly Average for THC - AQHI - Cadotte Lake Station***

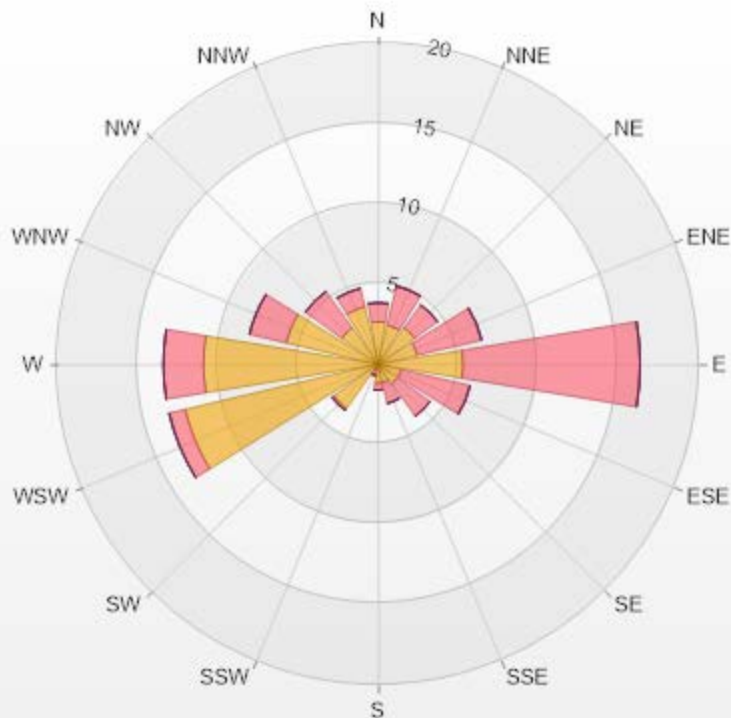






Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-THC55[ppm] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 91.40% Calm Avg: 0.00 [ppm]

| Direction | 0-2   | 2-5   | 5-10 | 10-40 | >40.0 | Total |
|-----------|-------|-------|------|-------|-------|-------|
| N         | 2.65  | 1.18  | 0    | 0     | 0     | 3.83  |
| NNE       | 2.5   | 2.5   | 0    | 0     | 0     | 5     |
| NE        | 2.79  | 1.76  | 0    | 0     | 0     | 4.55  |
| ENE       | 2.5   | 4.12  | 0    | 0     | 0     | 6.62  |
| E         | 5.29  | 11.03 | 0    | 0     | 0     | 16.32 |
| ESE       | 1.47  | 4.41  | 0    | 0     | 0     | 5.88  |
| SE        | 1.47  | 2.5   | 0    | 0     | 0     | 3.97  |
| SSE       | 1.18  | 1.32  | 0    | 0     | 0     | 2.5   |
| S         | 1.18  | 0.44  | 0    | 0     | 0     | 1.62  |
| SSW       | 0.29  | 0.44  | 0    | 0     | 0     | 0.73  |
| SW        | 3.38  | 0.15  | 0    | 0     | 0     | 3.53  |
| WSW       | 12.35 | 1.03  | 0    | 0     | 0     | 13.38 |
| W         | 10.88 | 2.5   | 0    | 0     | 0     | 13.38 |
| WNW       | 5.88  | 2.35  | 0    | 0     | 0     | 8.23  |
| NW        | 2.79  | 2.79  | 0    | 0     | 0     | 5.58  |
| NNW       | 3.68  | 1.18  | 0    | 0     | 0     | 4.86  |
| Summary   | 60.28 | 39.7  | 0    | 0     | 0     | 100   |



PRAMP-202107

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% Icon Classes (ppm)

60

0-2

40

2-5

0

5-10

0

10-40

0

>40.0



# PEACE RIVER AREA MONITORING PROGRAM

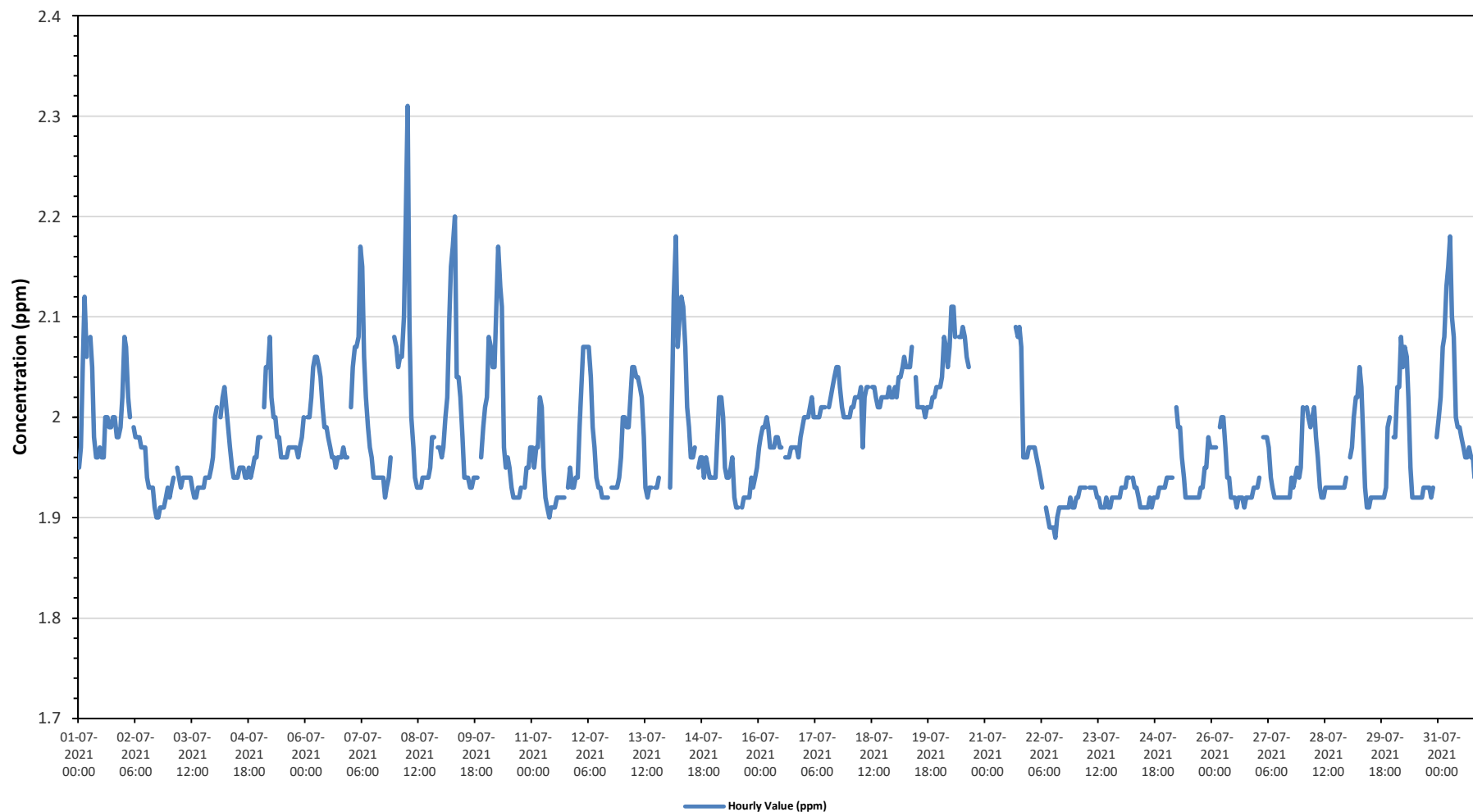
AQHI - Cadotte Lake Station - July 2021

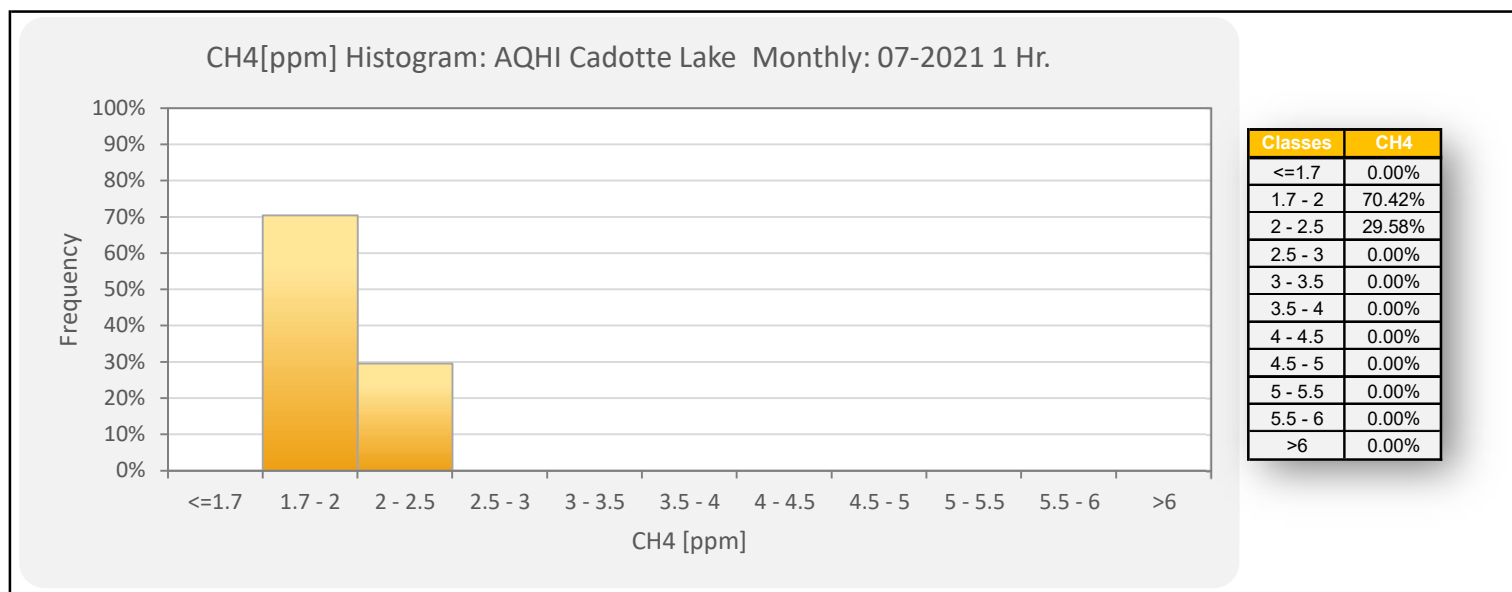
Summary of Hourly Averages

METHANE (CH4) in ppm

|                                                                                                         |                                               |      |      |      |      |      |      |                                                                                         |      |                                |      |      |      |      |                     |      |      |      |      |                        |      |               |      |               |               |               |      |      |  |      |  |  |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|------|--------------------------------|------|------|------|------|---------------------|------|------|------|------|------------------------|------|---------------|------|---------------|---------------|---------------|------|------|--|------|--|--|--|--|--|--|--|--|--|
| Maximum Hourly Value:                                                                                   |                                               |      |      |      |      |      |      |                                                                                         |      | 2.31 ppm on July 8 at hour 6   |      |      |      |      |                     |      |      |      |      | Hours in Service:      |      |               |      |               |               |               |      |      |  | 744  |  |  |  |  |  |  |  |  |  |
| Maximum Daily Value:                                                                                    |                                               |      |      |      |      |      |      |                                                                                         |      | 2.03 ppm on July 19            |      |      |      |      |                     |      |      |      |      | Hours of Data:         |      |               |      |               |               |               |      |      |  | 683  |  |  |  |  |  |  |  |  |  |
| Minimum Hourly Value:                                                                                   |                                               |      |      |      |      |      |      |                                                                                         |      | 1.88 ppm on July 22 at hour 13 |      |      |      |      |                     |      |      |      |      | Hours of Missing Data: |      |               |      |               |               |               |      |      |  | 23   |  |  |  |  |  |  |  |  |  |
| Minimum Daily Value:                                                                                    |                                               |      |      |      |      |      |      |                                                                                         |      | 1.92 ppm on July 22            |      |      |      |      |                     |      |      |      |      | Hours of Calibration:  |      |               |      |               |               |               |      |      |  | 38   |  |  |  |  |  |  |  |  |  |
| Monthly Average:                                                                                        |                                               |      |      |      |      |      |      |                                                                                         |      | 1.98 ppm                       |      |      |      |      |                     |      |      |      |      | Operational Uptime:    |      |               |      |               |               |               |      |      |  | 96.9 |  |  |  |  |  |  |  |  |  |
| Day                                                                                                     | Hourly Period Starting at (MST)               |      |      |      |      |      |      |                                                                                         |      |                                |      |      |      |      |                     |      |      |      |      |                        |      |               |      | Daily Minimum | Daily Maximum | Daily Average |      |      |  |      |  |  |  |  |  |  |  |  |  |
|                                                                                                         | 0                                             | 1    | 2    | 3    | 4    | 5    | 6    | 7                                                                                       | 8    | 9                              | 10   | 11   | 12   | 13   | 14                  | 15   | 16   | 17   | 18   | 19                     | 20   | 21            | 22   | 23            |               |               |      |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 1                                                                                                   | 1.95                                          | 1.97 | 2.05 | 2.12 | 2.06 | S    | 2.08 | 2.05                                                                                    | 1.98 | 1.96                           | 1.96 | 1.97 | 1.96 | 1.96 | 2.00                | 2.00 | 1.99 | 1.99 | 2.00 | 2.00                   | 1.98 | 1.98          | 1.99 | 2.02          | 1.95          | 2.12          | 2.00 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 2                                                                                                   | 2.08                                          | 2.07 | 2.02 | 2.00 | S    | 1.99 | 1.98 | 1.98                                                                                    | 1.98 | 1.97                           | 1.97 | 1.97 | 1.94 | 1.93 | 1.93                | 1.93 | 1.91 | 1.90 | 1.90 | 1.91                   | 1.91 | 1.91          | 1.92 | 1.93          | 1.90          | 2.08          | 1.96 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 3                                                                                                   | 1.92                                          | 1.93 | 1.94 | S    | 1.95 | 1.94 | 1.93 | 1.94                                                                                    | 1.94 | 1.94                           | 1.94 | 1.94 | 1.93 | 1.92 | 1.92                | 1.93 | 1.93 | 1.93 | 1.94 | 1.94                   | 1.94 | 1.94          | 1.95 | 1.96          | 1.92          | 1.96          | 1.94 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 4                                                                                                   | 2.00                                          | 2.01 | S    | 2.00 | 2.02 | 2.03 | 2.01 | 1.99                                                                                    | 1.97 | 1.95                           | 1.94 | 1.94 | 1.94 | 1.95 | 1.95                | 1.95 | 1.94 | 1.94 | 1.95 | 1.94                   | 1.95 | 1.96          | 1.96 | 1.98          | 1.94          | 2.03          | 1.97 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 5                                                                                                   | 1.98                                          | S    | 2.01 | 2.05 | 2.05 | 2.08 | 2.02 | 2.00                                                                                    | 2.00 | 1.98                           | 1.98 | 1.96 | 1.96 | 1.96 | 1.96                | 1.97 | 1.97 | 1.97 | 1.97 | 1.97                   | 1.96 | 1.97          | 1.98 | 2.00          | 1.96          | 2.08          | 1.99 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 6                                                                                                   | S                                             | 2.00 | 2.00 | 2.02 | 2.05 | 2.06 | 2.06 | 2.05                                                                                    | 2.04 | 2.01                           | 1.99 | 1.99 | 1.98 | 1.97 | 1.96                | 1.96 | 1.95 | 1.96 | 1.96 | 1.96                   | 1.97 | 1.96          | 1.96 | S             | 1.95          | 2.06          | 1.99 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 7                                                                                                   | 2.01                                          | 2.05 | 2.07 | 2.07 | 2.08 | 2.17 | 2.15 | 2.06                                                                                    | 2.02 | 1.99                           | 1.97 | 1.96 | 1.94 | 1.94 | 1.94                | 1.94 | 1.94 | 1.94 | 1.92 | 1.93                   | 1.94 | 1.96          | S    | 2.08          | 1.92          | 2.17          | 2.00 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 8                                                                                                   | 2.07                                          | 2.05 | 2.06 | 2.06 | 2.10 | 2.20 | 2.31 | 2.09                                                                                    | 2.00 | 1.97                           | 1.94 | 1.93 | 1.93 | 1.93 | 1.94                | 1.94 | 1.94 | 1.94 | 1.95 | 1.98                   | 1.98 | S             | 1.97 | 1.97          | 1.93          | 2.31          | 2.01 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 9                                                                                                   | 1.96                                          | 1.97 | 2.00 | 2.02 | 2.10 | 2.15 | 2.17 | 2.20                                                                                    | 2.04 | 2.04                           | 2.02 | 1.98 | 1.94 | 1.94 | 1.94                | 1.93 | 1.93 | 1.94 | 1.94 | 1.94                   | S    | 1.96          | 1.99 | 2.01          | 1.93          | 2.20          | 2.00 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 10                                                                                                  | 2.02                                          | 2.08 | 2.07 | 2.05 | 2.05 | 2.11 | 2.17 | 2.13                                                                                    | 2.11 | 1.97                           | 1.95 | 1.96 | 1.95 | 1.93 | 1.92                | 1.92 | 1.92 | 1.92 | 1.93 | S                      | 1.93 | 1.95          | 1.95 | 1.97          | 1.92          | 2.17          | 2.00 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 11                                                                                                  | 1.97                                          | 1.95 | 1.97 | 1.97 | 2.02 | 2.01 | 1.95 | 1.92                                                                                    | 1.91 | 1.90                           | 1.91 | 1.91 | 1.91 | 1.92 | 1.92                | 1.92 | 1.92 | 1.92 | S    | 1.93                   | 1.95 | 1.93          | 1.93 | 1.94          | 1.90          | 2.02          | 1.94 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 12                                                                                                  | 1.94                                          | 1.99 | 2.03 | 2.07 | 2.07 | 2.07 | 2.07 | 2.04                                                                                    | 1.99 | 1.97                           | 1.94 | 1.93 | 1.93 | 1.92 | 1.92                | 1.92 | 1.92 | S    | 1.93 | 1.93                   | 1.93 | 1.93          | 1.94 | 1.96          | 1.92          | 2.07          | 1.97 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 13                                                                                                  | 2.00                                          | 2.00 | 1.99 | 1.99 | 2.02 | 2.05 | 2.05 | 2.04                                                                                    | 2.04 | 2.03                           | 2.02 | 1.98 | 1.93 | 1.92 | 1.93                | 1.93 | S    | 1.93 | 1.93 | 1.94                   | P    | P             | P    | P             | 1.92          | 2.05          | 1.99 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 14                                                                                                  | P                                             | 1.93 | 2.03 | 2.12 | 2.18 | 2.07 | 2.10 | 2.12                                                                                    | 2.11 | 2.07                           | 2.01 | 1.99 | 1.96 | 1.96 | 1.97                | S    | 1.95 | 1.96 | 1.96 | 1.94                   | 1.96 | 1.95          | 1.94 | 1.94          | 1.93          | 2.18          | 2.01 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 15                                                                                                  | 1.94                                          | 1.94 | 1.98 | 2.02 | 2.02 | 2.00 | 1.95 | 1.94                                                                                    | 1.94 | 1.95                           | 1.96 | 1.92 | 1.91 | 1.91 | S                   | 1.91 | 1.92 | 1.92 | 1.92 | 1.92                   | 1.94 | 1.93          | 1.94 | 1.95          | 1.91          | 2.02          | 1.94 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 16                                                                                                  | 1.97                                          | 1.98 | 1.99 | 1.99 | 2.00 | 1.99 | 1.97 | 1.97                                                                                    | 1.97 | 1.98                           | 1.98 | 1.97 | 1.97 | S    | 1.96                | 1.96 | 1.96 | 1.97 | 1.97 | 1.97                   | 1.97 | 1.96          | 1.98 | 1.99          | 1.96          | 2.00          | 1.97 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 17                                                                                                  | 2.00                                          | 2.00 | 2.00 | 2.01 | 2.02 | 2.00 | 2.00 | 2.00                                                                                    | 2.00 | 2.01                           | 2.01 | 2.01 | S    | 2.01 | 2.02                | 2.03 | 2.04 | 2.05 | 2.05 | 2.03                   | 2.01 | 2.00          | 2.00 | 2.00          | 2.00          | 2.00          | 2.05 | 2.01 |  |      |  |  |  |  |  |  |  |  |  |
| Jul 18                                                                                                  | 2.00                                          | 2.01 | 2.01 | 2.02 | 2.02 | 2.02 | 2.03 | 1.97                                                                                    | 2.02 | 2.03                           | 2.03 | S    | S    | 2.03 | 2.03                | 2.02 | 2.01 | 2.01 | 2.02 | 2.02                   | 2.02 | 2.03          | 2.02 | 2.02          | 1.97          | 2.03          | 2.02 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 19                                                                                                  | 2.03                                          | 2.02 | 2.04 | 2.04 | 2.05 | 2.06 | 2.05 | 2.05                                                                                    | 2.05 | 2.07                           | S    | 2.04 | 2.01 | 2.01 | 2.01                | 2.01 | 2.00 | 2.01 | 2.01 | 2.01                   | 2.01 | 2.02          | 2.02 | 2.03          | 2.00          | 2.07          | 2.03 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 20                                                                                                  | 2.03                                          | 2.04 | 2.08 | 2.07 | 2.05 | 2.07 | 2.11 | 2.11                                                                                    | 2.08 | S                              | 2.08 | 2.08 | 2.09 | 2.08 | 2.06                | 2.05 | Y    | X    | X    | X                      | X    | X             | X    | X             | 2.03          | 2.11          | -    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 21                                                                                                  | X                                             | X    | X    | X    | X    | X    | X    | X                                                                                       | X    | X                              | C    | C    | C    | C    | C                   | C    | 2.09 | 2.08 | 2.09 | 2.07                   | 1.96 | 1.96          | 1.96 | 1.97          | 1.96          | 2.09          | -    |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 22                                                                                                  | 1.97                                          | 1.97 | 1.97 | 1.96 | 1.95 | 1.94 | 1.93 | S                                                                                       | 1.91 | 1.90                           | 1.89 | 1.89 | 1.89 | 1.88 | 1.90                | 1.91 | 1.91 | 1.91 | 1.91 | 1.91                   | 1.91 | 1.92          | 1.91 | 1.91          | 1.88          | 1.97          | 1.92 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 23                                                                                                  | 1.92                                          | 1.92 | 1.93 | 1.93 | 1.93 | 1.93 | S    | 1.93                                                                                    | 1.93 | 1.93                           | 1.93 | 1.92 | 1.92 | 1.91 | 1.91                | 1.91 | 1.92 | 1.91 | 1.91 | 1.92                   | 1.92 | 1.92          | 1.92 | 1.92          | 1.91          | 1.93          | 1.92 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 24                                                                                                  | 1.93                                          | 1.93 | 1.93 | 1.94 | 1.94 | S    | 1.94 | 1.93                                                                                    | 1.93 | 1.92                           | 1.91 | 1.91 | 1.91 | 1.91 | 1.91                | 1.92 | 1.91 | 1.92 | 1.92 | 1.92                   | 1.93 | 1.93          | 1.93 | 1.93          | 1.91          | 1.94          | 1.92 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 25                                                                                                  | 1.94                                          | 1.94 | 1.94 | 1.94 | S    | 2.01 | 1.99 | 1.99                                                                                    | 1.96 | 1.94                           | 1.92 | 1.92 | 1.92 | 1.92 | 1.92                | 1.92 | 1.92 | 1.93 | 1.93 | 1.95                   | 1.95 | 1.98          | 1.97 | 1.92          | 2.01          | 1.94          |      |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 26                                                                                                  | 1.97                                          | 1.97 | 1.97 | S    | 1.99 | 2.00 | 2.00 | 1.97                                                                                    | 1.94 | 1.94                           | 1.92 | 1.92 | 1.92 | 1.91 | 1.92                | 1.92 | 1.92 | 1.91 | 1.92 | 1.92                   | 1.92 | 1.92          | 1.93 | 1.93          | 1.91          | 2.00          | 1.94 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 27                                                                                                  | 1.93                                          | 1.94 | S    | 1.98 | 1.98 | 1.98 | 1.97 | 1.94                                                                                    | 1.93 | 1.92                           | 1.92 | 1.92 | 1.92 | 1.92 | 1.92                | 1.92 | 1.92 | 1.92 | 1.94 | 1.93                   | 1.94 | 1.95          | 1.94 | 1.95          | 1.92          | 1.98          | 1.94 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 28                                                                                                  | 2.01                                          | S    | 2.01 | 2.00 | 1.99 | 2.00 | 2.01 | 1.98                                                                                    | 1.96 | 1.93                           | 1.92 | 1.92 | 1.93 | 1.93 | 1.93                | 1.93 | 1.93 | 1.93 | 1.93 | 1.93                   | 1.93 | 1.93          | 1.93 | 1.94          | 1.92          | 2.01          | 1.95 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 29                                                                                                  | S                                             | 1.96 | 1.97 | 2.00 | 2.02 | 2.02 | 2.05 | 2.03                                                                                    | 1.98 | 1.93                           | 1.91 | 1.91 | 1.92 | 1.92 | 1.92                | 1.92 | 1.92 | 1.92 | 1.92 | 1.92                   | 1.93 | 1.99          | 2.00 | S             | 1.91          | 2.05          | 1.96 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 30                                                                                                  | 1.98                                          | 1.98 | 2.03 | 2.03 | 2.08 | 2.05 | 2.07 | 2.06                                                                                    | 2.02 | 1.95                           | 1.92 | 1.92 | 1.92 | 1.92 | 1.92                | 1.92 | 1.93 | 1.93 | 1.93 | 1.93                   | 1.92 | 1.93          | S    | 1.98          | 1.92          | 2.08          | 1.97 |      |  |      |  |  |  |  |  |  |  |  |  |
| Jul 31                                                                                                  | 2.00                                          | 2.02 | 2.07 | 2.08 | 2.13 | 2.15 | 2.18 | 2.10                                                                                    | 2.08 | 2.00                           | 1.99 | 1.99 | 1.98 | 1.97 | 1.96                | 1.96 | 1.97 | 1.96 | 1.96 | 1.94                   | 1.94 | S             | 1.97 | 2.01          | 1.94          | 2.18          | 2.02 |      |  |      |  |  |  |  |  |  |  |  |  |
| Diurnal Maximum                                                                                         | 2.08                                          | 2.08 | 2.08 | 2.12 | 2.18 | 2.20 | 2.31 | 2.20                                                                                    | 2.11 | 2.07                           | 2.08 | 2.08 | 2.09 | 2.08 | 2.06                | 2.05 | 2.09 | 2.08 | 2.09 | 2.07                   | 2.02 | 2.03          | 2.03 | 2.08          |               |               |      |      |  |      |  |  |  |  |  |  |  |  |  |
| Diurnal Average                                                                                         | 1.98                                          | 1.99 | 2.01 | 2.02 | 2.03 | 2.04 | 2.04 | 2.02                                                                                    | 1.99 | 1.97                           | 1.96 | 1.95 | 1.95 | 1.94 | 1.95                | 1.95 | 1.95 | 1.95 | 1.95 | 1.95                   | 1.95 | 1.95          | 1.96 | 1.97          |               |               |      |      |  |      |  |  |  |  |  |  |  |  |  |
| C                                                                                                       | Monthly Calibration                           |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |                                |      |      |      | Q    | Quality Assurance   |      |      |      |      |                        |      |               |      |               |               |               |      |      |  |      |  |  |  |  |  |  |  |  |  |
| K                                                                                                       | Collection Error                              |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |                                |      |      |      | Y    | Routine Maintenance |      |      |      |      |                        | P    | Power Failure |      |               |               |               |      |      |  |      |  |  |  |  |  |  |  |  |  |
| X                                                                                                       | InValid Data (Equipment Malfunction/Recovery) |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |                                |      |      |      |      |                     |      |      |      |      |                        |      |               |      |               |               |               |      |      |  |      |  |  |  |  |  |  |  |  |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                               |      |      |      |      |      |      |                                                                                         |      |                                |      |      |      |      |                     |      |      |      |      |                        |      |               |      |               |               |               |      |      |  |      |  |  |  |  |  |  |  |  |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                               |      |      |      |      |      |      |                                                                                         |      |                                |      |      |      |      |                     |      |      |      |      |                        |      |               |      |               |               |               |      |      |  |      |  |  |  |  |  |  |  |  |  |

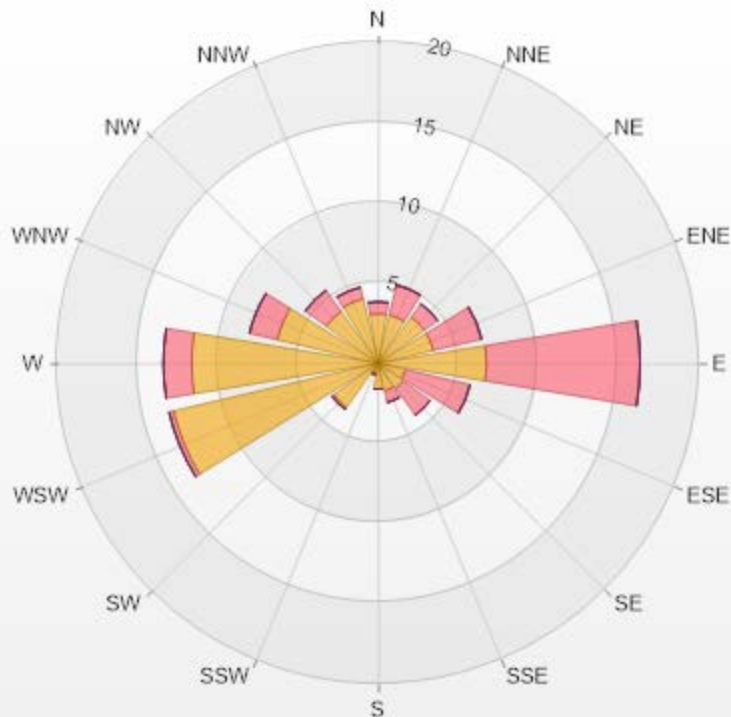
***Timeseries Chart of Hourly Average for CH4 - AQHI - Cadotte Lake Station***





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-CH4[ppm] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 91.40% Calm Avg: 0.00 [ppm]

| Direction | 0-2   | 2-5   | 5-10 | 10-20 | >20.0 | Total |
|-----------|-------|-------|------|-------|-------|-------|
| N         | 3.09  | 0.74  | 0    | 0     | 0     | 3.83  |
| NNE       | 3.09  | 1.91  | 0    | 0     | 0     | 5     |
| NE        | 3.53  | 1.03  | 0    | 0     | 0     | 4.56  |
| ENE       | 3.53  | 3.09  | 0    | 0     | 0     | 6.62  |
| E         | 6.76  | 9.56  | 0    | 0     | 0     | 16.32 |
| ESE       | 1.76  | 4.12  | 0    | 0     | 0     | 5.88  |
| SE        | 1.91  | 2.06  | 0    | 0     | 0     | 3.97  |
| SSE       | 1.76  | 0.74  | 0    | 0     | 0     | 2.5   |
| S         | 1.62  | 0     | 0    | 0     | 0     | 1.62  |
| SSW       | 0.59  | 0.15  | 0    | 0     | 0     | 0.74  |
| SW        | 3.38  | 0.15  | 0    | 0     | 0     | 3.53  |
| WSW       | 13.09 | 0.29  | 0    | 0     | 0     | 13.38 |
| W         | 11.62 | 1.76  | 0    | 0     | 0     | 13.38 |
| WNW       | 6.47  | 1.76  | 0    | 0     | 0     | 8.23  |
| NW        | 3.97  | 1.62  | 0    | 0     | 0     | 5.59  |
| NNW       | 4.12  | 0.74  | 0    | 0     | 0     | 4.86  |
| Summary   | 70.29 | 29.72 | 0    | 0     | 0     | 100   |



PRAMP-202107

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# PEACE RIVER AREA MONITORING PROGRAM

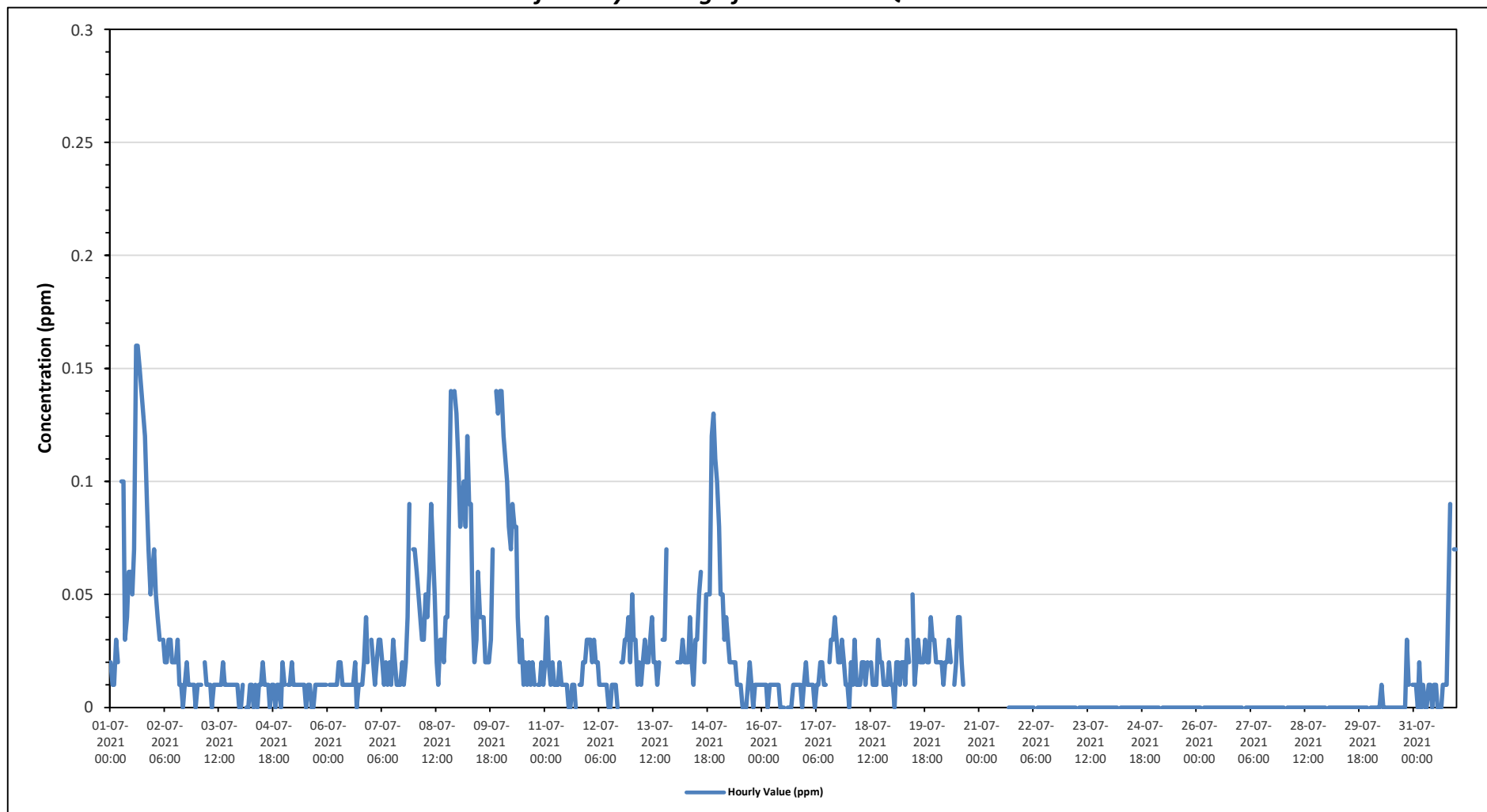
AQHI - Cadotte Lake Station - July 2021

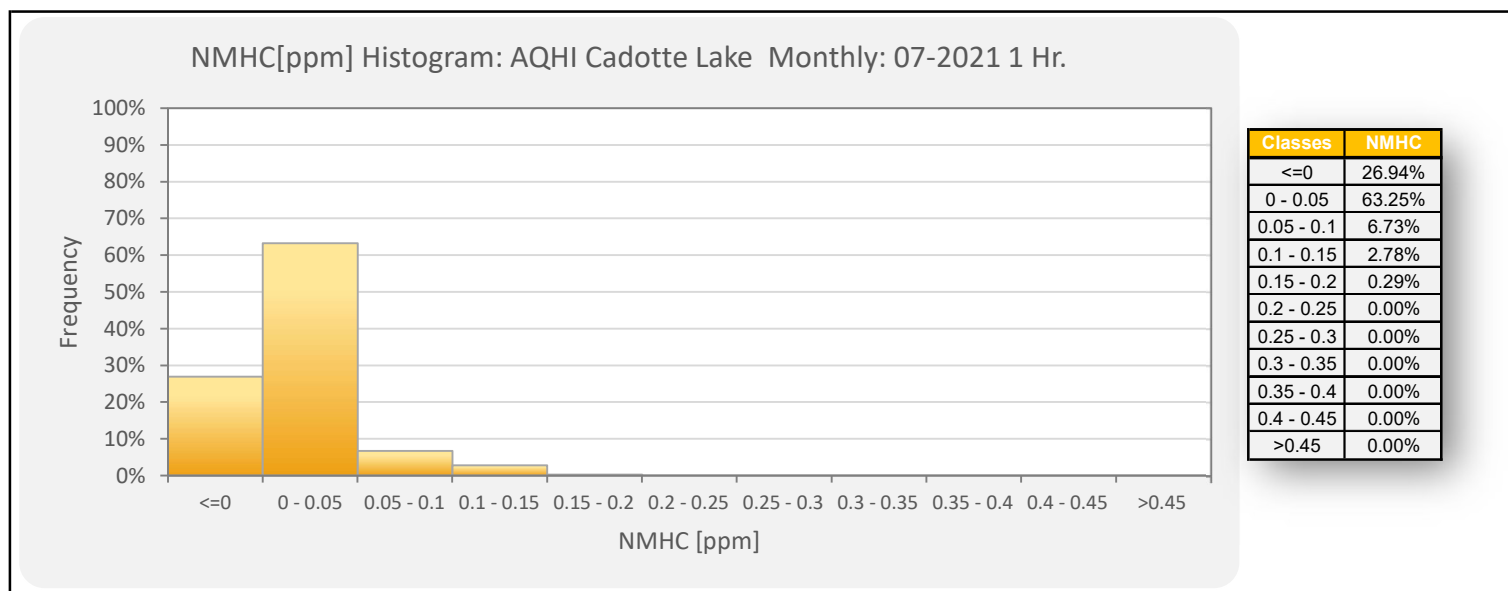
Summary of Hourly Averages

## NON-METHANE HYDROCARBONS (NMHC) in ppm

|                                                                                                         |                                               |      |      |      |      |      |      |      |                                                                                         |                               |      |      |      |      |      |      |                     |      |      |                        |      |      |      |       |         |         |         |  |  |      |  |  |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|-------------------------------|------|------|------|------|------|------|---------------------|------|------|------------------------|------|------|------|-------|---------|---------|---------|--|--|------|--|--|--|--|--|--|--|--|--|
| Maximum Hourly Value:                                                                                   |                                               |      |      |      |      |      |      |      |                                                                                         | 0.16 ppm on July 1 at hour 14 |      |      |      |      |      |      |                     |      |      | Hours in Service:      |      |      |      |       |         |         |         |  |  | 744  |  |  |  |  |  |  |  |  |  |
| Maximum Daily Value:                                                                                    |                                               |      |      |      |      |      |      |      |                                                                                         | 0.08 ppm on July 1            |      |      |      |      |      |      |                     |      |      | Hours of Data:         |      |      |      |       |         |         |         |  |  | 683  |  |  |  |  |  |  |  |  |  |
| Minimum Hourly Value:                                                                                   |                                               |      |      |      |      |      |      |      |                                                                                         | 0.00 ppm on July 2 at hour 16 |      |      |      |      |      |      |                     |      |      | Hours of Missing Data: |      |      |      |       |         |         |         |  |  | 23   |  |  |  |  |  |  |  |  |  |
| Minimum Daily Value:                                                                                    |                                               |      |      |      |      |      |      |      |                                                                                         | 0.00 ppm on July 22           |      |      |      |      |      |      |                     |      |      | Hours of Calibration:  |      |      |      |       |         |         |         |  |  | 38   |  |  |  |  |  |  |  |  |  |
| Monthly Average:                                                                                        |                                               |      |      |      |      |      |      |      |                                                                                         | 0.02 ppm                      |      |      |      |      |      |      |                     |      |      | Operational Uptime:    |      |      |      |       |         |         |         |  |  | 96.9 |  |  |  |  |  |  |  |  |  |
| Day                                                                                                     | Hourly Period Starting at (MST)               |      |      |      |      |      |      |      |                                                                                         |                               |      |      |      |      |      |      |                     |      |      |                        |      |      |      | Daily | Daily   | Daily   |         |  |  |      |  |  |  |  |  |  |  |  |  |
|                                                                                                         | 0                                             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8                                                                                       | 9                             | 10   | 11   | 12   | 13   | 14   | 15   | 16                  | 17   | 18   | 19                     | 20   | 21   | 22   | 23    | Minimum | Maximum | Average |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 1                                                                                                   | 0.02                                          | 0.01 | 0.01 | 0.03 | 0.02 | S    | 0.10 | 0.10 | 0.03                                                                                    | 0.04                          | 0.06 | 0.06 | 0.05 | 0.07 | 0.16 | 0.16 | 0.15                | 0.14 | 0.13 | 0.12                   | 0.09 | 0.07 | 0.05 | 0.06  | 0.01    | 0.16    | 0.08    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 2                                                                                                   | 0.07                                          | 0.05 | 0.04 | 0.03 | S    | 0.03 | 0.02 | 0.02 | 0.03                                                                                    | 0.03                          | 0.02 | 0.02 | 0.02 | 0.03 | 0.01 | 0.01 | 0.00                | 0.01 | 0.02 | 0.01                   | 0.01 | 0.01 | 0.01 | 0.00  | 0.00    | 0.07    | 0.02    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 3                                                                                                   | 0.01                                          | 0.01 | 0.01 | S    | 0.02 | 0.01 | 0.01 | 0.01 | 0.00                                                                                    | 0.01                          | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01                | 0.01 | 0.01 | 0.01                   | 0.01 | 0.01 | 0.01 | 0.00  | 0.00    | 0.02    | 0.01    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 4                                                                                                   | 0.00                                          | 0.01 | S    | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01                                                                                    | 0.00                          | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.00                | 0.01 | 0.01 | 0.00                   | 0.01 | 0.01 | 0.00 | 0.02  | 0.00    | 0.02    | 0.01    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 5                                                                                                   | 0.01                                          | S    | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01                                                                                    | 0.01                          | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00                | 0.01 | 0.01 | 0.01                   | 0.01 | 0.01 | 0.01 | 0.01  | 0.00    | 0.02    | 0.01    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 6                                                                                                   | S                                             | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.01                                                                                    | 0.01                          | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.00                | 0.01 | 0.01 | 0.01                   | 0.02 | 0.04 | 0.02 | S     | 0.00    | 0.04    | 0.01    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 7                                                                                                   | 0.03                                          | 0.02 | 0.01 | 0.02 | 0.03 | 0.03 | 0.02 | 0.01 | 0.02                                                                                    | 0.01                          | 0.02 | 0.01 | 0.03 | 0.02 | 0.01 | 0.01 | 0.01                | 0.02 | 0.01 | 0.02                   | 0.04 | 0.09 | S    | 0.07  | 0.01    | 0.09    | 0.02    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 8                                                                                                   | 0.07                                          | 0.06 | 0.05 | 0.04 | 0.03 | 0.03 | 0.05 | 0.04 | 0.06                                                                                    | 0.09                          | 0.07 | 0.05 | 0.02 | 0.01 | 0.03 | 0.03 | 0.02                | 0.04 | 0.04 | 0.09                   | 0.14 | S    | 0.14 | 0.13  | 0.01    | 0.14    | 0.06    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 9                                                                                                   | 0.11                                          | 0.08 | 0.09 | 0.10 | 0.08 | 0.12 | 0.09 | 0.09 | 0.04                                                                                    | 0.02                          | 0.03 | 0.06 | 0.04 | 0.04 | 0.04 | 0.02 | 0.02                | 0.02 | 0.03 | 0.07                   | S    | 0.14 | 0.13 | 0.14  | 0.02    | 0.14    | 0.07    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 10                                                                                                  | 0.14                                          | 0.12 | 0.11 | 0.10 | 0.08 | 0.07 | 0.09 | 0.08 | 0.08                                                                                    | 0.04                          | 0.02 | 0.03 | 0.01 | 0.02 | 0.01 | 0.02 | 0.01                | 0.02 | 0.01 | S                      | 0.01 | 0.01 | 0.02 | 0.01  | 0.01    | 0.14    | 0.05    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 11                                                                                                  | 0.02                                          | 0.04 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.02                                                                                    | 0.01                          | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.01                | 0.00 | S    | 0.01                   | 0.01 | 0.02 | 0.02 | 0.03  | 0.00    | 0.04    | 0.01    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 12                                                                                                  | 0.03                                          | 0.03 | 0.02 | 0.03 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01                                                                                    | 0.01                          | 0.01 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.00                | S    | 0.02 | 0.02                   | 0.03 | 0.03 | 0.04 | 0.02  | 0.00    | 0.04    | 0.02    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 13                                                                                                  | 0.05                                          | 0.03 | 0.03 | 0.01 | 0.02 | 0.01 | 0.02 | 0.03 | 0.02                                                                                    | 0.02                          | 0.03 | 0.04 | 0.02 | 0.02 | 0.01 | 0.02 | S                   | 0.03 | 0.03 | 0.07                   | P    | P    | P    | P     | 0.01    | 0.07    | 0.03    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 14                                                                                                  | P                                             | 0.02 | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 | 0.02 | 0.04                                                                                    | 0.02                          | 0.01 | 0.03 | 0.03 | 0.05 | 0.06 | S    | 0.02                | 0.05 | 0.05 | 0.05                   | 0.12 | 0.13 | 0.11 | 0.10  | 0.01    | 0.13    | 0.05    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 15                                                                                                  | 0.08                                          | 0.05 | 0.05 | 0.03 | 0.04 | 0.03 | 0.02 | 0.02 | 0.02                                                                                    | 0.02                          | 0.01 | 0.01 | 0.01 | 0.00 | S    | 0.00 | 0.01                | 0.02 | 0.01 | 0.00                   | 0.01 | 0.01 | 0.01 | 0.01  | 0.00    | 0.08    | 0.02    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 16                                                                                                  | 0.01                                          | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01                                                                                    | 0.01                          | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00                | 0.01 | 0.01 | 0.01                   | 0.01 | 0.01 | 0.00 | 0.01  | 0.00    | 0.01    | 0.01    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 17                                                                                                  | 0.02                                          | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 0.02                                                                                    | 0.02                          | 0.01 | 0.01 | S    | 0.02 | 0.03 | 0.03 | 0.04                | 0.03 | 0.02 | 0.02                   | 0.03 | 0.02 | 0.01 | 0.01  | 0.00    | 0.04    | 0.02    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 18                                                                                                  | 0.00                                          | 0.02 | 0.01 | 0.03 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02                                                                                    | 0.01                          | 0.02 | 0.01 | S    | 0.02 | 0.01 | 0.01 | 0.03                | 0.02 | 0.02 | 0.01                   | 0.01 | 0.01 | 0.02 | 0.01  | 0.00    | 0.03    | 0.01    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 19                                                                                                  | 0.01                                          | 0.00 | 0.02 | 0.02 | 0.01 | 0.02 | 0.02 | 0.01 | 0.03                                                                                    | 0.02                          | S    | 0.05 | 0.01 | 0.02 | 0.03 | 0.02 | 0.02                | 0.02 | 0.03 | 0.02                   | 0.02 | 0.04 | 0.03 | 0.03  | 0.00    | 0.05    | 0.02    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 20                                                                                                  | 0.02                                          | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 | 0.02 | 0.03 | 0.02                                                                                    | S                             | 0.01 | 0.02 | 0.04 | 0.04 | 0.02 | 0.01 | Y                   | X    | X    | X                      | X    | X    | X    | X     | 0.01    | 0.04    | -       |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 21                                                                                                  | X                                             | X    | X    | X    | X    | X    | X    | X    | X                                                                                       | X                             | C    | C    | C    | C    | C    | C    | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00  | 0.00    | 0.00    | -       |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 22                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00                                                                                    | 0.00                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00  | 0.00    | 0.00    | 0.00    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 23                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00                                                                                    | 0.00                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00  | 0.00    | 0.00    | 0.00    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 24                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00                                                                                    | 0.00                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00  | 0.00    | 0.00    | 0.00    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 25                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00  | 0.00    | 0.00    | 0.00    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 26                                                                                                  | 0.00                                          | 0.00 | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00  | 0.00    | 0.00    | 0.00    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 27                                                                                                  | 0.00                                          | 0.00 | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00  | 0.00    | 0.00    | 0.00    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 28                                                                                                  | 0.00                                          | S    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | 0.00  | 0.00    | 0.00    | 0.00    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 29                                                                                                  | S                                             | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                                                                                    | 0.00                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.00 | 0.00 | 0.00 | S     | 0.00    | 0.00    | 0.00    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 30                                                                                                  | 0.00                                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00                                                                                    | 0.00                          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00                | 0.00 | 0.00 | 0.00                   | 0.03 | 0.01 | S    | 0.01  | 0.00    | 0.03    | 0.00    |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 31                                                                                                  | 0.01                                          | 0.01 | 0.00 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01                                                                                    | 0.01                          | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01                | 0.01 | 0.01 | 0.05                   | 0.09 | S    | 0.07 | 0.07  | 0.00    | 0.09    | 0.02    |  |  |      |  |  |  |  |  |  |  |  |  |
| Diurnal Maximum                                                                                         | 0.14                                          | 0.12 | 0.11 | 0.10 | 0.08 | 0.12 | 0.10 | 0.10 | 0.08                                                                                    | 0.09                          | 0.07 | 0.06 | 0.05 | 0.07 | 0.16 | 0.16 | 0.15                | 0.14 | 0.13 | 0.12                   | 0.14 | 0.14 | 0.14 | 0.14  |         |         |         |  |  |      |  |  |  |  |  |  |  |  |  |
| Diurnal Average                                                                                         | 0.03                                          | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02                                                                                    | 0.01                          | 0.01 | 0.02 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01                | 0.02 | 0.02 | 0.02                   | 0.03 | 0.02 | 0.03 | 0.03  |         |         |         |  |  |      |  |  |  |  |  |  |  |  |  |
| C                                                                                                       | Monthly Calibration                           |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |                               |      |      |      |      |      | Q    | Quality Assurance   |      |      |                        |      |      |      |       |         |         |         |  |  |      |  |  |  |  |  |  |  |  |  |
| K                                                                                                       | Collection Error                              |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |                               |      |      |      |      |      | Y    | Routine Maintenance |      |      |                        |      |      |      |       |         |         |         |  |  |      |  |  |  |  |  |  |  |  |  |
| X                                                                                                       | InValid Data (Equipment Malfunction/Recovery) |      |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |                               |      |      |      |      |      |      | Power Failure       |      |      |                        |      |      |      |       |         |         |         |  |  |      |  |  |  |  |  |  |  |  |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                               |      |      |      |      |      |      |      |                                                                                         |                               |      |      |      |      |      |      |                     |      |      |                        |      |      |      |       |         |         |         |  |  |      |  |  |  |  |  |  |  |  |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                               |      |      |      |      |      |      |      |                                                                                         |                               |      |      |      |      |      |      |                     |      |      |                        |      |      |      |       |         |         |         |  |  |      |  |  |  |  |  |  |  |  |  |

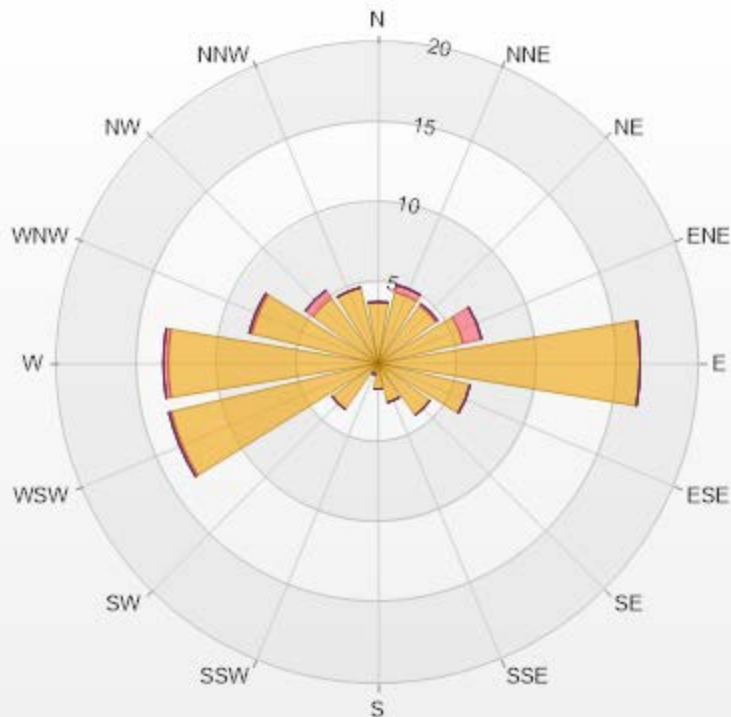
*Timeseries Chart of Hourly Average for NMHC - AQHI - Cadotte Lake Station*





Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-NMHC[ppm] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 91.40% Calm Avg: 0.00 [ppm]

| Direction | 0-0.1 | 0.1-0.3 | 0.3-0.9 | 0.9-2 | >2.0 | Total |
|-----------|-------|---------|---------|-------|------|-------|
| N         | 3.82  | 0       | 0       | 0     | 0    | 3.82  |
| NNE       | 4.56  | 0.44    | 0       | 0     | 0    | 5     |
| NE        | 4.41  | 0.15    | 0       | 0     | 0    | 4.56  |
| ENE       | 5.44  | 1.18    | 0       | 0     | 0    | 6.62  |
| E         | 16.32 | 0       | 0       | 0     | 0    | 16.32 |
| ESE       | 5.88  | 0       | 0       | 0     | 0    | 5.88  |
| SE        | 3.97  | 0       | 0       | 0     | 0    | 3.97  |
| SSE       | 2.5   | 0       | 0       | 0     | 0    | 2.5   |
| S         | 1.62  | 0       | 0       | 0     | 0    | 1.62  |
| SSW       | 0.59  | 0.15    | 0       | 0     | 0    | 0.74  |
| SW        | 3.53  | 0       | 0       | 0     | 0    | 3.53  |
| WSW       | 13.24 | 0.15    | 0       | 0     | 0    | 13.39 |
| W         | 13.09 | 0.29    | 0       | 0     | 0    | 13.38 |
| WNW       | 8.09  | 0.15    | 0       | 0     | 0    | 8.24  |
| NW        | 5     | 0.59    | 0       | 0     | 0    | 5.59  |
| NNW       | 4.85  | 0       | 0       | 0     | 0    | 4.85  |
| Summary   | 96.91 | 3.1     | 0       | 0     | 0    | 100   |



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% Icon Classes (ppm)

97 0-0.1

3 0.1-0.3

0 0.3-0.9

0 0.9-2

0 >2.0



# PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - July 2021

Summary of Hourly Averages

PARTICULATE MATTER 2.5 (PM<sub>2.5</sub>) in µg/m<sup>3</sup>

Alberta Ambient Air Quality Guidelines (AAAQG): 1-Hour 80 µg/m<sup>3</sup>, Alberta Ambient Air Quality Objectives (AAAQO): 24-Hour 29 µg/m<sup>3</sup>

Number of 1-Hour Exceedances: 17      Number of 24-Hour Exceedances: 7

|                       |                                             |                        |      |
|-----------------------|---------------------------------------------|------------------------|------|
| Maximum Hourly Value: | 154 µg/m <sup>3</sup> on July 17 at hour 17 | Hours in Service:      | 744  |
| Maximum Daily Value:  | 63.3 µg/m <sup>3</sup> on July 18           | Hours of Data:         | 578  |
| Minimum Hourly Value: | 1 µg/m <sup>3</sup> on July 16 at hour 5    | Hours of Missing Data: | 165  |
| Minimum Daily Value:  | 3.4 µg/m <sup>3</sup> on July 16            | Hours of Calibration:  | 1    |
| Monthly Average:      | 20.7 µg/m <sup>3</sup>                      | Operational Uptime:    | 77.8 |

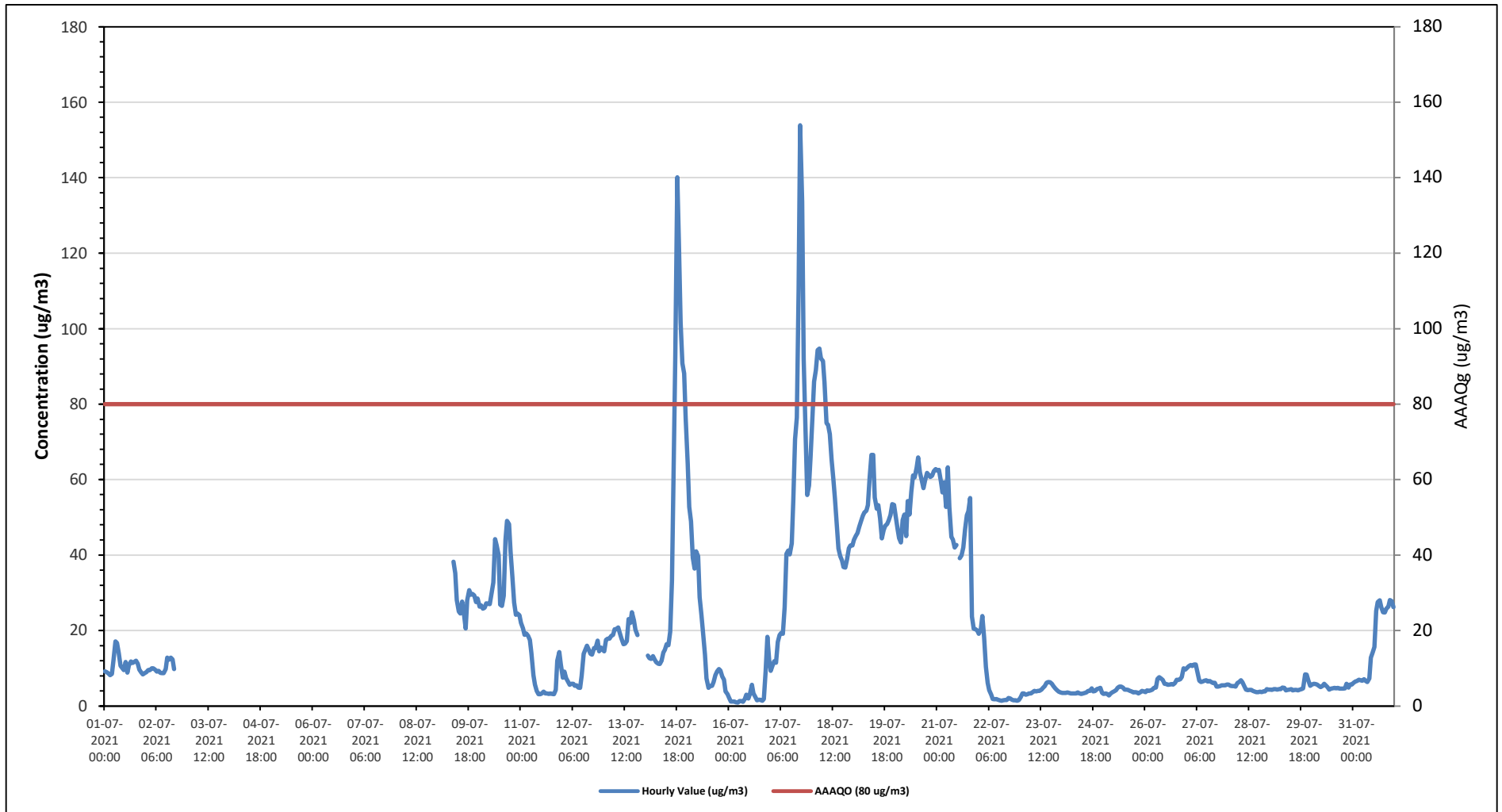
| Day    | Hourly Period Starting at (MST) |    |     |     |     |    |      |      |    |      |      |     |      |     |      |      |      |      |     |      |     |     |     | Daily Minimum | Daily Maximum | Daily Average |      |   |
|--------|---------------------------------|----|-----|-----|-----|----|------|------|----|------|------|-----|------|-----|------|------|------|------|-----|------|-----|-----|-----|---------------|---------------|---------------|------|---|
|        | 0                               | 1  | 2   | 3   | 4   | 5  | 6    | 7    | 8  | 9    | 10   | 11  | 12   | 13  | 14   | 15   | 16   | 17   | 18  | 19   | 20  | 21  | 22  | 23            |               |               |      |   |
| Jul 1  | 9.2                             | 9  | 8.6 | 8.2 | 8.5 | 12 | 17.1 | 16.7 | 14 | 10.7 | 10.1 | 9.5 | 11.7 | 8.9 | 10.8 | 11.8 | 11.4 | 11.7 | 12  | 11.2 | 9.7 | 8.9 | 8.4 | 8.7           | 8             | 17            | 10.8 |   |
| Jul 2  | 9                               | 10 | 10  | 10  | 10  | 10 | 9    | 9    | 9  | 9    | 9    | 10  | 13   | 12  | 13   | 12   | 10   | X    | X   | X    | X   | X   | X   | X             | 9             | 13            | -    |   |
| Jul 3  | X                               | X  | X   | X   | X   | X  | X    | X    | X  | X    | X    | X   | X    | X   | X    | X    | X    | X    | X   | X    | X   | X   | X   | X             | -             | -             | -    |   |
| Jul 4  | X                               | X  | X   | X   | X   | X  | X    | X    | X  | X    | X    | X   | X    | X   | X    | X    | X    | X    | X   | X    | X   | X   | X   | X             | -             | -             | -    |   |
| Jul 5  | X                               | X  | X   | X   | X   | X  | X    | X    | X  | X    | X    | X   | X    | X   | X    | X    | X    | X    | X   | X    | X   | X   | X   | X             | -             | -             | -    |   |
| Jul 6  | X                               | X  | X   | X   | X   | X  | X    | X    | X  | X    | X    | X   | X    | X   | X    | X    | X    | X    | X   | X    | X   | X   | X   | X             | -             | -             | -    |   |
| Jul 7  | X                               | X  | X   | X   | X   | X  | X    | X    | X  | X    | X    | X   | X    | X   | X    | X    | X    | X    | X   | X    | X   | X   | X   | X             | -             | -             | -    |   |
| Jul 8  | X                               | X  | X   | X   | X   | X  | X    | X    | X  | X    | X    | X   | X    | X   | X    | X    | X    | X    | X   | X    | X   | X   | X   | X             | -             | -             | -    |   |
| Jul 9  | X                               | X  | X   | X   | X   | X  | X    | X    | X  | X    | 38   | 35  | 28   | 25  | 25   | 28   | 25   | 21   | 28  | 31   | 30  | 30  | 29  | 28            | 29            | 21            | 38   | - |
| Jul 10 | 26                              | 27 | 26  | 26  | 27  | 27 | 27   | 30   | 33 | 44   | 43   | 40  | 27   | 27  | 29   | 44   | 49   | 48   | 41  | 34   | 27  | 24  | 25  | 24            | 24            | 49            | 32.3 |   |
| Jul 11 | 22                              | 21 | 19  | 19  | 19  | 18 | 14   | 8    | 6  | 4    | 3    | 3   | 3    | 4   | 3    | 3    | 3    | 3    | 3   | 3    | 4   | 12  | 14  | 11            | 3             | 22            | 9.3  |   |
| Jul 12 | 8                               | 9  | 7   | 7   | 6   | 6  | 6    | 5    | 6  | 5    | 5    | 8   | 14   | 15  | 16   | 15   | 14   | 14   | 15  | 15   | 17  | 15  | 16  | 15            | 5             | 17            | 10.7 |   |
| Jul 13 | 15                              | 18 | 18  | 18  | 19  | 19 | 20   | 20   | 21 | 19   | 18   | 16  | 17   | 17  | 23   | 22   | 25   | 23   | 20  | 19   | P   | P   | P   | P             | 15            | 25            | 19.3 |   |
| Jul 14 | P                               | 13 | 13  | 13  | 13  | 12 | 12   | 11   | 11 | 12   | 14   | 15  | 16   | 16  | 20   | 33   | 65   | 92   | 140 | 123  | 102 | 91  | 88  | 76            | 11            | 140           | 43.6 |   |
| Jul 15 | 64                              | 53 | 49  | 39  | 36  | 41 | 40   | 29   | 24 | 19   | 14   | 7   | 5    | 5   | 5    | 6    | 8    | 9    | 10  | 9    | 8   | 7   | 4   | 3             | 3             | 64            | 20.7 |   |
| Jul 16 | 2                               | 1  | 1   | 1   | 1   | 1  | 1    | 1    | 1  | 2    | 3    | 2   | 3    | 6   | 3    | 3    | 2    | 2    | 2   | 1    | 2   | 9   | 18  | 12            | 1             | 18            | 3.4  |   |
| Jul 17 | 9                               | 11 | 12  | 12  | 17  | 19 | 19   | 19   | 26 | 40   | 41   | 40  | 43   | 54  | 71   | 76   | 110  | 154  | 134 | 92   | 74  | 56  | 58  | 66            | 9             | 154           | 52.2 |   |
| Jul 18 | 77                              | 86 | 89  | 94  | 95  | 92 | 91   | 86   | 75 | 75   | 72   | 65  | 60   | 55  | 48   | 42   | 40   | 39   | 37  | 37   | 39  | 42  | 43  | 43            | 37            | 95            | 63.3 |   |
| Jul 19 | 44                              | 45 | 46  | 48  | 49  | 50 | 51   | 52   | 53 | 61   | 67   | 67  | 55   | 52  | 53   | 50   | 44   | 47   | 48  | 48   | 49  | 51  | 54  | 53            | 44            | 67            | 51.5 |   |
| Jul 20 | 51                              | 47 | 45  | 43  | 49  | 51 | 45   | 54   | 51 | 57   | 61   | 61  | 63   | 66  | 62   | 60   | 58   | 60   | 62  | 61   | 61  | 61  | 62  | 63            | 43            | 66            | 56.3 |   |
| Jul 21 | 62                              | 63 | 59  | 57  | 59  | 53 | 63   | 53   | 45 | 44   | 42   | 43  | C    | 39  | 40   | 42   | 47   | 51   | 52  | 55   | 24  | 21  | 20  | 20            | 20            | 63            | 45.8 |   |
| Jul 22 | 19                              | 20 | 24  | 18  | 10  | 6  | 4    | 3    | 2  | 2    | 2    | 2   | 2    | 1   | 2    | 2    | 2    | 2    | 2   | 2    | 2   | 2   | 1   | 2             | 1             | 24            | 5.5  |   |
| Jul 23 | 2                               | 3  | 3   | 3   | 3   | 3  | 3    | 4    | 4  | 4    | 4    | 4   | 4    | 5   | 5    | 6    | 6    | 6    | 6   | 5    | 5   | 4   | 4   | 4             | 2             | 6             | 4.3  |   |
| Jul 24 | 4                               | 4  | 4   | 4   | 4   | 3  | 3    | 3    | 3  | 4    | 3    | 3   | 3    | 4   | 4    | 4    | 4    | 5    | 4   | 4    | 5   | 5   | 5   | 4             | 3             | 5             | 3.7  |   |
| Jul 25 | 3                               | 3  | 3   | 3   | 3   | 4  | 4    | 4    | 5  | 5    | 5    | 5   | 4    | 4   | 4    | 4    | 4    | 4    | 4   | 4    | 3   | 4   | 4   | 4             | 3             | 5             | 3.9  |   |
| Jul 26 | 4                               | 4  | 4   | 4   | 4   | 5  | 5    | 7    | 8  | 7    | 7    | 6   | 6    | 6   | 6    | 6    | 6    | 6    | 7   | 7    | 7   | 8   | 10  | 10            | 4             | 10            | 6.2  |   |
| Jul 27 | 10                              | 11 | 11  | 11  | 11  | 11 | 9    | 7    | 6  | 7    | 7    | 7   | 7    | 7   | 6    | 6    | 6    | 5    | 5   | 5    | 6   | 6   | 6   | 6             | 5             | 11            | 7.3  |   |
| Jul 28 | 6                               | 5  | 5   | 5   | 5   | 6  | 6    | 7    | 6  | 5    | 4    | 4   | 4    | 4   | 4    | 4    | 4    | 4    | 4   | 4    | 4   | 4   | 5   | 4             | 4             | 7             | 4.8  |   |
| Jul 29 | 4                               | 4  | 5   | 5   | 4   | 5  | 5    | 5    | 5  | 4    | 4    | 4   | 5    | 4   | 4    | 4    | 4    | 4    | 5   | 5    | 8   | 8   | 7   | 5             | 4             | 8             | 4.9  |   |
| Jul 30 | 6                               | 6  | 6   | 6   | 5   | 5  | 5    | 6    | 6  | 5    | 4    | 5   | 5    | 5   | 5    | 5    | 5    | 5    | 5   | 5    | 6   | 5   | 6   | 6             | 4             | 6             | 5.2  |   |
| Jul 31 | 6                               | 7  | 7   | 7   | 7   | 7  | 7    | 7    | 6  | 7    | 13   | 14  | 16   | 25  | 28   | 28   | 26   | 25   | 25  | 26   | 26  | 28  | 28  | 26            | 6             | 28            | 16.7 |   |

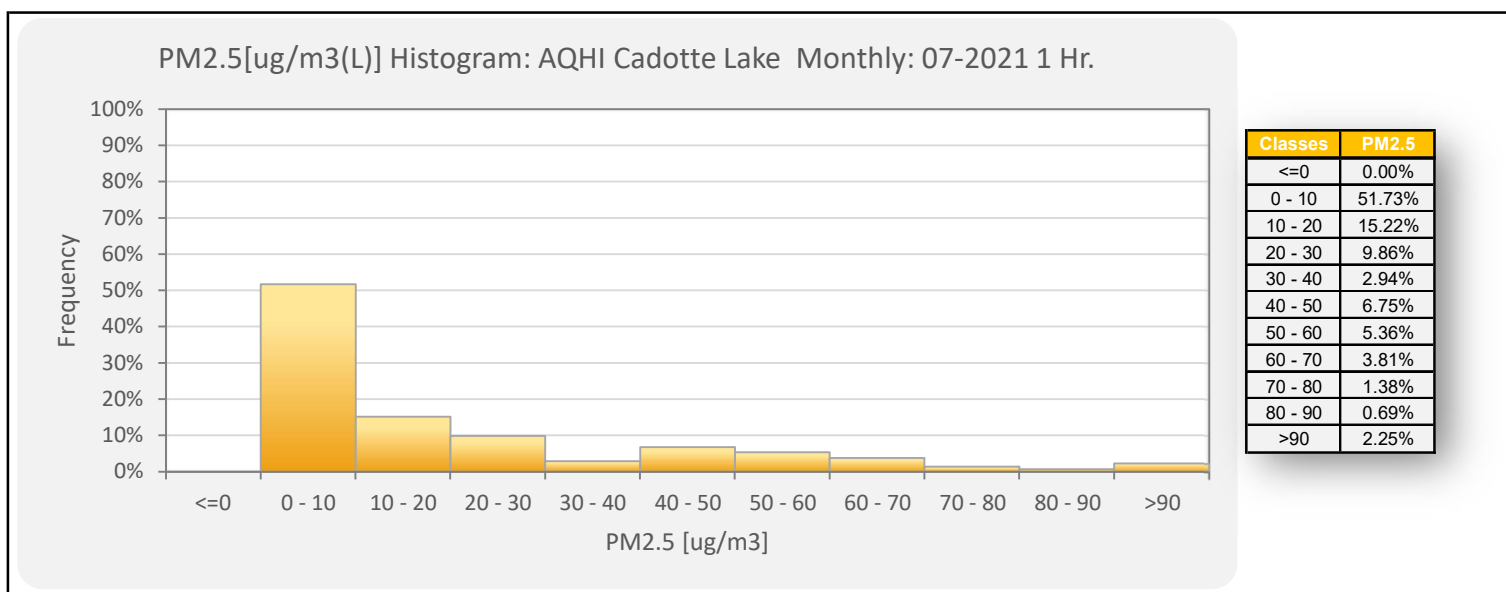
|                                                         |                                                                                                    |                              |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------|
| <b>C</b> Monthly Calibration                            | <b>S</b> Daily Zero-Span Check                                                                     | <b>Q</b> Quality Assurance   |
| <b>K</b> Collection Error                               | <b>N</b> No Data (Machine Not in Service)                                                          | <b>Y</b> Routine Maintenance |
| <b>X</b> InValid Data (Equipment Malfunction /Recovery) | <b>NRM</b> UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) | <b>P</b> Power Failure       |

Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met.

Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met.

***Timeseries Chart of Hourly Average for PM2.5 - AQHI - Cadotte Lake Station***

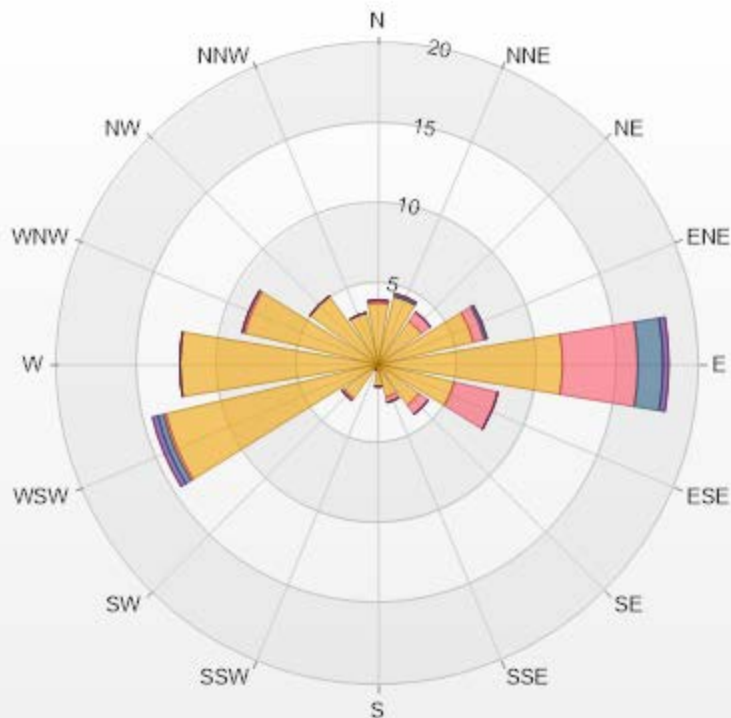






Wind: AQHI Cadotte Lake Poll.: AQHI Cadotte Lake-PM2.5[ug/m3(L)] Monthly: 07-2021 Type: PollutionRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 0.00% Valid Data: 77.28% Calm Avg: 0.00 [ug/m3(L)]

| Direction | 0-50  | 50-80 | 80-120 | 120-240 | >240.0 | Total |
|-----------|-------|-------|--------|---------|--------|-------|
| N         | 3.83  | 0.17  | 0      | 0       | 0      | 4     |
| NNE       | 4.35  | 0     | 0.17   | 0       | 0      | 4.52  |
| NE        | 3.3   | 0.7   | 0      | 0       | 0      | 4     |
| ENE       | 6.09  | 0.7   | 0.17   | 0       | 0      | 6.96  |
| E         | 11.48 | 4.7   | 1.57   | 0.35    | 0      | 18.1  |
| ESE       | 4.87  | 2.78  | 0      | 0       | 0      | 7.65  |
| SE        | 3.13  | 0.7   | 0      | 0       | 0      | 3.83  |
| SSE       | 2.09  | 0.35  | 0      | 0       | 0      | 2.44  |
| S         | 1.39  | 0     | 0      | 0       | 0      | 1.39  |
| SSW       | 0.35  | 0     | 0      | 0       | 0      | 0.35  |
| SW        | 2.61  | 0.17  | 0      | 0       | 0      | 2.78  |
| WSW       | 13.57 | 0.17  | 0.35   | 0.35    | 0      | 14.44 |
| W         | 12.35 | 0     | 0      | 0       | 0      | 12.35 |
| WNW       | 8.52  | 0.17  | 0      | 0       | 0      | 8.69  |
| NW        | 5.22  | 0     | 0      | 0       | 0      | 5.22  |
| NNW       | 3.3   | 0     | 0      | 0       | 0      | 3.3   |
| Summary   | 86.45 | 10.61 | 2.26   | 0.7     | 0      | 100   |



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% Icon Classes (ug/m3(L))

86

0-50

11

50-80

2

80-120

1

120-240

0

>240.0



# PEACE RIVER AREA MONITORING PROGRAM

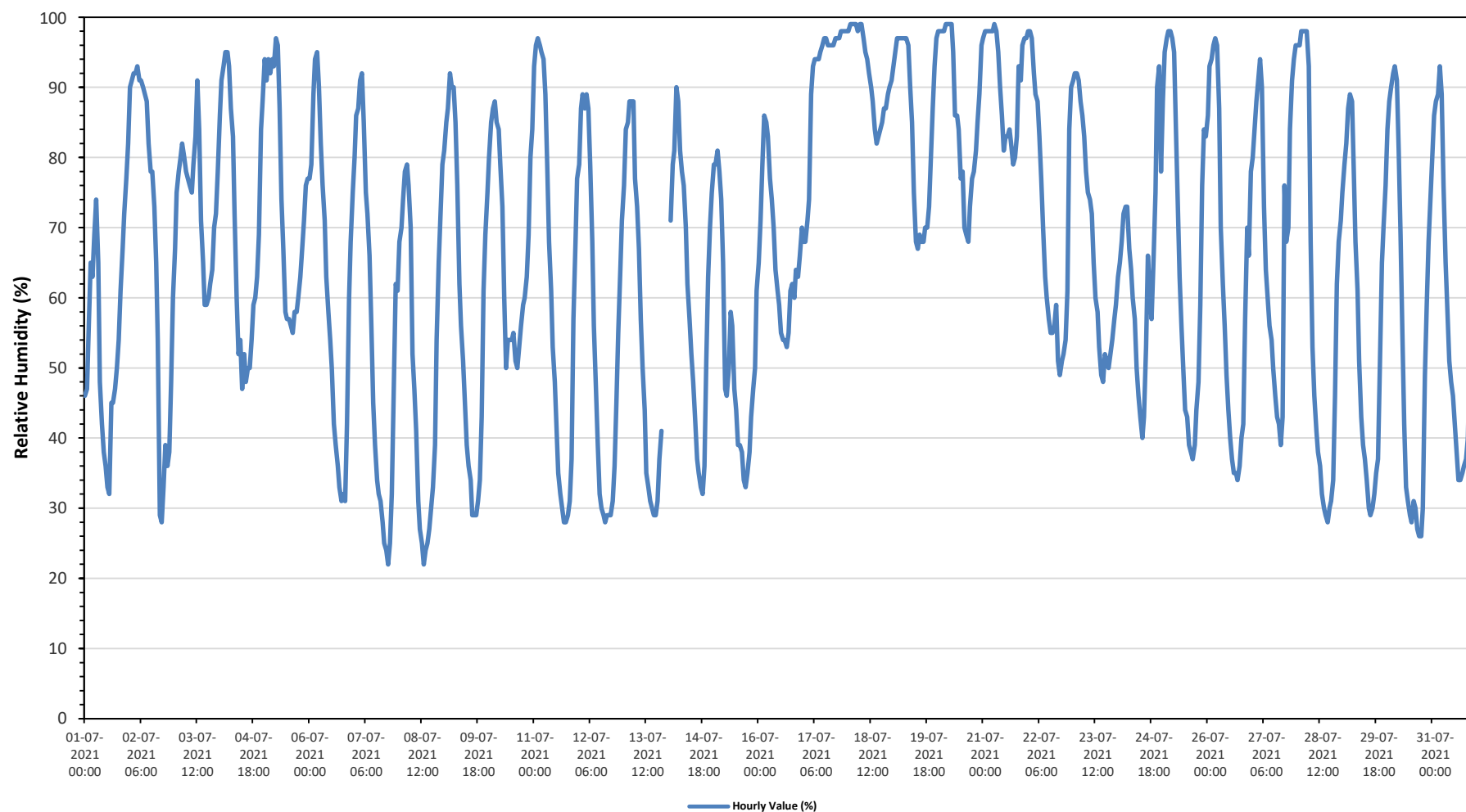
## AQHI - Cadotte Lake Station - July 2021

### Summary of Hourly Averages

#### RELATIVE HUMIDITY (RH) in %

| Maximum Hourly Value:                                                                                   |                                                |      | 99   | %    | on July 18 at hour 1 |      |      |                                                                                         |      |      |      |      |      |      | Hours in Service:      |      |      | 744  |      |      |      |               |      |       |         |         |         |  |  |  |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|----------------------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|------|------|------------------------|------|------|------|------|------|------|---------------|------|-------|---------|---------|---------|--|--|--|--|
| Maximum Daily Value:                                                                                    |                                                |      | 92.0 | %    | on July 18           |      |      |                                                                                         |      |      |      |      |      |      | Hours of Data:         |      |      | 740  |      |      |      |               |      |       |         |         |         |  |  |  |  |
| Minimum Hourly Value:                                                                                   |                                                |      | 22   | %    | on July 7 at hour 18 |      |      |                                                                                         |      |      |      |      |      |      | Hours of Missing Data: |      |      | 4    |      |      |      |               |      |       |         |         |         |  |  |  |  |
| Minimum Daily Value:                                                                                    |                                                |      | 50.3 | %    | on July 8            |      |      |                                                                                         |      |      |      |      |      |      | Hours of Calibration:  |      |      | 0    |      |      |      |               |      |       |         |         |         |  |  |  |  |
| Monthly Average:                                                                                        |                                                |      | 66.6 | %    |                      |      |      |                                                                                         |      |      |      |      |      |      | Operational Uptime:    |      |      | 99.5 |      |      |      |               |      |       |         |         |         |  |  |  |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |                      |      |      |                                                                                         |      |      |      |      |      |      |                        |      |      |      |      |      |      |               |      | Daily | Daily   | Daily   |         |  |  |  |  |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4                    | 5    | 6    | 7                                                                                       | 8    | 9    | 10   | 11   | 12   | 13   | 14                     | 15   | 16   | 17   | 18   | 19   | 20   | 21            | 22   | 23    | Minimum | Maximum | Average |  |  |  |  |
| Jul 1                                                                                                   | 46                                             | 47   | 55   | 65   | 63                   | 69   | 74   | 65                                                                                      | 48   | 42   | 38   | 36   | 33   | 32   | 45                     | 45   | 47   | 50   | 54   | 61   | 67   | 72            | 77   | 82    | 32      | 82      | 54.7    |  |  |  |  |
| Jul 2                                                                                                   | 90                                             | 91   | 92   | 92   | 93                   | 91   | 91   | 90                                                                                      | 89   | 88   | 82   | 78   | 78   | 73   | 65                     | 54   | 29   | 28   | 33   | 39   | 36   | 38            | 48   | 60    | 28      | 93      | 68.7    |  |  |  |  |
| Jul 3                                                                                                   | 67                                             | 75   | 78   | 80   | 82                   | 80   | 78   | 77                                                                                      | 76   | 75   | 79   | 83   | 91   | 84   | 71                     | 65   | 59   | 59   | 60   | 62   | 64   | 70            | 72   | 78    | 59      | 91      | 73.5    |  |  |  |  |
| Jul 4                                                                                                   | 86                                             | 91   | 93   | 95   | 95                   | 93   | 87   | 83                                                                                      | 72   | 60   | 52   | 54   | 47   | 52   | 48                     | 50   | 50   | 54   | 59   | 60   | 63   | 69            | 84   | 88    | 47      | 95      | 70.2    |  |  |  |  |
| Jul 5                                                                                                   | 94                                             | 91   | 94   | 92   | 94                   | 93   | 97   | 96                                                                                      | 87   | 74   | 67   | 58   | 57   | 57   | 56                     | 55   | 58   | 58   | 60   | 63   | 67   | 71            | 76   | 77    | 55      | 97      | 74.7    |  |  |  |  |
| Jul 6                                                                                                   | 77                                             | 79   | 89   | 94   | 95                   | 90   | 82   | 76                                                                                      | 71   | 63   | 58   | 54   | 50   | 42   | 39                     | 36   | 33   | 31   | 32   | 31   | 42   | 60            | 68   | 75    | 31      | 95      | 61.1    |  |  |  |  |
| Jul 7                                                                                                   | 80                                             | 86   | 87   | 91   | 92                   | 85   | 75   | 72                                                                                      | 66   | 56   | 45   | 39   | 34   | 32   | 31                     | 28   | 25   | 24   | 22   | 25   | 32   | 48            | 62   | 61    | 22      | 92      | 54.1    |  |  |  |  |
| Jul 8                                                                                                   | 68                                             | 70   | 74   | 78   | 79                   | 76   | 70   | 52                                                                                      | 47   | 41   | 31   | 27   | 25   | 22   | 24                     | 25   | 27   | 30   | 33   | 39   | 54   | 65            | 72   | 79    | 22      | 79      | 50.3    |  |  |  |  |
| Jul 9                                                                                                   | 81                                             | 85   | 87   | 92   | 90                   | 90   | 85   | 76                                                                                      | 62   | 56   | 51   | 45   | 39   | 36   | 34                     | 29   | 29   | 29   | 31   | 34   | 43   | 61            | 69   | 75    | 29      | 92      | 58.7    |  |  |  |  |
| Jul 10                                                                                                  | 80                                             | 85   | 87   | 88   | 85                   | 84   | 79   | 73                                                                                      | 60   | 50   | 54   | 54   | 54   | 55   | 51                     | 50   | 53   | 56   | 59   | 60   | 63   | 69            | 80   | 84    | 50      | 88      | 67.2    |  |  |  |  |
| Jul 11                                                                                                  | 93                                             | 96   | 97   | 96   | 95                   | 94   | 89   | 79                                                                                      | 68   | 61   | 53   | 48   | 41   | 35   | 32                     | 30   | 28   | 28   | 29   | 31   | 37   | 57            | 68   | 77    | 28      | 97      | 60.9    |  |  |  |  |
| Jul 12                                                                                                  | 79                                             | 87   | 89   | 87   | 89                   | 87   | 79   | 68                                                                                      | 56   | 47   | 39   | 32   | 30   | 29   | 28                     | 29   | 29   | 29   | 31   | 36   | 45   | 55            | 64   | 71    | 28      | 89      | 54.8    |  |  |  |  |
| Jul 13                                                                                                  | 76                                             | 84   | 85   | 88   | 88                   | 88   | 77   | 73                                                                                      | 67   | 57   | 50   | 44   | 35   | 33   | 31                     | 30   | 29   | 29   | 31   | 37   | 41   | P             | P    | P     | 29      | 88      | 55.9    |  |  |  |  |
| Jul 14                                                                                                  | P                                              | 71   | 79   | 81   | 90                   | 88   | 81   | 78                                                                                      | 76   | 70   | 62   | 57   | 52   | 48   | 43                     | 37   | 35   | 33   | 32   | 36   | 51   | 63            | 70   | 75    | 32      | 90      | 61.2    |  |  |  |  |
| Jul 15                                                                                                  | 79                                             | 79   | 81   | 78   | 74                   | 65   | 47   | 46                                                                                      | 50   | 58   | 56   | 47   | 44   | 39   | 39                     | 38   | 34   | 33   | 35   | 38   | 43   | 47            | 50   | 61    | 33      | 81      | 52.5    |  |  |  |  |
| Jul 16                                                                                                  | 65                                             | 71   | 79   | 86   | 85                   | 83   | 77   | 74                                                                                      | 70   | 64   | 61   | 59   | 55   | 54   | 54                     | 53   | 55   | 61   | 62   | 60   | 64   | 63            | 66   | 70    | 53      | 86      | 66.3    |  |  |  |  |
| Jul 17                                                                                                  | 68                                             | 68   | 71   | 74   | 89                   | 93   | 94   | 94                                                                                      | 94   | 95   | 96   | 97   | 97   | 96   | 96                     | 96   | 96   | 97   | 97   | 97   | 98   | 98            | 98   | 98    | 68      | 98      | 91.5    |  |  |  |  |
| Jul 18                                                                                                  | 98                                             | 99   | 99   | 99   | 99                   | 98   | 99   | 99                                                                                      | 97   | 95   | 94   | 92   | 90   | 88   | 84                     | 82   | 83   | 84   | 85   | 87   | 87   | 89            | 90   | 91    | 82      | 99      | 92.0    |  |  |  |  |
| Jul 19                                                                                                  | 93                                             | 95   | 97   | 97   | 97                   | 97   | 97   | 97                                                                                      | 96   | 90   | 85   | 75   | 68   | 67   | 69                     | 68   | 68   | 70   | 73   | 79   | 87   | 93            | 97   | 97    | 67      | 97      | 84.4    |  |  |  |  |
| Jul 20                                                                                                  | 98                                             | 98   | 98   | 98   | 99                   | 99   | 99   | 99                                                                                      | 95   | 86   | 86   | 84   | 77   | 78   | 70                     | 69   | 68   | 73   | 77   | 78   | 81   | 85            | 89   | 96    | 68      | 99      | 86.7    |  |  |  |  |
| Jul 21                                                                                                  | 97                                             | 98   | 98   | 98   | 98                   | 98   | 99   | 98                                                                                      | 95   | 90   | 86   | 81   | 83   | 83   | 84                     | 82   | 79   | 80   | 83   | 93   | 91   | 96            | 97   | 97    | 79      | 99      | 91.0    |  |  |  |  |
| Jul 22                                                                                                  | 98                                             | 98   | 97   | 92   | 89                   | 88   | 83   | 77                                                                                      | 70   | 63   | 60   | 57   | 55   | 55   | 56                     | 59   | 51   | 49   | 51   | 52   | 54   | 61            | 84   | 90    | 49      | 98      | 70.4    |  |  |  |  |
| Jul 23                                                                                                  | 91                                             | 92   | 92   | 91   | 88                   | 86   | 83   | 78                                                                                      | 75   | 74   | 72   | 65   | 60   | 58   | 53                     | 49   | 48   | 52   | 51   | 50   | 52   | 54            | 57   | 59    | 48      | 92      | 67.9    |  |  |  |  |
| Jul 24                                                                                                  | 63                                             | 65   | 68   | 72   | 73                   | 73   | 67   | 64                                                                                      | 60   | 57   | 50   | 46   | 43   | 40   | 43                     | 53   | 66   | 60   | 57   | 66   | 75   | 90            | 93   | 78    | 40      | 93      | 63.4    |  |  |  |  |
| Jul 25                                                                                                  | 88                                             | 95   | 97   | 98   | 98                   | 97   | 95   | 84                                                                                      | 72   | 63   | 56   | 49   | 44   | 43   | 39                     | 38   | 37   | 39   | 44   | 48   | 59   | 76            | 84   | 83    | 37      | 98      | 67.8    |  |  |  |  |
| Jul 26                                                                                                  | 86                                             | 93   | 94   | 96   | 97                   | 96   | 87   | 70                                                                                      | 62   | 56   | 49   | 44   | 40   | 37   | 35                     | 35   | 34   | 36   | 40   | 42   | 57   | 70            | 66   | 78    | 34      | 97      | 62.5    |  |  |  |  |
| Jul 27                                                                                                  | 80                                             | 84   | 88   | 91   | 94                   | 90   | 73   | 64                                                                                      | 60   | 56   | 54   | 50   | 46   | 43   | 42                     | 39   | 43   | 76   | 68   | 70   | 84   | 91            | 94   | 96    | 39      | 96      | 69.8    |  |  |  |  |
| Jul 28                                                                                                  | 96                                             | 96   | 98   | 98   | 98                   | 98   | 93   | 68                                                                                      | 53   | 46   | 41   | 38   | 36   | 32   | 30                     | 29   | 28   | 30   | 31   | 34   | 46   | 62            | 68   | 71    | 28      | 98      | 59.2    |  |  |  |  |
| Jul 29                                                                                                  | 75                                             | 79   | 82   | 87   | 89                   | 88   | 79   | 68                                                                                      | 61   | 51   | 43   | 39   | 37   | 34   | 30                     | 29   | 30   | 32   | 35   | 37   | 50   | 65            | 70   | 76    | 29      | 89      | 56.9    |  |  |  |  |
| Jul 30                                                                                                  | 84                                             | 88   | 90   | 92   | 93                   | 91   | 81   | 69                                                                                      | 55   | 42   | 33   | 31   | 29   | 28   | 31                     | 30   | 27   | 26   | 26   | 30   | 49   | 59            | 68   | 74    | 26      | 93      | 55.3    |  |  |  |  |
| Jul 31                                                                                                  | 80                                             | 86   | 88   | 89   | 93                   | 89   | 76   | 65                                                                                      | 59   | 51   | 48   | 46   | 42   | 38   | 34                     | 34   | 35   | 36   | 37   | 40   | 52   | 66            | 74   | 79    | 34      | 93      | 59.9    |  |  |  |  |
| Diurnal Maximum                                                                                         | 98                                             | 99   | 99   | 99   | 99                   | 99   | 99   | 99                                                                                      | 97   | 95   | 96   | 97   | 97   | 96   | 96                     | 96   | 96   | 97   | 97   | 97   | 98   | 98            | 98   | 98    |         |         |         |  |  |  |  |
| Diurnal Average                                                                                         | 81.9                                           | 84.6 | 87.2 | 88.9 | 89.8                 | 88.3 | 83.0 | 76.5                                                                                    | 70.0 | 63.8 | 59.1 | 55.1 | 52.0 | 49.8 | 48.0                   | 46.6 | 45.6 | 47.5 | 48.9 | 51.9 | 58.9 | 68.6          | 75.0 | 79.2  |         |         |         |  |  |  |  |
| C                                                                                                       | Monthly Calibration                            |      |      |      |                      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |      | Q    | Quality Assurance      |      |      |      |      |      |      |               |      |       |         |         |         |  |  |  |  |
| K                                                                                                       | Collection Error                               |      |      |      |                      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |      | Y    | Routine Maintenance    |      |      |      |      |      | P    | Power Failure |      |       |         |         |         |  |  |  |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |                      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |      |      |                        |      |      |      |      |      |      |               |      |       |         |         |         |  |  |  |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |                      |      |      |                                                                                         |      |      |      |      |      |      |                        |      |      |      |      |      |      |               |      |       |         |         |         |  |  |  |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |                      |      |      |                                                                                         |      |      |      |      |      |      |                        |      |      |      |      |      |      |               |      |       |         |         |         |  |  |  |  |

*Timeseries Chart of Hourly Average for RH - AQHI - Cadotte Lake Station*





# PEACE RIVER AREA MONITORING PROGRAM

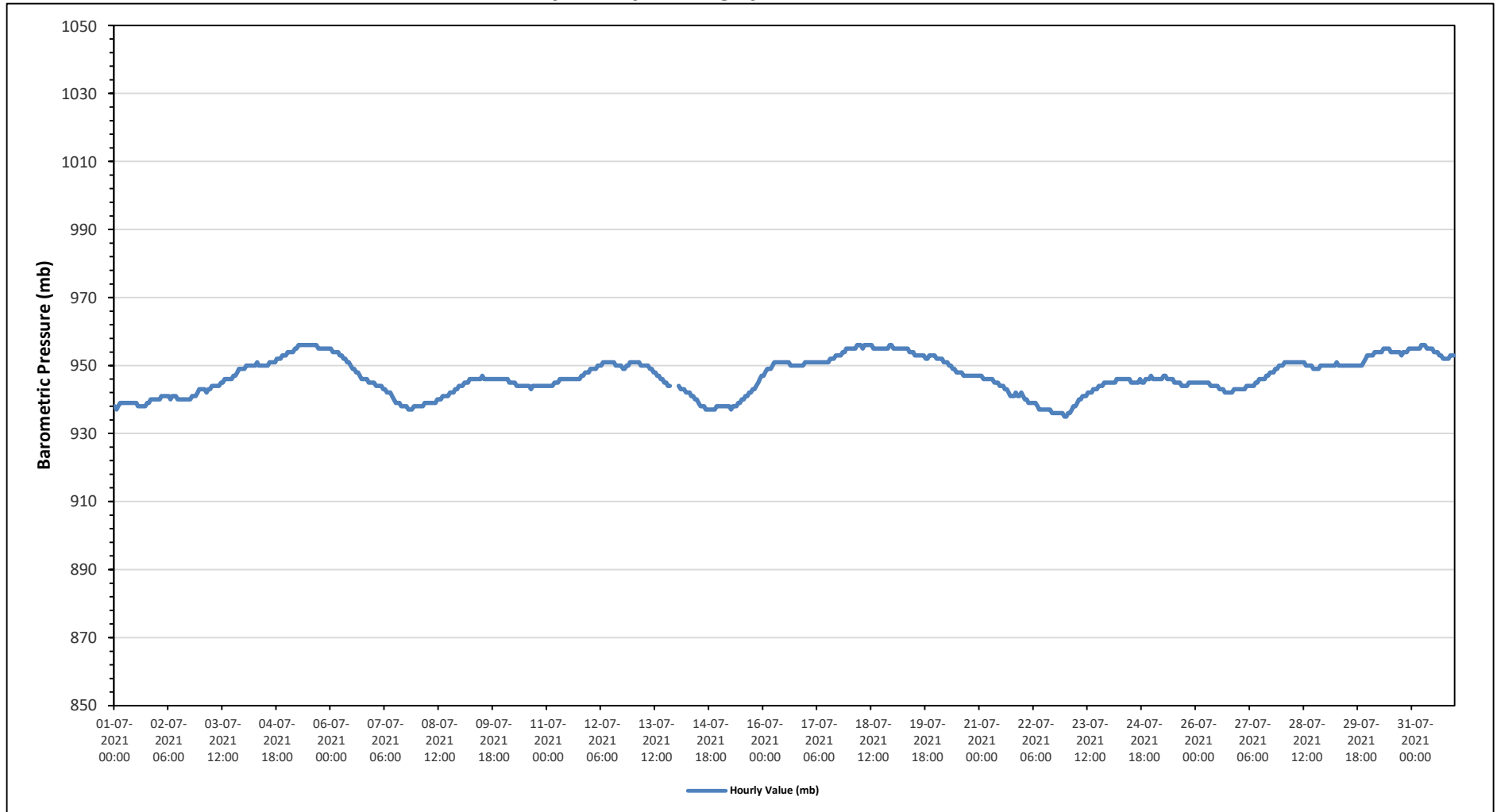
AQHI - Cadotte Lake Station - July 2021

Summary of Hourly Averages

BAROMETRIC PRESSURE (BP) in millibar

| Maximum Hourly Value:                                                                                   |                                                |     |     | 956 | mb  | on July 5 at hour 6   |     |                                                                                         |     | Hours in Service:      |     |     |     | 744  |                     |     |     |     |     |     |     |               |     |       |         |         |         |       |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|-----|-----|-----|-----|-----------------------|-----|-----------------------------------------------------------------------------------------|-----|------------------------|-----|-----|-----|------|---------------------|-----|-----|-----|-----|-----|-----|---------------|-----|-------|---------|---------|---------|-------|
| Maximum Daily Value:                                                                                    |                                                |     |     | 955 | mb  | on July 18            |     |                                                                                         |     | Hours of Data:         |     |     |     | 740  |                     |     |     |     |     |     |     |               |     |       |         |         |         |       |
| Minimum Hourly Value:                                                                                   |                                                |     |     | 935 | mb  | on July 22 at hour 23 |     |                                                                                         |     | Hours of Missing Data: |     |     |     | 4    |                     |     |     |     |     |     |     |               |     |       |         |         |         |       |
| Minimum Daily Value:                                                                                    |                                                |     |     | 938 | mb  | on July 22            |     |                                                                                         |     | Hours of Calibration:  |     |     |     | 0    |                     |     |     |     |     |     |     |               |     |       |         |         |         |       |
| Monthly Average:                                                                                        |                                                |     |     | 947 | mb  |                       |     |                                                                                         |     | Operational Uptime:    |     |     |     | 99.5 |                     |     |     |     |     |     |     |               |     |       |         |         |         |       |
| Day                                                                                                     | Hourly Period Starting at (MST)                |     |     |     |     |                       |     |                                                                                         |     |                        |     |     |     |      |                     |     |     |     |     |     |     |               |     | Daily | Daily   | Daily   |         |       |
|                                                                                                         | 0                                              | 1   | 2   | 3   | 4   | 5                     | 6   | 7                                                                                       | 8   | 9                      | 10  | 11  | 12  | 13   | 14                  | 15  | 16  | 17  | 18  | 19  | 20  | 21            | 22  | 23    | Minimum | Maximum | Average |       |
| Jul 1                                                                                                   | 938                                            | 937 | 938 | 939 | 939 | 939                   | 939 | 939                                                                                     | 939 | 939                    | 939 | 939 | 939 | 938  | 938                 | 938 | 938 | 938 | 939 | 939 | 940 | 940           | 940 | 940   | 937     | 940     | 938.8   |       |
| Jul 2                                                                                                   | 940                                            | 940 | 941 | 941 | 941 | 941                   | 941 | 940                                                                                     | 941 | 941                    | 941 | 940 | 940 | 940  | 940                 | 940 | 940 | 940 | 941 | 941 | 941 | 941           | 942 | 943   | 940     | 943     | 940.7   |       |
| Jul 3                                                                                                   | 943                                            | 943 | 943 | 942 | 943 | 943                   | 944 | 944                                                                                     | 944 | 944                    | 944 | 945 | 945 | 946  | 946                 | 946 | 946 | 946 | 947 | 947 | 948 | 949           | 949 | 949   | 942     | 949     | 945.3   |       |
| Jul 4                                                                                                   | 949                                            | 950 | 950 | 950 | 950 | 950                   | 950 | 951                                                                                     | 950 | 950                    | 950 | 950 | 950 | 950  | 951                 | 951 | 951 | 951 | 952 | 952 | 952 | 953           | 953 | 953   | 949     | 953     | 950.8   |       |
| Jul 5                                                                                                   | 954                                            | 954 | 954 | 954 | 955 | 955                   | 956 | 956                                                                                     | 956 | 956                    | 956 | 956 | 956 | 956  | 956                 | 956 | 956 | 955 | 955 | 955 | 955 | 955           | 955 | 955   | 954     | 956     | 955.3   |       |
| Jul 6                                                                                                   | 955                                            | 954 | 954 | 954 | 954 | 953                   | 953 | 952                                                                                     | 952 | 952                    | 951 | 951 | 950 | 949  | 949                 | 948 | 948 | 947 | 946 | 946 | 946 | 945           | 945 | 945   | 945     | 955     | 949.7   |       |
| Jul 7                                                                                                   | 945                                            | 944 | 944 | 944 | 944 | 943                   | 943 | 942                                                                                     | 942 | 942                    | 941 | 940 | 939 | 939  | 939                 | 938 | 938 | 938 | 938 | 937 | 937 | 937           | 938 | 938   | 937     | 945     | 940.4   |       |
| Jul 8                                                                                                   | 938                                            | 938 | 938 | 938 | 939 | 939                   | 939 | 939                                                                                     | 939 | 939                    | 939 | 940 | 940 | 940  | 941                 | 941 | 941 | 941 | 942 | 942 | 942 | 943           | 943 | 944   | 938     | 944     | 940.2   |       |
| Jul 9                                                                                                   | 944                                            | 944 | 945 | 945 | 945 | 946                   | 946 | 946                                                                                     | 946 | 946                    | 946 | 946 | 947 | 946  | 946                 | 946 | 946 | 946 | 946 | 946 | 946 | 946           | 946 | 946   | 944     | 947     | 945.8   |       |
| Jul 10                                                                                                  | 946                                            | 946 | 946 | 945 | 945 | 945                   | 945 | 944                                                                                     | 944 | 944                    | 944 | 944 | 944 | 944  | 943                 | 944 | 944 | 944 | 944 | 944 | 944 | 944           | 944 | 944   | 943     | 946     | 944.4   |       |
| Jul 11                                                                                                  | 944                                            | 944 | 944 | 944 | 945 | 945                   | 945 | 946                                                                                     | 946 | 946                    | 946 | 946 | 946 | 946  | 946                 | 946 | 946 | 946 | 947 | 947 | 947 | 948           | 948 | 948   | 944     | 948     | 945.9   |       |
| Jul 12                                                                                                  | 949                                            | 949 | 949 | 949 | 950 | 950                   | 950 | 951                                                                                     | 951 | 951                    | 951 | 951 | 951 | 951  | 950                 | 950 | 950 | 950 | 949 | 949 | 950 | 950           | 951 | 951   | 949     | 951     | 950.1   |       |
| Jul 13                                                                                                  | 951                                            | 951 | 951 | 951 | 950 | 950                   | 950 | 950                                                                                     | 950 | 949                    | 949 | 948 | 948 | 947  | 947                 | 946 | 946 | 945 | 945 | 944 | 944 | P             | P   | P     | 944     | 951     | 948.2   |       |
| Jul 14                                                                                                  | P                                              | 944 | 943 | 943 | 943 | 942                   | 942 | 942                                                                                     | 942 | 941                    | 941 | 940 | 940 | 939  | 938                 | 938 | 937 | 937 | 937 | 937 | 937 | 937           | 937 | 938   | 938     | 937     | 944     | 939.7 |
| Jul 15                                                                                                  | 938                                            | 938 | 938 | 938 | 938 | 938                   | 937 | 938                                                                                     | 938 | 938                    | 939 | 939 | 940 | 940  | 941                 | 941 | 942 | 942 | 943 | 943 | 944 | 945           | 946 | 947   | 937     | 947     | 940.5   |       |
| Jul 16                                                                                                  | 947                                            | 948 | 949 | 949 | 949 | 950                   | 951 | 951                                                                                     | 951 | 951                    | 951 | 951 | 951 | 951  | 951                 | 950 | 950 | 950 | 950 | 950 | 950 | 950           | 951 | 947   | 951     | 950.1   |         |       |
| Jul 17                                                                                                  | 951                                            | 951 | 951 | 951 | 951 | 951                   | 951 | 951                                                                                     | 951 | 951                    | 951 | 951 | 951 | 952  | 952                 | 952 | 953 | 953 | 953 | 953 | 954 | 954           | 955 | 955   | 951     | 955     | 952.0   |       |
| Jul 18                                                                                                  | 955                                            | 955 | 955 | 955 | 956 | 956                   | 956 | 955                                                                                     | 956 | 956                    | 956 | 956 | 956 | 955  | 955                 | 955 | 955 | 955 | 955 | 955 | 955 | 955           | 956 | 956   | 955     | 956     | 955.4   |       |
| Jul 19                                                                                                  | 955                                            | 955 | 955 | 955 | 955 | 955                   | 955 | 955                                                                                     | 955 | 955                    | 954 | 954 | 954 | 953  | 953                 | 953 | 953 | 953 | 952 | 952 | 953 | 953           | 953 | 953   | 952     | 955     | 953.8   |       |
| Jul 20                                                                                                  | 952                                            | 952 | 952 | 952 | 951 | 951                   | 951 | 950                                                                                     | 950 | 949                    | 949 | 948 | 948 | 948  | 948                 | 947 | 947 | 947 | 947 | 947 | 947 | 947           | 947 | 947   | 947     | 952     | 948.9   |       |
| Jul 21                                                                                                  | 947                                            | 947 | 946 | 946 | 946 | 946                   | 946 | 946                                                                                     | 946 | 945                    | 945 | 945 | 944 | 944  | 943                 | 943 | 942 | 941 | 941 | 941 | 942 | 941           | 941 | 942   | 941     | 947     | 943.9   |       |
| Jul 22                                                                                                  | 941                                            | 940 | 940 | 939 | 939 | 939                   | 939 | 939                                                                                     | 938 | 937                    | 937 | 937 | 937 | 937  | 937                 | 937 | 936 | 936 | 936 | 936 | 936 | 936           | 936 | 935   | 935     | 941     | 937.5   |       |
| Jul 23                                                                                                  | 935                                            | 936 | 936 | 937 | 938 | 938                   | 939 | 940                                                                                     | 940 | 941                    | 941 | 941 | 942 | 942  | 942                 | 943 | 943 | 943 | 944 | 944 | 944 | 945           | 945 | 945   | 935     | 945     | 941.0   |       |
| Jul 24                                                                                                  | 945                                            | 945 | 945 | 945 | 946 | 946                   | 946 | 946                                                                                     | 946 | 946                    | 946 | 946 | 946 | 945  | 945                 | 945 | 945 | 945 | 946 | 945 | 945 | 946           | 946 | 947   | 945     | 947     | 945.6   |       |
| Jul 25                                                                                                  | 946                                            | 946 | 946 | 946 | 946 | 946                   | 947 | 947                                                                                     | 946 | 946                    | 946 | 946 | 946 | 945  | 945                 | 945 | 944 | 944 | 944 | 944 | 945 | 945           | 945 | 945   | 944     | 947     | 945.4   |       |
| Jul 26                                                                                                  | 945                                            | 945 | 945 | 945 | 945 | 945                   | 945 | 945                                                                                     | 944 | 944                    | 944 | 944 | 944 | 943  | 943                 | 943 | 942 | 942 | 942 | 942 | 942 | 943           | 943 | 943   | 942     | 945     | 943.7   |       |
| Jul 27                                                                                                  | 943                                            | 943 | 943 | 943 | 944 | 944                   | 944 | 944                                                                                     | 944 | 945                    | 945 | 945 | 946 | 946  | 946                 | 947 | 947 | 948 | 948 | 948 | 949 | 949           | 950 | 950   | 943     | 950     | 945.9   |       |
| Jul 28                                                                                                  | 950                                            | 951 | 951 | 951 | 951 | 951                   | 951 | 951                                                                                     | 951 | 951                    | 951 | 951 | 951 | 950  | 950                 | 950 | 950 | 949 | 949 | 949 | 949 | 950           | 950 | 950   | 949     | 951     | 950.3   |       |
| Jul 29                                                                                                  | 950                                            | 950 | 950 | 950 | 950 | 950                   | 951 | 950                                                                                     | 950 | 950                    | 950 | 950 | 950 | 950  | 950                 | 950 | 950 | 950 | 950 | 950 | 951 | 952           | 953 | 950   | 953     | 950     | 950.3   |       |
| Jul 30                                                                                                  | 953                                            | 953 | 953 | 954 | 954 | 954                   | 954 | 955                                                                                     | 955 | 955                    | 955 | 955 | 954 | 954  | 954                 | 954 | 954 | 953 | 954 | 954 | 954 | 955           | 955 | 955   | 953     | 955     | 954.1   |       |
| Jul 31                                                                                                  | 955                                            | 955 | 955 | 955 | 955 | 956                   | 956 | 956                                                                                     | 955 | 955                    | 955 | 955 | 954 | 954  | 954                 | 953 | 953 | 952 | 952 | 952 | 952 | 953           | 953 | 953   | 952     | 956     | 954.1   |       |
| Diurnal Maximum                                                                                         | 955                                            | 955 | 955 | 955 | 956 | 956                   | 956 | 956                                                                                     | 956 | 956                    | 956 | 956 | 956 | 956  | 956                 | 956 | 956 | 955 | 955 | 955 | 955 | 955           | 956 | 956   | 956     | 956     | 956     |       |
| Diurnal Average                                                                                         | 947                                            | 947 | 947 | 947 | 947 | 947                   | 947 | 947                                                                                     | 947 | 947                    | 947 | 947 | 947 | 946  | 946                 | 946 | 946 | 946 | 946 | 946 | 946 | 947           | 947 | 947   | 947     | 947     | 947     |       |
| C                                                                                                       | Monthly Calibration                            |     |     |     |     |                       | S   | Daily Zero-Span Check                                                                   |     |                        |     |     |     | Q    | Quality Assurance   |     |     |     |     |     |     |               |     |       |         |         |         |       |
| K                                                                                                       | Collection Error                               |     |     |     |     |                       | N   | No Data (Machine Not in Service)                                                        |     |                        |     |     |     | Y    | Routine Maintenance |     |     |     |     |     | P   | Power Failure |     |       |         |         |         |       |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |     |     |     |     |                       | NRM | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |     |                        |     |     |     |      |                     |     |     |     |     |     |     |               |     |       |         |         |         |       |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |     |     |     |     |                       |     |                                                                                         |     |                        |     |     |     |      |                     |     |     |     |     |     |     |               |     |       |         |         |         |       |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |     |     |     |     |                       |     |                                                                                         |     |                        |     |     |     |      |                     |     |     |     |     |     |     |               |     |       |         |         |         |       |

*Timeseries Chart of Hourly Average for BP - AQHI - Cadotte Lake Station*





# PEACE RIVER AREA MONITORING PROGRAM

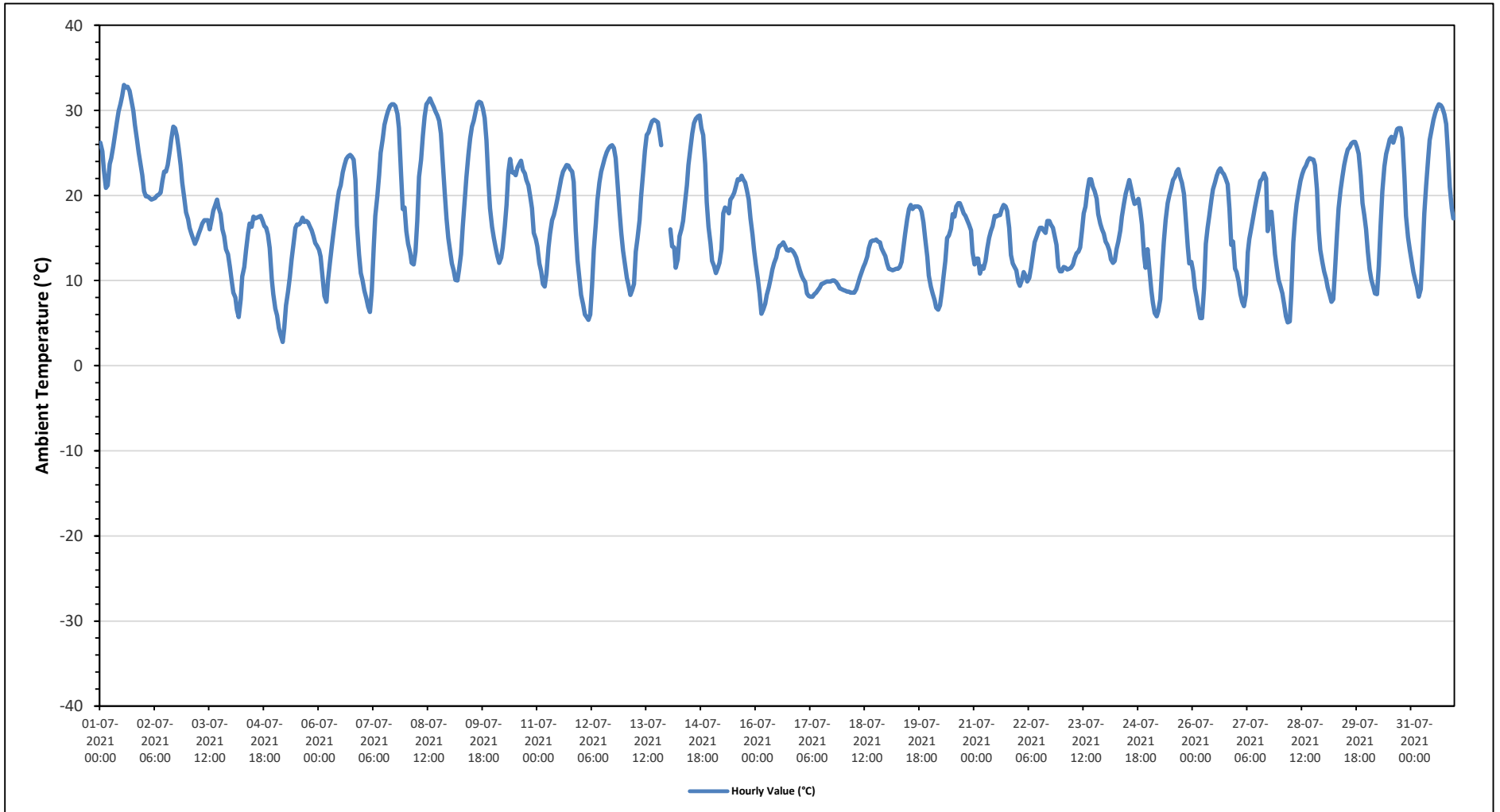
AQHI - Cadotte Lake Station - July 2021

Summary of Hourly Averages

## AMBIENT TEMPERATURE (AT) in Degree Celsius

|                                                                                                         |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |                      |      |      |                     |      |      |      |      |      |      |                        |               |         |         |  |      |  |  |  |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|----------------------|------|------|---------------------|------|------|------|------|------|------|------------------------|---------------|---------|---------|--|------|--|--|--|--|
| Maximum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |                                                                                         | 33.0 |      | °C   |      | on July 1 at hour 13 |      |      |                     |      |      |      |      |      |      | Hours in Service:      |               |         |         |  | 744  |  |  |  |  |
| Maximum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | 27.4 |      | °C   |      | on July 1            |      |      |                     |      |      |      |      |      |      | Hours of Data:         |               |         |         |  | 740  |  |  |  |  |
| Minimum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |      |                                                                                         | 2.8  |      | °C   |      | on July 5 at hour 4  |      |      |                     |      |      |      |      |      |      | Hours of Missing Data: |               |         |         |  | 4    |  |  |  |  |
| Minimum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | 9.4  |      | °C   |      | on July 17           |      |      |                     |      |      |      |      |      |      | Hours of Calibration:  |               |         |         |  | 0    |  |  |  |  |
| Monthly Average:                                                                                        |                                                |      |      |      |      |      |      |      |                                                                                         | 17.0 |      | °C   |      |                      |      |      |                     |      |      |      |      |      |      | Operational Uptime:    |               |         |         |  | 99.5 |  |  |  |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |                      |      |      |                     |      |      |      |      |      |      | Daily                  | Daily         | Daily   |         |  |      |  |  |  |  |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8                                                                                       | 9    | 10   | 11   | 12   | 13                   | 14   | 15   | 16                  | 17   | 18   | 19   | 20   | 21   | 22   | 23                     | Minimum       | Maximum | Average |  |      |  |  |  |  |
| Jul 1                                                                                                   | 26.2                                           | 25.2 | 23   | 20.9 | 21.2 | 23.7 | 24.4 | 25.8 | 27.2                                                                                    | 28.6 | 29.9 | 30.7 | 31.7 | 33                   | 32.7 | 32.8 | 32.3                | 31.2 | 29.9 | 28.3 | 26.6 | 25   | 23.7 | 22.4                   | 20.9          | 33.0    | 27.4    |  |      |  |  |  |  |
| Jul 2                                                                                                   | 20.5                                           | 19.9 | 19.9 | 19.7 | 19.5 | 19.6 | 19.7 | 20   | 20.1                                                                                    | 20.3 | 21.7 | 22.8 | 22.8 | 23.6                 | 25.2 | 26.6 | 28.1                | 27.9 | 27   | 25.5 | 23.5 | 21.5 | 19.7 | 18                     | 18.0          | 28.1    | 22.2    |  |      |  |  |  |  |
| Jul 3                                                                                                   | 17.2                                           | 16.2 | 15.5 | 14.8 | 14.3 | 14.9 | 15.5 | 16.1 | 16.7                                                                                    | 17.1 | 17.1 | 17.1 | 16   | 17.2                 | 18.2 | 18.8 | 19.5                | 18.6 | 17.8 | 16   | 15.2 | 13.7 | 13.1 | 11.7                   | 11.7          | 19.5    | 16.2    |  |      |  |  |  |  |
| Jul 4                                                                                                   | 10.1                                           | 8.6  | 8    | 6.6  | 5.7  | 7.8  | 10.5 | 11.6 | 13.6                                                                                    | 15.6 | 16.7 | 16.3 | 17.5 | 17.3                 | 17.4 | 17.5 | 17.6                | 17.1 | 16.4 | 16.2 | 15.4 | 13.8 | 10.2 | 8.4                    | 5.7           | 17.6    | 13.2    |  |      |  |  |  |  |
| Jul 5                                                                                                   | 6.7                                            | 5.9  | 4.4  | 3.6  | 2.8  | 4.4  | 7.1  | 8.7  | 10.4                                                                                    | 12.5 | 14.2 | 16.2 | 16.6 | 16.6                 | 16.8 | 17.4 | 16.9                | 17   | 16.8 | 16.4 | 15.9 | 15.2 | 14.4 | 14.1                   | 2.8           | 17.4    | 12.1    |  |      |  |  |  |  |
| Jul 6                                                                                                   | 13.6                                           | 12.8 | 10.3 | 8.2  | 7.5  | 10   | 12.2 | 14   | 15.5                                                                                    | 17.4 | 19.1 | 20.5 | 21.2 | 22.7                 | 23.6 | 24.3 | 24.6                | 24.8 | 24.6 | 24.2 | 21.8 | 16.5 | 13.1 | 10.9                   | 7.5           | 24.8    | 17.2    |  |      |  |  |  |  |
| Jul 7                                                                                                   | 10                                             | 8.8  | 7.9  | 6.9  | 6.3  | 8.7  | 14   | 17.6 | 19.9                                                                                    | 22.4 | 25   | 26.6 | 28.3 | 29.3                 | 29.9 | 30.5 | 30.7                | 30.7 | 30.5 | 29.6 | 27.9 | 22.7 | 18.4 | 18.6                   | 6.3           | 30.7    | 20.9    |  |      |  |  |  |  |
| Jul 8                                                                                                   | 15.8                                           | 14.3 | 13.3 | 12.1 | 11.9 | 13.4 | 17   | 22.2 | 24.2                                                                                    | 27   | 29.3 | 30.7 | 31   | 31.4                 | 30.9 | 30.4 | 29.9                | 29.4 | 28.8 | 27.3 | 24   | 20.3 | 17.3 | 15                     | 11.9          | 31.4    | 22.8    |  |      |  |  |  |  |
| Jul 9                                                                                                   | 13.5                                           | 12   | 11.2 | 10.1 | 10   | 11.2 | 13.1 | 16.4 | 19.6                                                                                    | 22.1 | 24.8 | 26.7 | 28.1 | 28.8                 | 29.8 | 30.8 | 31                  | 30.9 | 30.2 | 29.1 | 26.5 | 21.5 | 18.5 | 16.3                   | 10.0          | 31.0    | 21.3    |  |      |  |  |  |  |
| Jul 10                                                                                                  | 15                                             | 13.9 | 12.9 | 12.1 | 12.7 | 13.9 | 16.3 | 18.9 | 22.7                                                                                    | 24.3 | 22.7 | 22.7 | 22.4 | 23.3                 | 23.7 | 24.1 | 23                  | 22.6 | 21.8 | 21.2 | 19.9 | 18.5 | 15.6 | 14.9                   | 12.1          | 24.3    | 19.1    |  |      |  |  |  |  |
| Jul 11                                                                                                  | 14                                             | 12   | 11.1 | 9.6  | 9.3  | 10.8 | 13.9 | 15.5 | 17.1                                                                                    | 17.7 | 18.6 | 19.6 | 20.9 | 22                   | 22.8 | 23.2 | 23.6                | 23.5 | 23.1 | 22.8 | 21.6 | 15.9 | 12.4 | 10.1                   | 9.3           | 23.6    | 17.1    |  |      |  |  |  |  |
| Jul 12                                                                                                  | 8.3                                            | 7.2  | 6    | 5.7  | 5.4  | 6    | 9.3  | 13.6 | 16.7                                                                                    | 19.4 | 21.5 | 22.8 | 23.7 | 24.4                 | 25.1 | 25.5 | 25.8                | 25.9 | 25.6 | 24.4 | 21.6 | 18.2 | 15.6 | 13.5                   | 5.4           | 25.9    | 17.1    |  |      |  |  |  |  |
| Jul 13                                                                                                  | 12                                             | 10.3 | 9.5  | 8.3  | 8.9  | 9.6  | 13.4 | 15   | 17.1                                                                                    | 19.9 | 22.7 | 25.3 | 27.1 | 27.4                 | 28.2 | 28.7 | 28.9                | 28.8 | 28.6 | 27.4 | 25.9 | P    | P    | P                      | 8.3           | 28.9    | 20.1    |  |      |  |  |  |  |
| Jul 14                                                                                                  | P                                              | 16   | 14   | 13.9 | 11.5 | 12.5 | 15.2 | 16.1 | 17                                                                                      | 19   | 21.2 | 23.6 | 25.6 | 27.3                 | 28.5 | 29   | 29.3                | 29.4 | 27.9 | 27.1 | 23.7 | 19.2 | 16.3 | 14.3                   | 11.5          | 29.4    | 20.8    |  |      |  |  |  |  |
| Jul 15                                                                                                  | 12.3                                           | 11.7 | 10.9 | 11.5 | 12.1 | 13.7 | 17.9 | 18.6 | 18.4                                                                                    | 17.9 | 19.5 | 19.8 | 20.3 | 21.1                 | 21.9 | 21.8 | 22.3                | 21.9 | 21.5 | 20.6 | 19.5 | 17.3 | 15.4 | 13.6                   | 10.9          | 22.3    | 17.6    |  |      |  |  |  |  |
| Jul 16                                                                                                  | 11.9                                           | 10.2 | 8.4  | 6.1  | 6.6  | 7.3  | 8.3  | 9.2  | 10.2                                                                                    | 11.3 | 12.1 | 12.7 | 13.7 | 14.1                 | 14.2 | 14.5 | 14.1                | 13.6 | 13.5 | 13.7 | 13.5 | 13.2 | 12.7 | 12                     | 6.1           | 14.5    | 11.5    |  |      |  |  |  |  |
| Jul 17                                                                                                  | 11.2                                           | 10.6 | 10.2 | 9.8  | 8.5  | 8.2  | 8.1  | 8.1  | 8.4                                                                                     | 8.6  | 8.9  | 9.2  | 9.6  | 9.7                  | 9.8  | 9.9  | 9.9                 | 9.9  | 10   | 10   | 9.8  | 9.5  | 9.1  | 9                      | 8.1           | 11.2    | 9.4     |  |      |  |  |  |  |
| Jul 18                                                                                                  | 8.9                                            | 8.8  | 8.7  | 8.7  | 8.6  | 8.6  | 8.6  | 9    | 9.6                                                                                     | 10.4 | 11   | 11.6 | 12.1 | 12.8                 | 13.8 | 14.6 | 14.7                | 14.7 | 14.8 | 14.6 | 14.5 | 13.8 | 13.3 | 12.9                   | 8.6           | 14.8    | 11.6    |  |      |  |  |  |  |
| Jul 19                                                                                                  | 12                                             | 11.4 | 11.3 | 11.2 | 11.3 | 11.4 | 11.4 | 11.6 | 12.2                                                                                    | 14.1 | 15.5 | 17.2 | 18.4 | 18.9                 | 18.4 | 18.7 | 18.7                | 18.7 | 18.6 | 18.1 | 16.8 | 14.9 | 12.8 | 10.6                   | 10.6          | 18.9    | 14.8    |  |      |  |  |  |  |
| Jul 20                                                                                                  | 9.3                                            | 8.5  | 7.7  | 6.8  | 6.6  | 7.1  | 8.6  | 10.5 | 12.3                                                                                    | 15   | 15.3 | 16.1 | 17.8 | 17.5                 | 18.7 | 19.1 | 19.1                | 18.5 | 17.9 | 17.6 | 17.1 | 16.6 | 15.9 | 13.3                   | 6.6           | 19.1    | 13.9    |  |      |  |  |  |  |
| Jul 21                                                                                                  | 11.9                                           | 12.6 | 12.6 | 10.8 | 11.7 | 11.4 | 12.3 | 13.8 | 15                                                                                      | 15.8 | 16.4 | 17.6 | 17.5 | 17.7                 | 17.7 | 18.4 | 18.9                | 18.7 | 18.2 | 16.2 | 13   | 12   | 11.6 | 11.2                   | 10.8          | 18.9    | 14.7    |  |      |  |  |  |  |
| Jul 22                                                                                                  | 9.8                                            | 9.4  | 10.1 | 11   | 10.6 | 9.9  | 10.3 | 11.5 | 13                                                                                      | 14.5 | 15.1 | 15.7 | 16.2 | 16.2                 | 15.9 | 15.6 | 17                  | 17   | 16.6 | 16.2 | 15.2 | 14.2 | 11.6 | 11.1                   | 9.4           | 17.0    | 13.5    |  |      |  |  |  |  |
| Jul 23                                                                                                  | 11.1                                           | 11.6 | 11.5 | 11.3 | 11.4 | 11.5 | 11.9 | 12.6 | 13.2                                                                                    | 13.4 | 13.9 | 15.8 | 17.9 | 18.7                 | 20.5 | 21.9 | 21.9                | 21   | 20.5 | 19.6 | 17.8 | 16.7 | 16   | 15.5                   | 11.1          | 21.9    | 15.7    |  |      |  |  |  |  |
| Jul 24                                                                                                  | 14.6                                           | 14.2 | 13.5 | 12.5 | 12.1 | 12.3 | 13.7 | 14.6 | 15.9                                                                                    | 17.5 | 19   | 20.2 | 21.1 | 21.8                 | 20.9 | 19.7 | 19                  | 19.2 | 19.6 | 18.3 | 16.6 | 13   | 11.5 | 13.7                   | 11.5          | 21.8    | 16.4    |  |      |  |  |  |  |
| Jul 25                                                                                                  | 11.4                                           | 8.8  | 7.4  | 6.2  | 5.8  | 6.4  | 7.8  | 11.4 | 14.6                                                                                    | 17.1 | 19.1 | 20.1 | 20.9 | 21.8                 | 22.2 | 22.8 | 23.1                | 22.1 | 21.5 | 20.2 | 17.4 | 14   | 12   | 12.2                   | 5.8           | 23.1    | 15.3    |  |      |  |  |  |  |
| Jul 26                                                                                                  | 11.1                                           | 9.1  | 8    | 6.5  | 5.6  | 5.6  | 9.1  | 14.3 | 16.2                                                                                    | 17.7 | 19.5 | 20.7 | 21.5 | 22.3                 | 22.9 | 23.2 | 22.7                | 22.5 | 22   | 21.3 | 18.4 | 14.2 | 14.6 | 11.4                   | 5.6           | 23.2    | 15.9    |  |      |  |  |  |  |
| Jul 27                                                                                                  | 11                                             | 9.9  | 8.4  | 7.5  | 7    | 8.4  | 13.3 | 14.9 | 16.2                                                                                    | 17.4 | 18.6 | 19.7 | 20.8 | 21.7                 | 22   | 22.6 | 22                  | 15.8 | 18   | 18.1 | 16   | 13.1 | 11.5 | 10.1                   | 7.0           | 22.6    | 15.2    |  |      |  |  |  |  |
| Jul 28                                                                                                  | 9.4                                            | 8.5  | 7.2  | 5.8  | 5.1  | 5.2  | 8.4  | 14.5 | 17.3                                                                                    | 19   | 20.5 | 21.7 | 22.5 | 23.1                 | 23.5 | 24.1 | 24.4                | 24.3 | 24.2 | 23.6 | 20.7 | 15.9 | 13.6 | 12.2                   | 5.1           | 24.4    | 16.4    |  |      |  |  |  |  |
| Jul 29                                                                                                  | 11.1                                           | 10.2 | 9.2  | 8.3  | 7.5  | 7.8  | 11.3 | 15.6 | 18.5                                                                                    | 20.7 | 22.2 | 23.6 | 24.6 | 25.4                 | 25.7 | 26.1 | 26.3                | 26.3 | 25.7 | 24.9 | 22.3 | 19.1 | 17.7 | 16                     | 7.5           | 26.3    | 18.6    |  |      |  |  |  |  |
| Jul 30                                                                                                  | 13.4                                           | 11.3 | 10.1 | 9.2  | 8.5  | 8.4  | 11.7 | 16.4 | 20.5                                                                                    | 23.4 | 24.9 | 25.7 | 26.6 | 26.9                 | 26.2 | 26.9 | 27.8                | 27.9 | 27.9 | 26.7 | 22.1 | 17.6 | 15.1 | 13.6                   | 8.4           | 27.9    | 19.5    |  |      |  |  |  |  |
| Jul 31                                                                                                  | 12.3                                           | 11   | 10.1 | 9.3  | 8.1  | 9    | 13.1 | 17.9 | 21.1                                                                                    | 24.3 | 26.5 | 27.8 | 28.9 | 29.7                 | 30.3 | 30.7 | 30.6                | 30.3 | 29.5 | 28.4 | 25   | 21   | 18.5 | 17.3                   | 8.1           | 30.7    | 21.3    |  |      |  |  |  |  |
| Diurnal Maximum                                                                                         | 26.2                                           | 25.2 | 23.0 | 20.9 | 21.2 | 23.7 | 24.4 | 25.8 | 27.2                                                                                    | 28.6 | 29.9 | 30.7 | 31.7 | 33.0                 | 32.7 | 32.8 | 32.3                | 31.2 | 30.5 | 29.6 | 27.9 | 25.0 | 23.7 | 22.4                   |               |         |         |  |      |  |  |  |  |
| Diurnal Average                                                                                         | 12.5                                           | 11.6 | 10.7 | 9.8  | 9.5  | 10.3 | 12.5 | 14.7 | 16.5                                                                                    | 18.1 | 19.4 | 20.5 | 21.4 | 22.1                 | 22.5 | 22.9 | 23.0                | 22.6 | 22.2 | 21.4 | 19.5 | 16.6 | 14.7 | 13.5                   |               |         |         |  |      |  |  |  |  |
| C                                                                                                       | Monthly Calibration                            |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |                      |      | Q    | Quality Assurance   |      |      |      |      |      |      |                        |               |         |         |  |      |  |  |  |  |
| K                                                                                                       | Collection Error                               |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |                      |      | Y    | Routine Maintenance |      |      |      |      |      |      | P                      | Power Failure |         |         |  |      |  |  |  |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |                      |      |      |                     |      |      |      |      |      |      |                        |               |         |         |  |      |  |  |  |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |                      |      |      |                     |      |      |      |      |      |      |                        |               |         |         |  |      |  |  |  |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |      |      |      |      |                      |      |      |                     |      |      |      |      |      |      |                        |               |         |         |  |      |  |  |  |  |

*Timeseries Chart of Hourly Average for AT - AQHI - Cadotte Lake Station*







# PEACE RIVER AREA MONITORING PROGRAM

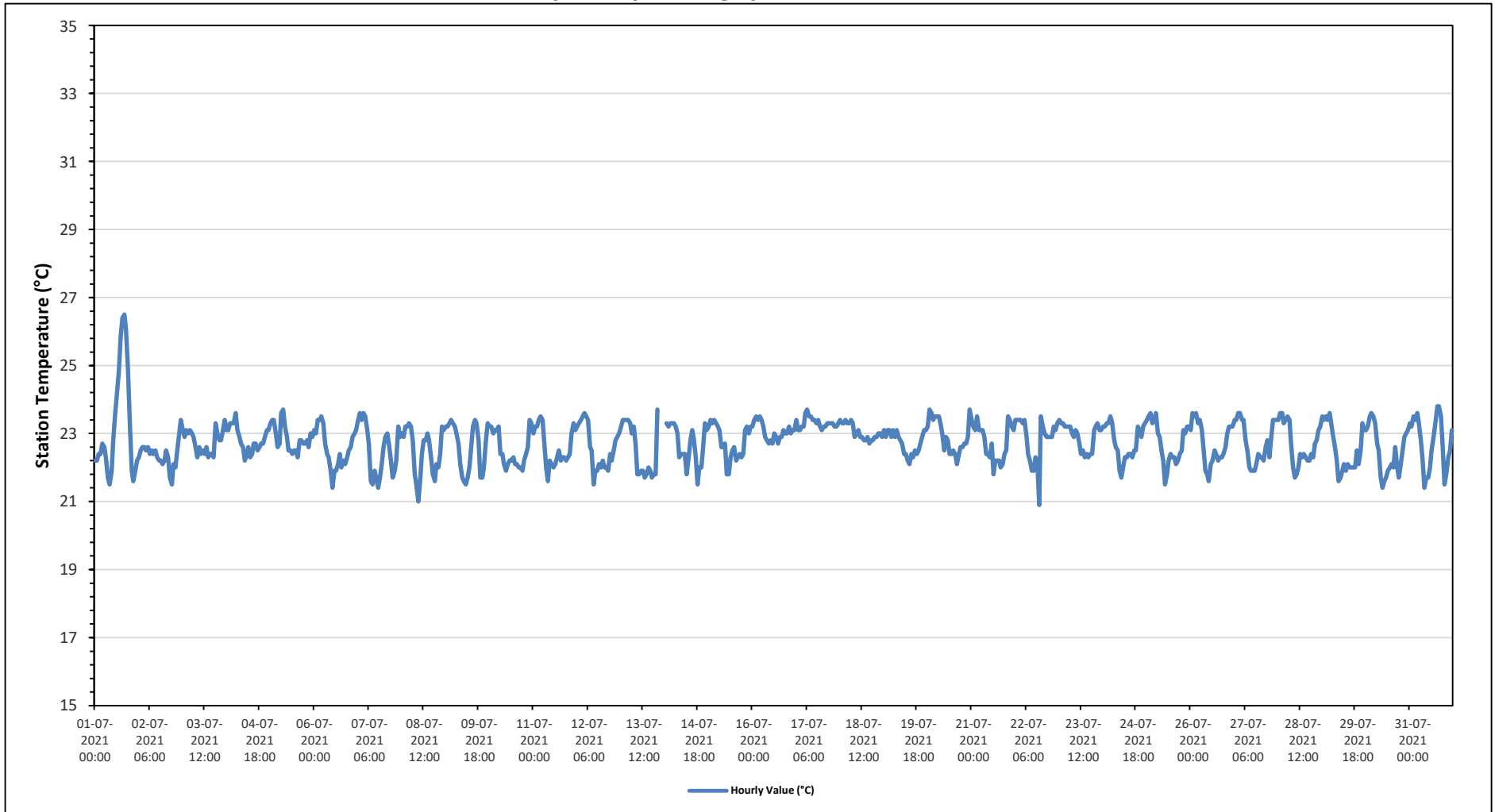
AQHI - Cadotte Lake Station - July 2021

Summary of Hourly Averages

## STATION TEMPERATURE (ST) in Degree Celsius

|                                                                                                         |                                                |      |      |      |      |      |      |                                                                                         |      |      |      |      |      |                       |                     |      |      |      |      |      |      |               |      |                        |         |         |         |  |  |  |  |  |  |      |  |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|------|------|------|------|------|-----------------------|---------------------|------|------|------|------|------|------|---------------|------|------------------------|---------|---------|---------|--|--|--|--|--|--|------|--|
| Maximum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |                                                                                         |      | 26.5 |      | °C   |      | on July 1 at hour 16  |                     |      |      |      |      |      |      |               |      | Hours in Service:      |         |         |         |  |  |  |  |  |  | 744  |  |
| Maximum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |                                                                                         |      | 23.3 |      | °C   |      | on July 17            |                     |      |      |      |      |      |      |               |      | Hours of Data:         |         |         |         |  |  |  |  |  |  | 740  |  |
| Minimum Hourly Value:                                                                                   |                                                |      |      |      |      |      |      |                                                                                         |      | 20.9 |      | °C   |      | on July 22 at hour 13 |                     |      |      |      |      |      |      |               |      | Hours of Missing Data: |         |         |         |  |  |  |  |  |  | 4    |  |
| Minimum Daily Value:                                                                                    |                                                |      |      |      |      |      |      |                                                                                         |      | 22.4 |      | °C   |      | on July 2             |                     |      |      |      |      |      |      |               |      | Hours of Calibration:  |         |         |         |  |  |  |  |  |  | 0    |  |
| Monthly Average:                                                                                        |                                                |      |      |      |      |      |      |                                                                                         |      | 22.7 |      | °C   |      |                       |                     |      |      |      |      |      |      |               |      | Operational Uptime:    |         |         |         |  |  |  |  |  |  | 99.5 |  |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |      |      |      |                                                                                         |      |      |      |      |      |                       |                     |      |      |      |      |      |      |               |      | Daily                  | Daily   | Daily   |         |  |  |  |  |  |  |      |  |
|                                                                                                         | 0                                              | 1    | 2    | 3    | 4    | 5    | 6    | 7                                                                                       | 8    | 9    | 10   | 11   | 12   | 13                    | 14                  | 15   | 16   | 17   | 18   | 19   | 20   | 21            | 22   | 23                     | Minimum | Maximum | Average |  |  |  |  |  |  |      |  |
| Jul 1                                                                                                   | 22.2                                           | 22.2 | 22.4 | 22.4 | 22.7 | 22.6 | 22.3 | 21.7                                                                                    | 21.5 | 21.9 | 22.8 | 23.6 | 24.2 | 24.8                  | 25.8                | 26.4 | 26.5 | 26.1 | 24.9 | 23.4 | 21.9 | 21.6          | 21.9 | 22.2                   | 21.5    | 26.5    | 23.3    |  |  |  |  |  |  |      |  |
| Jul 2                                                                                                   | 22.3                                           | 22.5 | 22.6 | 22.6 | 22.5 | 22.6 | 22.4 | 22.5                                                                                    | 22.4 | 22.5 | 22.3 | 22.2 | 22.2 | 22.1                  | 22.2                | 22.5 | 22.3 | 21.7 | 21.5 | 22.1 | 22.0 | 22.5          | 23.0 | 23.4                   | 21.5    | 23.4    | 22.4    |  |  |  |  |  |  |      |  |
| Jul 3                                                                                                   | 23.1                                           | 22.9 | 23.1 | 23.0 | 23.1 | 23.0 | 22.9 | 22.6                                                                                    | 22.3 | 22.6 | 22.4 | 22.5 | 22.4 | 22.6                  | 22.3                | 22.4 | 22.4 | 22.3 | 23.3 | 23.0 | 22.8 | 22.8          | 23.1 | 23.4                   | 22.3    | 23.4    | 22.8    |  |  |  |  |  |  |      |  |
| Jul 4                                                                                                   | 23.1                                           | 23.1 | 23.3 | 23.3 | 23.3 | 23.6 | 23.1 | 22.9                                                                                    | 22.7 | 22.6 | 22.2 | 22.4 | 22.6 | 22.3                  | 22.4                | 22.7 | 22.7 | 22.5 | 22.6 | 22.7 | 22.7 | 22.9          | 23.1 | 23.1                   | 22.2    | 23.6    | 22.8    |  |  |  |  |  |  |      |  |
| Jul 5                                                                                                   | 23.3                                           | 23.4 | 23.4 | 23.0 | 22.6 | 22.7 | 23.6 | 23.7                                                                                    | 23.2 | 22.9 | 22.5 | 22.5 | 22.4 | 22.5                  | 22.5                | 22.3 | 22.8 | 22.8 | 22.7 | 22.7 | 22.8 | 22.6          | 23.0 | 22.9                   | 22.3    | 23.7    | 22.9    |  |  |  |  |  |  |      |  |
| Jul 6                                                                                                   | 23.1                                           | 23.0 | 23.4 | 23.4 | 23.5 | 23.3 | 22.7 | 22.4                                                                                    | 22.3 | 21.9 | 21.4 | 21.9 | 21.9 | 22.1                  | 22.4                | 22.0 | 22.2 | 22.1 | 22.3 | 22.5 | 22.6 | 22.9          | 23.0 | 23.1                   | 21.4    | 23.5    | 22.6    |  |  |  |  |  |  |      |  |
| Jul 7                                                                                                   | 23.4                                           | 23.6 | 23.4 | 23.6 | 23.5 | 23.1 | 22.7 | 21.6                                                                                    | 21.5 | 21.9 | 21.7 | 21.4 | 21.7 | 22.1                  | 22.6                | 22.9 | 23.0 | 22.7 | 22.2 | 21.7 | 21.9 | 22.2          | 23.2 | 22.9                   | 21.4    | 23.6    | 22.5    |  |  |  |  |  |  |      |  |
| Jul 8                                                                                                   | 23.0                                           | 22.9 | 23.2 | 23.2 | 23.3 | 23.2 | 22.8 | 21.8                                                                                    | 21.5 | 21.0 | 21.6 | 22.4 | 22.8 | 22.8                  | 23.0                | 22.8 | 22.3 | 21.8 | 21.6 | 22.1 | 22.0 | 22.4          | 23.2 | 23.1                   | 21.0    | 23.3    | 22.5    |  |  |  |  |  |  |      |  |
| Jul 9                                                                                                   | 23.2                                           | 23.2 | 23.3 | 23.4 | 23.3 | 23.2 | 23.0 | 22.7                                                                                    | 22.1 | 21.7 | 21.6 | 21.5 | 21.7 | 22.0                  | 22.6                | 23.2 | 23.4 | 23.3 | 22.8 | 21.7 | 21.7 | 22.0          | 22.8 | 23.3                   | 21.5    | 23.4    | 22.6    |  |  |  |  |  |  |      |  |
| Jul 10                                                                                                  | 23.2                                           | 23.2 | 23.0 | 23.1 | 23.1 | 23.2 | 22.4 | 22.4                                                                                    | 22.1 | 21.9 | 22.1 | 22.2 | 22.2 | 22.3                  | 22.1                | 22.1 | 22.0 | 22.0 | 21.9 | 22.2 | 22.4 | 22.6          | 23.4 | 23.3                   | 21.9    | 23.4    | 22.5    |  |  |  |  |  |  |      |  |
| Jul 11                                                                                                  | 23.0                                           | 23.2 | 23.2 | 23.4 | 23.5 | 23.4 | 22.8 | 22.0                                                                                    | 21.6 | 22.2 | 22.1 | 22.0 | 22.1 | 22.3                  | 22.5                | 22.2 | 22.3 | 22.3 | 22.2 | 22.3 | 22.4 | 23.0          | 23.3 | 23.1                   | 21.6    | 23.5    | 22.6    |  |  |  |  |  |  |      |  |
| Jul 12                                                                                                  | 23.2                                           | 23.3 | 23.4 | 23.5 | 23.6 | 23.5 | 23.4 | 22.6                                                                                    | 22.5 | 21.5 | 21.9 | 21.9 | 22.1 | 22.0                  | 22.2                | 22.0 | 22.0 | 21.9 | 22.4 | 22.2 | 22.5 | 22.8          | 22.9 | 23.0                   | 21.5    | 23.6    | 22.6    |  |  |  |  |  |  |      |  |
| Jul 13                                                                                                  | 23.2                                           | 23.4 | 23.4 | 23.4 | 23.4 | 23.3 | 23.0 | 23.2                                                                                    | 22.7 | 21.8 | 21.8 | 21.9 | 21.9 | 21.7                  | 21.8                | 22.0 | 21.9 | 21.7 | 21.8 | 21.8 | 23.7 | P             | P    | P                      | 21.7    | 23.7    | 22.5    |  |  |  |  |  |  |      |  |
| Jul 14                                                                                                  | P                                              | 23.3 | 23.2 | 23.3 | 23.3 | 23.3 | 23.2 | 23.0                                                                                    | 22.3 | 22.4 | 22.4 | 22.4 | 21.8 | 22.3                  | 22.8                | 23.1 | 22.8 | 22.3 | 21.5 | 22.0 | 22.0 | 22.6          | 23.3 | 23.1                   | 21.5    | 23.3    | 22.7    |  |  |  |  |  |  |      |  |
| Jul 15                                                                                                  | 23.2                                           | 23.4 | 23.3 | 23.4 | 23.3 | 23.2 | 23.1 | 22.6                                                                                    | 22.6 | 22.7 | 21.8 | 21.8 | 22.3 | 22.5                  | 22.6                | 22.2 | 22.3 | 22.4 | 22.3 | 22.4 | 23.1 | 23.2          | 23.0 | 23.2                   | 21.8    | 23.4    | 22.7    |  |  |  |  |  |  |      |  |
| Jul 16                                                                                                  | 23.2                                           | 23.4 | 23.5 | 23.4 | 23.5 | 23.4 | 23.2 | 22.9                                                                                    | 22.8 | 22.7 | 22.8 | 22.7 | 23.0 | 22.9                  | 22.7                | 22.9 | 22.9 | 23.1 | 23.0 | 23.0 | 23.2 | 23.0          | 23.1 | 23.1                   | 22.7    | 23.5    | 23.1    |  |  |  |  |  |  |      |  |
| Jul 17                                                                                                  | 23.4                                           | 23.1 | 23.1 | 23.2 | 23.2 | 23.6 | 23.7 | 23.5                                                                                    | 23.5 | 23.4 | 23.4 | 23.3 | 23.4 | 23.2                  | 23.1                | 23.2 | 23.2 | 23.3 | 23.3 | 23.3 | 23.3 | 23.2          | 23.2 | 23.3                   | 23.1    | 23.7    | 23.3    |  |  |  |  |  |  |      |  |
| Jul 18                                                                                                  | 23.4                                           | 23.3 | 23.3 | 23.4 | 23.3 | 23.3 | 23.4 | 23.3                                                                                    | 22.9 | 23.0 | 23.1 | 22.9 | 22.9 | 22.8                  | 22.8                | 22.9 | 22.7 | 22.8 | 22.8 | 22.9 | 22.9 | 23.0          | 23.0 | 22.9                   | 22.7    | 23.4    | 23.0    |  |  |  |  |  |  |      |  |
| Jul 19                                                                                                  | 23.1                                           | 22.9 | 23.1 | 23.1 | 22.9 | 23.1 | 22.9 | 23.1                                                                                    | 22.9 | 22.8 | 22.7 | 22.4 | 22.4 | 22.2                  | 22.1                | 22.4 | 22.3 | 22.5 | 22.4 | 22.5 | 22.7 | 22.9          | 23.1 | 23.1                   | 22.1    | 23.1    | 22.7    |  |  |  |  |  |  |      |  |
| Jul 20                                                                                                  | 23.2                                           | 23.7 | 23.6 | 23.4 | 23.5 | 23.5 | 23.5 | 23.3                                                                                    | 23.0 | 22.5 | 22.9 | 22.8 | 22.4 | 22.4                  | 22.5                | 22.4 | 22.1 | 22.4 | 22.6 | 22.6 | 22.7 | 22.7          | 22.9 | 23.7                   | 22.1    | 23.7    | 22.9    |  |  |  |  |  |  |      |  |
| Jul 21                                                                                                  | 23.4                                           | 23.2 | 23.1 | 23.5 | 23.1 | 23.1 | 23.1 | 22.9                                                                                    | 22.4 | 22.4 | 22.3 | 22.7 | 21.8 | 22.2                  | 22.2                | 22.2 | 22.0 | 22.1 | 22.4 | 22.5 | 23.5 | 23.4          | 23.2 | 23.1                   | 21.8    | 23.5    | 22.7    |  |  |  |  |  |  |      |  |
| Jul 22                                                                                                  | 23.4                                           | 23.4 | 23.4 | 23.4 | 23.3 | 23.4 | 22.9 | 22.4                                                                                    | 22.2 | 21.9 | 21.9 | 22.3 | 22.2 | 20.9                  | 23.5                | 23.2 | 23.0 | 22.9 | 22.9 | 22.9 | 23.2 | 23.1          | 23.3 | 23.1                   | 20.9    | 23.5    | 22.8    |  |  |  |  |  |  |      |  |
| Jul 23                                                                                                  | 23.4                                           | 23.3 | 23.3 | 23.2 | 23.2 | 23.2 | 23.2 | 23.0                                                                                    | 22.9 | 23.1 | 23.0 | 22.7 | 22.4 | 22.5                  | 22.3                | 22.4 | 22.3 | 22.4 | 22.4 | 23.1 | 23.2 | 23.3          | 23.1 | 23.1                   | 22.3    | 23.4    | 22.9    |  |  |  |  |  |  |      |  |
| Jul 24                                                                                                  | 23.2                                           | 23.2 | 23.3 | 23.3 | 23.5 | 23.3 | 22.8 | 22.6                                                                                    | 22.5 | 21.9 | 21.7 | 22.0 | 22.3 | 22.3                  | 22.4                | 22.4 | 22.3 | 22.5 | 22.5 | 23.2 | 23.1 | 22.9          | 23.2 | 23.3                   | 21.7    | 23.5    | 22.7    |  |  |  |  |  |  |      |  |
| Jul 25                                                                                                  | 23.4                                           | 23.5 | 23.6 | 23.3 | 23.4 | 23.6 | 23.0 | 22.9                                                                                    | 22.5 | 22.2 | 21.5 | 21.8 | 22.2 | 22.4                  | 22.3                | 22.3 | 22.1 | 22.2 | 22.4 | 22.5 | 23.1 | 23.0          | 23.2 | 23.2                   | 21.5    | 23.6    | 22.7    |  |  |  |  |  |  |      |  |
| Jul 26                                                                                                  | 23.1                                           | 23.6 | 23.5 | 23.6 | 23.3 | 23.4 | 23.1 | 22.6                                                                                    | 21.9 | 21.8 | 21.6 | 22.1 | 22.2 | 22.5                  | 22.4                | 22.2 | 22.3 | 22.3 | 22.4 | 22.6 | 23.0 | 23.2          | 23.2 | 23.2                   | 21.6    | 23.6    | 22.7    |  |  |  |  |  |  |      |  |
| Jul 27                                                                                                  | 23.4                                           | 23.4 | 23.6 | 23.6 | 23.4 | 23.4 | 22.8 | 22.5                                                                                    | 22.0 | 21.9 | 21.9 | 21.9 | 22.1 | 22.4                  | 22.3                | 22.3 | 22.2 | 22.6 | 22.8 | 22.3 | 22.8 | 23.4          | 23.4 | 23.4                   | 21.9    | 23.6    | 22.7    |  |  |  |  |  |  |      |  |
| Jul 28                                                                                                  | 23.4                                           | 23.6 | 23.6 | 23.3 | 23.4 | 23.5 | 23.4 | 22.7                                                                                    | 22.0 | 21.7 | 21.8 | 22.0 | 22.4 | 22.3                  | 22.4                | 22.3 | 22.2 | 22.2 | 22.4 | 22.3 | 22.7 | 22.8          | 23.1 | 23.2                   | 21.7    | 23.6    | 22.7    |  |  |  |  |  |  |      |  |
| Jul 29                                                                                                  | 23.5                                           | 23.4 | 23.5 | 23.4 | 23.6 | 23.3 | 22.9 | 22.6                                                                                    | 22.2 | 21.6 | 21.7 | 21.9 | 22.1 | 21.9                  | 22.1                | 22.0 | 22.0 | 22.0 | 22.5 | 22.1 | 22.5 | 23.3          | 23.1 | 23.1                   | 21.6    | 23.6    | 22.6    |  |  |  |  |  |  |      |  |
| Jul 30                                                                                                  | 23.1                                           | 23.2 | 23.5 | 23.6 | 23.5 | 23.3 | 22.7 | 22.5                                                                                    | 21.7 | 21.4 | 21.6 | 21.7 | 21.9 | 22.0                  | 22.1                | 22.0 | 22.6 | 22.0 | 21.7 | 22.1 | 22.5 | 22.9          | 23.0 | 23.1                   | 21.4    | 23.6    | 22.5    |  |  |  |  |  |  |      |  |
| Jul 31                                                                                                  | 23.3                                           | 23.2 | 23.5 | 23.4 | 23.6 | 23.3 | 22.8 | 22.2                                                                                    | 21.4 | 21.7 | 21.7 | 22.0 | 22.5 | 22.9                  | 23.3                | 23.8 | 23.8 | 23.5 | 22.6 | 21.5 | 21.8 | 22.3          | 22.5 | 23.1                   | 21.4    | 23.8    | 22.7    |  |  |  |  |  |  |      |  |
| Diurnal Maximum                                                                                         | 23.5                                           | 23.7 | 23.6 | 23.6 | 23.6 | 23.6 | 23.7 | 23.7                                                                                    | 23.5 | 23.4 | 23.4 | 23.6 | 24.2 | 24.8                  | 25.8                | 26.4 | 26.5 | 26.1 | 24.9 | 23.4 | 23.7 | 23.4          | 23.4 | 23.7                   |         |         |         |  |  |  |  |  |  |      |  |
| Diurnal Average                                                                                         | 23.2                                           | 23.2 | 23.3 | 23.3 | 23.3 | 23.3 | 23.0 | 22.7                                                                                    | 22.3 | 22.2 | 22.1 | 22.3 | 22.3 | 22.4                  | 22.6                | 22.6 | 22.6 | 22.5 | 22.5 | 22.5 | 22.6 | 22.8          | 23.1 | 23.1                   |         |         |         |  |  |  |  |  |  |      |  |
| C                                                                                                       | Monthly Calibration                            |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |      |      |      |      |      | Q                     | Quality Assurance   |      |      |      |      |      |      |               |      |                        |         |         |         |  |  |  |  |  |  |      |  |
| K                                                                                                       | Collection Error                               |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |      |      |      |      |      | Y                     | Routine Maintenance |      |      |      |      |      | P    | Power Failure |      |                        |         |         |         |  |  |  |  |  |  |      |  |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |      |      |      |                       |                     |      |      |      |      |      |      |               |      |                        |         |         |         |  |  |  |  |  |  |      |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |      |      |      |                                                                                         |      |      |      |      |      |                       |                     |      |      |      |      |      |      |               |      |                        |         |         |         |  |  |  |  |  |  |      |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |      |      |      |                                                                                         |      |      |      |      |      |                       |                     |      |      |      |      |      |      |               |      |                        |         |         |         |  |  |  |  |  |  |      |  |

***Timeseries Chart of Hourly Average for ST - AQHI - Cadotte Lake Station***





# PEACE RIVER AREA MONITORING PROGRAM

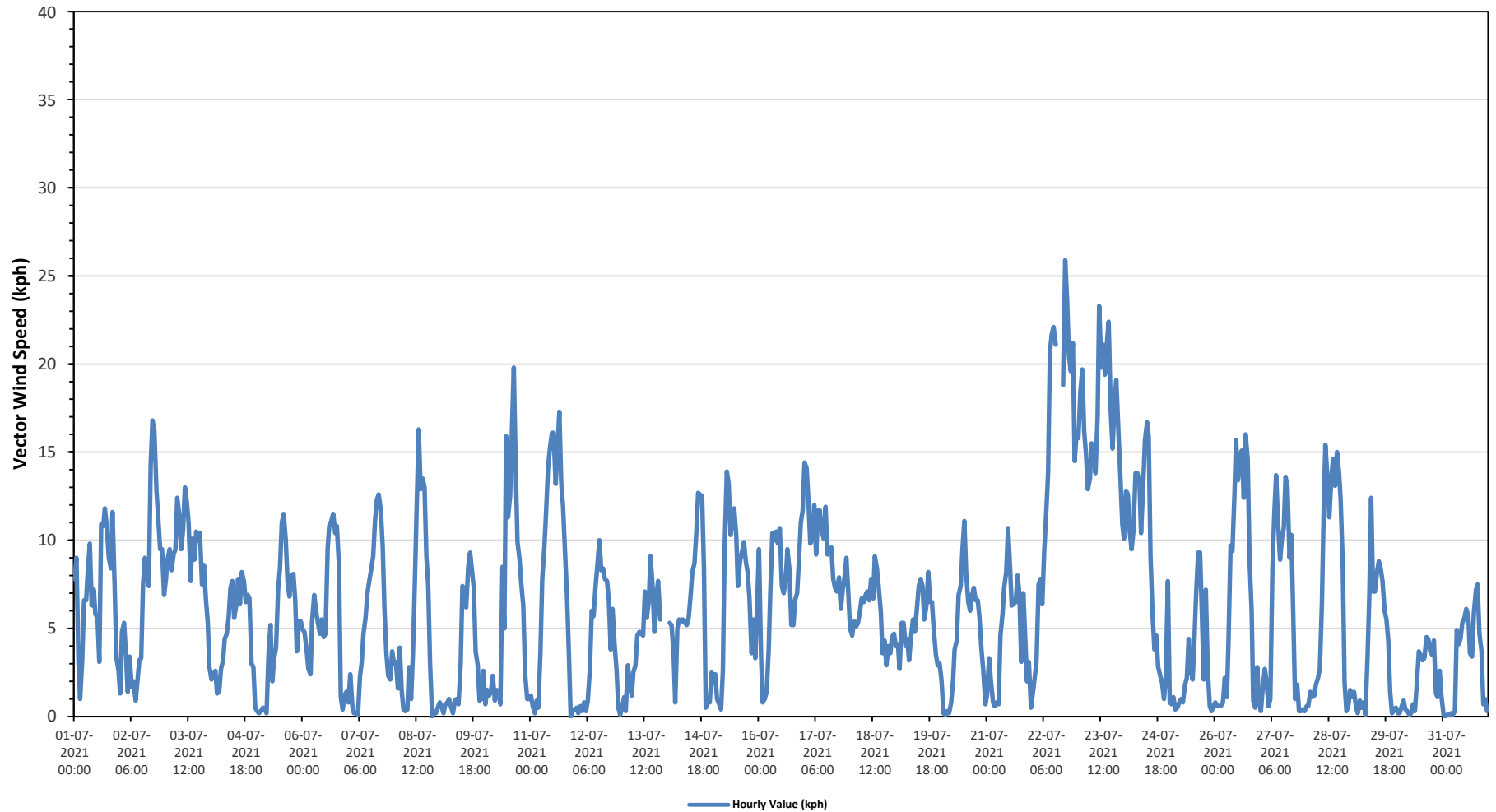
## AQHI - Cadotte Lake Station - July 2021

### Summary of Hourly Averages

#### VECTOR WIND SPEED (VWS) in km/hr

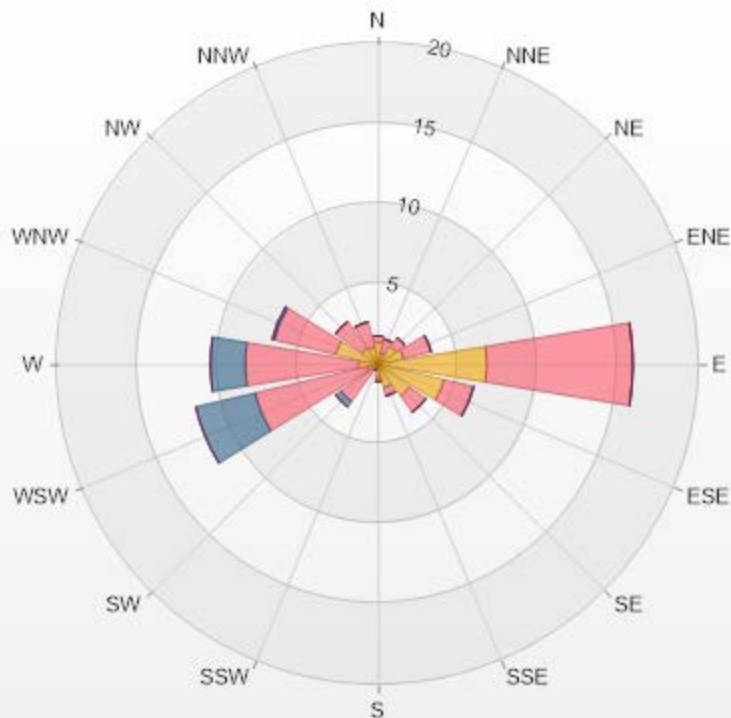
| Maximum Hourly Value: 25.9 kph on July 22 at hour 17                                                    |                                                |      |      |      |      |      |      |      |                                                                                         | Hours in Service: 744    |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------|------|------|------|------|------|------|-----------------------------------------------------------------------------------------|--------------------------|------|------|------|------|------|------|---------------------|------|------|------|------|------|------|---------------|---------------|---------------|------|
| Maximum Daily Value: 17.1 kph on July 23                                                                |                                                |      |      |      |      |      |      |      |                                                                                         | Hours of Data: 737       |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |
| Minimum Hourly Value: 0.0 kph on July 8 at hour 20                                                      |                                                |      |      |      |      |      |      |      |                                                                                         | Hours of Missing Data: 4 |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |
| Minimum Daily Value: 0.8 kph on July 30                                                                 |                                                |      |      |      |      |      |      |      |                                                                                         | Hours of Calibration: 3  |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |
| Monthly Average: 1.8 kph                                                                                |                                                |      |      |      |      |      |      |      |                                                                                         | Operational Uptime: 99.5 |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |
| Day                                                                                                     | Hourly Period Starting at (MST)                |      |      |      |      |      |      |      |                                                                                         |                          |      |      |      |      |      |      |                     |      |      |      |      |      |      | Daily Minimum | Daily Maximum | Daily Average |      |
| Jul 1                                                                                                   | 7.8                                            | 9.0  | 3.0  | 1.0  | 3.2  | 6.6  | 6.6  | 8.2  | 9.8                                                                                     | 6.3                      | 7.2  | 5.8  | 5.6  | 3.1  | 10.9 | 10.8 | 11.8                | 10.7 | 9.0  | 8.4  | 11.6 | 7.5  | 3.3  | 2.6           | 1.0           | 11.8          | 2.7  |
| Jul 2                                                                                                   | 1.3                                            | 4.8  | 5.3  | 3.5  | 1.4  | 3.4  | 1.7  | 2.0  | 0.9                                                                                     | 1.9                      | 3.2  | 3.3  | 7.5  | 9.0  | 7.9  | 7.4  | 14.3                | 16.8 | 16.2 | 12.8 | 11.2 | 9.5  | 9.5  | 6.9           | 0.9           | 16.8          | 6.4  |
| Jul 3                                                                                                   | 7.8                                            | 8.9  | 9.5  | 8.3  | 9.2  | 9.5  | 12.4 | 11.5 | 9.5                                                                                     | 10.6                     | 13.0 | 12.2 | 11.0 | 7.7  | 10.1 | 8.9  | 10.5                | 10.0 | 10.4 | 7.5  | 8.6  | 6.6  | 5.3  | 2.8           | 2.8           | 13.0          | 8.4  |
| Jul 4                                                                                                   | 2.1                                            | 2.4  | 2.6  | 1.3  | 1.4  | 2.7  | 3.2  | 4.4  | 4.7                                                                                     | 5.6                      | 7.3  | 7.7  | 5.6  | 6.3  | 7.8  | 6.4  | 8.2                 | 7.7  | 6.5  | 6.9  | 6.7  | 3.0  | 2.8  | 0.5           | 0.5           | 8.2           | 3.7  |
| Jul 5                                                                                                   | 0.3                                            | 0.2  | 0.3  | 0.5  | 0.4  | 0.2  | 3.7  | 5.2  | 2.0                                                                                     | 3.3                      | 3.9  | 7.2  | 8.4  | 11.0 | 11.5 | 10.0 | 7.6                 | 6.8  | 8.0  | 8.1  | 6.6  | 3.7  | 5.4  | 5.4           | 0.2           | 11.5          | 4.7  |
| Jul 6                                                                                                   | 4.9                                            | 4.8  | 3.8  | 2.7  | 2.4  | 5.4  | 6.9  | 6.0  | 5.3                                                                                     | 4.7                      | 5.5  | 4.5  | 4.7  | 9.5  | 10.8 | 11.1 | 11.5                | 10.4 | 10.8 | 8.6  | 1.1  | 0.4  | 1.2  | 1.4           | 0.4           | 11.5          | 2.7  |
| Jul 7                                                                                                   | 0.8                                            | 2.4  | 0.6  | 0.2  | 0.2  | 0.1  | 2.3  | 3.0  | 4.7                                                                                     | 5.6                      | 7.0  | 7.7  | 8.3  | 9.1  | 11.1 | 12.3 | 12.6                | 11.7 | 9.7  | 6.0  | 3.6  | 2.3  | 2.1  | 3.7           | 0.1           | 12.6          | 3.7  |
| Jul 8                                                                                                   | 3.0                                            | 3.1  | 1.6  | 3.9  | 1.5  | 0.4  | 0.3  | 0.4  | 2.8                                                                                     | 1.0                      | 3.6  | 8.1  | 11.8 | 16.3 | 12.9 | 13.5 | 13.0                | 9.1  | 7.4  | 3.0  | 0.0  | 0.2  | 0.2  | 0.5           | 0.0           | 16.3          | 3.5  |
| Jul 9                                                                                                   | 0.8                                            | 0.6  | 0.2  | 0.7  | 0.8  | 1.0  | 0.6  | 0.2  | 0.9                                                                                     | 1.0                      | 0.7  | 2.9  | 7.4  | 7.2  | 6.2  | 8.5  | 9.3                 | 8.3  | 7.3  | 3.7  | 2.9  | 0.9  | 1.0  | 2.6           | 0.2           | 9.3           | 2.0  |
| Jul 10                                                                                                  | 0.7                                            | 1.5  | 1.2  | 1.4  | 2.3  | 0.9  | 1.5  | 1.4  | 0.7                                                                                     | 8.5                      | 5.0  | 15.9 | 11.3 | 12.5 | 16.3 | 19.8 | 14.3                | 9.9  | 8.9  | 7.6  | 6.3  | 2.4  | 1.0  | 1.0           | 0.7           | 19.8          | 5.4  |
| Jul 11                                                                                                  | 1.2                                            | 0.6  | 0.2  | 0.9  | 0.5  | 3.6  | 7.8  | 9.6  | 11.4                                                                                    | 14.1                     | 15.2 | 16.1 | 16.1 | 13.2 | 15.2 | 17.3 | 13.3                | 11.9 | 9.2  | 6.9  | 3.2  | 0.0  | 0.3  | 0.4           | 0.0           | 17.3          | 7.6  |
| Jul 12                                                                                                  | 0.5                                            | 0.2  | 0.6  | 0.3  | 0.8  | 0.3  | 0.9  | 2.7  | 6.0                                                                                     | 5.7                      | 7.3  | 8.7  | 10.0 | 8.3  | 8.4  | 7.8  | 7.7                 | 6.6  | 3.8  | 6.1  | 4.0  | 2.7  | 0.5  | 0.1           | 0.1           | 10.0          | 3.1  |
| Jul 13                                                                                                  | 0.6                                            | 1.1  | 0.3  | 2.9  | 1.9  | 1.2  | 2.5  | 2.9  | 4.6                                                                                     | 4.8                      | 4.7  | 4.6  | 7.1  | 5.6  | 6.6  | 9.1  | 7.4                 | 4.8  | 6.9  | 7.7  | 5.5  | P    | P    | P             | 0.3           | 9.1           | 4.0  |
| Jul 14                                                                                                  | P                                              | 5.3  | 5.2  | 3.5  | 0.8  | 5.0  | 5.5  | 5.4  | 5.5                                                                                     | 5.3                      | 5.2  | 5.6  | 6.8  | 8.2  | 8.7  | 10.4 | 12.7                | 12.6 | 12.5 | 8.5  | 0.5  | 0.8  | 0.8  | 2.5           | 0.5           | 12.7          | 2.4  |
| Jul 15                                                                                                  | 1.9                                            | 2.4  | 1.0  | 0.7  | 0.4  | 2.6  | 9.8  | 13.9 | 13.2                                                                                    | 10.3                     | 11.1 | 11.8 | 10.2 | 7.4  | 8.8  | 9.3  | 9.9                 | 8.8  | 8.2  | 6.7  | 3.6  | 5.5  | 3.3  | 6.3           | 0.4           | 13.9          | 5.4  |
| Jul 16                                                                                                  | 9.5                                            | 3.4  | 0.8  | 1.0  | 1.4  | 3.8  | 7.0  | 10.4 | 10.0                                                                                    | 10.5                     | 9.8  | 10.7 | 7.4  | 7.0  | 7.8  | 9.5  | 8.3                 | 5.2  | 5.2  | 6.6  | 7.0  | 8.9  | 11.0 | 11.7          | 0.8           | 11.7          | 6.5  |
| Jul 17                                                                                                  | 14.4                                           | 14.1 | 12.2 | 9.8  | 10.1 | 12.0 | 9.2  | 11.7 | 11.7                                                                                    | 10.5                     | 10.1 | 11.9 | 9.2  | 9.5  | 9.6  | 7.8  | 7.3                 | 7.1  | 7.9  | 6.1  | 7.2  | 7.9  | 9.0  | 6.8           | 6.1           | 14.4          | 9.7  |
| Jul 18                                                                                                  | 5.0                                            | 4.6  | 5.4  | 5.1  | 5.3  | 5.9  | 6.7  | 6.5  | 6.9                                                                                     | 7.1                      | 6.6  | 7.8  | 6.7  | 9.1  | 8.4  | 7.3  | 5.9                 | 3.6  | 4.3  | 2.9  | 4.0  | 3.6  | 4.5  | 4.7           | 2.9           | 9.1           | 5.6  |
| Jul 19                                                                                                  | 4.0                                            | 4.1  | 2.7  | 5.3  | 5.3  | 4.0  | 4.4  | 3.2  | 4.6                                                                                     | 5.5                      | 4.8  | 6.0  | 7.4  | 7.8  | 7.4  | 5.5  | 6.3                 | 8.2  | 6.5  | 6.5  | 4.9  | 3.5  | 2.9  | 3.0           | 2.7           | 8.2           | 4.7  |
| Jul 20                                                                                                  | 2.1                                            | 0.2  | 0.1  | 0.3  | 0.2  | 0.8  | 2.0  | 3.8  | 4.3                                                                                     | 6.9                      | 7.4  | 9.5  | 11.1 | 8.1  | 6.5  | 6.0  | 6.9                 | 7.3  | 6.6  | 6.6  | 5.7  | 3.8  | 2.6  | 0.7           | 0.1           | 11.1          | 4.4  |
| Jul 21                                                                                                  | 1.2                                            | 3.3  | 2.0  | 0.8  | 0.6  | 0.8  | 0.7  | 4.6  | 5.8                                                                                     | 7.3                      | 8.2  | 10.7 | 8.3  | 6.3  | 6.4  | 6.5  | 8.0                 | 7.0  | 3.1  | 7.0  | 4.5  | 2.0  | 3.1  | 0.5           | 0.5           | 10.7          | 3.2  |
| Jul 22                                                                                                  | 1.3                                            | 2.3  | 3.1  | 7.5  | 7.8  | 6.4  | 9.3  | 11.3 | 13.8                                                                                    | 20.7                     | 21.7 | 22.1 | 21.1 | C    | C    | C    | 18.8                | 25.9 | 23.7 | 20.5 | 19.6 | 21.2 | 14.5 | 16.1          | 1.3           | 25.9          | 14.3 |
| Jul 23                                                                                                  | 15.8                                           | 18.5 | 19.7 | 16.2 | 14.9 | 12.9 | 13.5 | 15.5 | 15.3                                                                                    | 13.8                     | 17.0 | 23.3 | 19.8 | 21.1 | 19.4 | 21.3 | 22.4                | 17.3 | 15.2 | 18.1 | 19.1 | 16.2 | 13.8 | 10.9          | 10.9          | 23.3          | 17.1 |
| Jul 24                                                                                                  | 10.1                                           | 12.8 | 12.6 | 10.5 | 9.5  | 10.5 | 13.8 | 13.8 | 13.3                                                                                    | 10.4                     | 13.1 | 15.7 | 16.7 | 15.9 | 9.1  | 5.7  | 3.8                 | 4.6  | 2.8  | 2.3  | 1.9  | 1.0  | 2.2  | 7.7           | 1.0           | 16.7          | 7.8  |
| Jul 25                                                                                                  | 0.8                                            | 0.7  | 1.1  | 0.4  | 0.5  | 0.8  | 1.0  | 0.8  | 1.8                                                                                     | 2.2                      | 4.4  | 2.7  | 2.1  | 4.5  | 6.9  | 9.3  | 9.3                 | 5.4  | 2.1  | 7.2  | 2.8  | 0.6  | 0.3  | 0.6           | 0.3           | 9.3           | 2.0  |
| Jul 26                                                                                                  | 0.8                                            | 0.6  | 0.6  | 0.6  | 0.8  | 2.2  | 1.1  | 4.2  | 9.7                                                                                     | 9.4                      | 12.7 | 15.7 | 13.4 | 14.8 | 15.1 | 12.4 | 16.0                | 14.6 | 8.9  | 6.0  | 0.9  | 0.5  | 2.8  | 0.9           | 0.5           | 16.0          | 6.2  |
| Jul 27                                                                                                  | 0.3                                            | 1.6  | 2.7  | 1.9  | 0.6  | 1.0  | 8.4  | 11.5 | 13.7                                                                                    | 11.1                     | 8.9  | 10.1 | 10.7 | 13.6 | 13.0 | 9.0  | 10.3                | 5.8  | 1.0  | 1.8  | 0.3  | 0.3  | 0.4  | 0.3           | 0.3           | 13.7          | 4.8  |
| Jul 28                                                                                                  | 0.6                                            | 0.6  | 1.4  | 1.1  | 1.2  | 1.8  | 2.2  | 2.7  | 6.5                                                                                     | 12.0                     | 15.4 | 13.5 | 11.3 | 13.6 | 14.6 | 13.1 | 15.0                | 13.8 | 12.3 | 8.6  | 1.9  | 0.3  | 0.6  | 1.5           | 0.3           | 15.4          | 6.0  |
| Jul 29                                                                                                  | 1.1                                            | 1.4  | 0.5  | 0.2  | 0.9  | 0.5  | 0.8  | 0.1  | 3.3                                                                                     | 6.9                      | 12.4 | 7.1  | 7.1  | 8.2  | 8.8  | 8.4  | 7.7                 | 6.0  | 5.5  | 4.3  | 1.4  | 0.2  | 0.4  | 0.5           | 0.1           | 12.4          | 3.2  |
| Jul 30                                                                                                  | 0.2                                            | 0.2  | 0.6  | 0.9  | 0.4  | 0.3  | 0.1  | 0.2  | 0.7                                                                                     | 0.3                      | 1.8  | 3.7  | 3.5  | 3.2  | 3.3  | 4.5  | 4.4                 | 3.7  | 3.5  | 4.3  | 1.3  | 1.1  | 2.6  | 1.1           | 0.1           | 4.5           | 0.8  |
| Jul 31                                                                                                  | 0.1                                            | 0.0  | 0.1  | 0.1  | 0.2  | 0.1  | 0.3  | 4.9  | 4.1                                                                                     | 4.4                      | 5.3  | 5.6  | 6.1  | 5.7  | 3.6  | 3.4  | 5.9                 | 7.2  | 7.5  | 4.7  | 3.7  | 0.7  | 1.0  | 0.3           | 0.0           | 7.5           | 2.9  |
| Diurnal Maximum                                                                                         | 16                                             | 19   | 20   | 16   | 15   | 13   | 14   | 16   | 15                                                                                      | 21                       | 22   | 23   | 21   | 21   | 19   | 21   | 22                  | 26   | 24   | 21   | 20   | 21   | 15   | 16            |               |               |      |
| Diurnal Average                                                                                         | 3.4                                            | 3.7  | 3.3  | 3.0  | 2.8  | 3.4  | 4.7  | 5.9  | 6.7                                                                                     | 7.3                      | 8.4  | 9.6  | 9.5  | 9.4  | 9.8  | 9.7  | 10.3                | 9.3  | 8.1  | 7.2  | 5.2  | 3.9  | 3.6  | 3.5           |               |               |      |
| C                                                                                                       | Monthly Calibration                            |      |      |      |      |      |      | S    | Daily Zero-Span Check                                                                   |                          |      |      |      |      |      | Q    | Quality Assurance   |      |      |      |      |      |      |               |               |               |      |
| K                                                                                                       | Collection Error                               |      |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                        |                          |      |      |      |      |      | Y    | Routine Maintenance |      |      |      |      |      |      | P             | Power Failure |               |      |
| X                                                                                                       | InValid Data (Equipment Malfunction /Recovery) |      |      |      |      |      |      | NRM  | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |                          |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |                          |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                                |      |      |      |      |      |      |      |                                                                                         |                          |      |      |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |

***Timeseries Chart of Hourly Average for VWS - AQHI - Cadotte Lake Station***



Wind: AQHI Cadotte Lake Monitor: WDS [KPH] Monthly: 07-2021 Type: WindRose Direction: Blowing From (Wind Frequency) Based On 1 Hr.  
 Calm: 23.88% Valid Data: 99.06%

| Direction | 1.8-6.0 | 6.0-15.0 | 15.0-29.0 | 29.0-39.0 | >39.0 | Total |
|-----------|---------|----------|-----------|-----------|-------|-------|
| N         | 1.36    | 0.41     | 0         | 0         | 0     | 1.77  |
| NNE       | 0.68    | 0.95     | 0         | 0         | 0     | 1.63  |
| NE        | 1.36    | 0.68     | 0         | 0         | 0     | 2.04  |
| ENE       | 1.63    | 1.76     | 0         | 0         | 0     | 3.39  |
| E         | 6.78    | 9.09     | 0         | 0         | 0     | 15.87 |
| ESE       | 4.21    | 1.9      | 0         | 0         | 0     | 6.11  |
| SE        | 2.44    | 1.22     | 0         | 0         | 0     | 3.66  |
| SSE       | 1.49    | 0.54     | 0         | 0         | 0     | 2.03  |
| S         | 0.81    | 0.27     | 0         | 0         | 0     | 1.08  |
| SSW       | 0.14    | 0.27     | 0         | 0         | 0     | 0.41  |
| SW        | 0.27    | 2.58     | 0.41      | 0         | 0     | 3.26  |
| WSW       | 0.68    | 7.19     | 3.8       | 0         | 0     | 11.67 |
| W         | 1.22    | 7.06     | 2.17      | 0         | 0     | 10.45 |
| WNW       | 2.71    | 3.93     | 0.14      | 0         | 0     | 6.78  |
| NW        | 1.22    | 2.04     | 0         | 0         | 0     | 3.26  |
| NNW       | 1.09    | 1.63     | 0         | 0         | 0     | 2.72  |
| Summary   | 28.09   | 41.52    | 6.52      | 0         | 0     | 76.13 |



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% Icon Classes (KPH)

28 1.8-6.0

42 6.0-15.0

7 15.0-29.0

0 29.0-39.0

0 >39.0



# PEACE RIVER AREA MONITORING PROGRAM

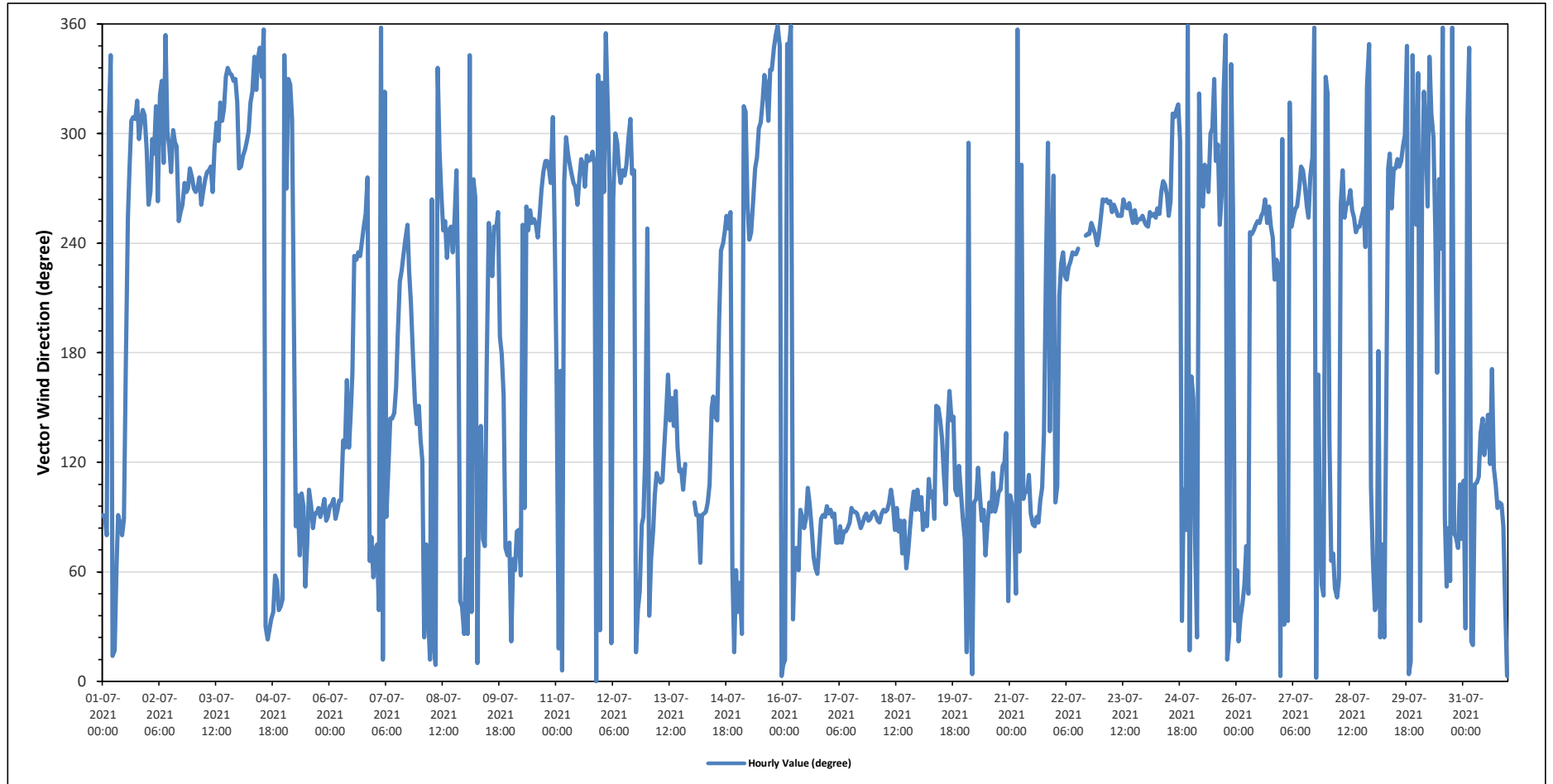
AQHI - Cadotte Lake Station - July 2021

Summary of Hourly Averages

WIND DIRECTION (VWD) in sector

|                                                                                                         |                                              |     |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     |                        |     |     |     |               |        |          |   |  |  |      |  |  |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|---------------------|------------------------|-----|-----|-----|---------------|--------|----------|---|--|--|------|--|--|--|--|--|--|--|--|--|
| Monthly Average:                                                                                        |                                              |     |     |     |     |     |     |     |     | 258 (WSW) degree                                                                        |     |     |     |     |     |     |     |     |                     | Hours in Service:      |     |     |     |               |        |          |   |  |  | 744  |  |  |  |  |  |  |  |  |  |
|                                                                                                         |                                              |     |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     | Hours of Data:         |     |     |     |               |        |          |   |  |  | 737  |  |  |  |  |  |  |  |  |  |
|                                                                                                         |                                              |     |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     | Hours of Missing Data: |     |     |     |               |        |          |   |  |  | 4    |  |  |  |  |  |  |  |  |  |
|                                                                                                         |                                              |     |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     | Hours of Calibration:  |     |     |     |               |        |          |   |  |  | 3    |  |  |  |  |  |  |  |  |  |
|                                                                                                         |                                              |     |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     | Operational Uptime:    |     |     |     |               |        |          |   |  |  | 99.5 |  |  |  |  |  |  |  |  |  |
| Day                                                                                                     | Hourly Period Starting at (MST)              |     |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     |                        |     |     |     | Daily Average |        |          |   |  |  |      |  |  |  |  |  |  |  |  |  |
|                                                                                                         | 0                                            | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9                                                                                       | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18                  | 19                     | 20  | 21  | 22  | 23            | Degree | Quadrant |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 1                                                                                                   | E                                            | E   | E   | NW  | NNW | NNE | NNE | ENE | E   | E                                                                                       | E   | E   | S   | WSW | W   | NW  | NW  | NW  | NW                  | WNW                    | NW  | NW  | NW  | WNW           | 347    | NNW      |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 2                                                                                                   | W                                            | W   | WNW | WNW | NW  | W   | NW  | NNW | WNW | N                                                                                       | WNW | WNW | W   | WNW | WNW | WNW | WSW | WSW | W                   | W                      | W   | W   | W   | W             | 276    | W        |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 3                                                                                                   | W                                            | W   | W   | W   | W   | W   | W   | W   | W   | W                                                                                       | W   | WNW | NW  | WNW | NW  | NW  | NW  | NNW | NNW                 | NNW                    | NNW | NNW | NNW | NW            | 295    | WNW      |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 4                                                                                                   | W                                            | W   | WNW | WNW | WNW | WNW | NW  | NW  | NNW | NW                                                                                      | NNW | NNW | N   | NNE | NNE | NNE | NE  | NE  | ENE                 | NE                     | NE  | NE  | NE  | 4             | N      |          |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 5                                                                                                   | NNW                                          | W   | NNW | NW  | NW  | SSW | E   | E   | ENE | ESE                                                                                     | E   | NE  | ENE | ESE | E   | E   | E   | E   | E                   | E                      | E   | E   | E   | 89            | E      |          |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 6                                                                                                   | E                                            | E   | E   | E   | E   | E   | E   | SE  | SE  | SSE                                                                                     | SE  | SE  | SSE | SW  | SW  | SW  | SW  | WSW | WSW                 | WSW                    | W   | ENE | ENE | ENE           | 191    | S        |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 7                                                                                                   | ENE                                          | ENE | NE  | N   | NNE | NW  | E   | ESE | SE  | SE                                                                                      | SE  | SSE | S   | SW  | SW  | SW  | WSW | WSW | SW                  | SSW                    | S   | SSE | SE  | SSE           | 200    | SSW      |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 8                                                                                                   | SE                                           | ESE | NNE | ENE | NE  | NNE | W   | NNE | N   | NNW                                                                                     | WNW | W   | WSW | WSW | SW  | WSW | WSW | SW  | WSW                 | W                      | SSW | NE  | NE  | NNE           | 250    | WSW      |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 9                                                                                                   | ENE                                          | NNE | NNW | NE  | W   | W   | N   | ESE | SE  | ENE                                                                                     | ENE | S   | WSW | WSW | SW  | WSW | WSW | WSW | S                   | S                      | SSE | ENE | ENE | ENE           | 227    | SW       |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 10                                                                                                  | NNE                                          | ENE | ENE | E   | E   | ENE | WSW | E   | WSW | WSW                                                                                     | WSW | WSW | WSW | WSW | WSW | WSW | W   | W   | WNW                 | WNW                    | W   | W   | NW  | WSW           | 261    | W        |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 11                                                                                                  | SSE                                          | NNE | SSE | N   | W   | WNW | WNW | W   | W   | W                                                                                       | W   | W   | W   | WNW | W   | W   | WNW | WNW | WNW                 | WNW                    | W   | N   | NNW | NNE           | 279    | W        |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 12                                                                                                  | NNW                                          | W   | N   | NW  | W   | NNE | W   | WNW | WNW | W                                                                                       | W   | W   | W   | W   | WNW | NW  | W   | W   | NNE                 | NE                     | NE  | E   | E   | ESE           | 297    | WNW      |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 13                                                                                                  | WSW                                          | NE  | ENE | E   | E   | ESE | ESE | ESE | ESE | SE                                                                                      | SE  | SSE | SE  | SSE | SE  | SSE | SE  | ESE | ESE                 | ESE                    | ESE | P   | P   | P             | 129    | SE       |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 14                                                                                                  | P                                            | E   | E   | E   | ENE | E   | E   | E   | E   | ESE                                                                                     | SSE | SSE | SE  | SE  | SSW | SW  | WSW | WSW | WSW                 | WSW                    | WSW | ENE | NNE | ENE           | 176    | S        |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 15                                                                                                  | NE                                           | NE  | NNE | NW  | NW  | W   | WSW | WSW | W   | W                                                                                       | WNW | WNW | NW  | NW  | NNW | NW  | NW  | NNW | NNW                 | NNW                    | N   | N   | NNW | N             | 306    | NW       |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 16                                                                                                  | N                                            | NNE | NNW | NNW | N   | NE  | ENE | ENE | ENE | E                                                                                       | E   | E   | E   | ESE | E   | E   | ENE | ENE | ENE                 | ENE                    | E   | E   | E   | E             | 76     | ENE      |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 17                                                                                                  | E                                            | E   | E   | E   | ENE | ENE | E   | ENE | E   | E                                                                                       | E   | E   | E   | E   | E   | E   | E   | E   | E                   | E                      | E   | E   | E   | E             | 87     | E        |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 18                                                                                                  | E                                            | E   | E   | E   | E   | E   | E   | E   | E   | ESE                                                                                     | E   | E   | E   | E   | E   | ENE | E   | ENE | ENE                 | E                      | E   | ESE | E   | ESE           | 90     | E        |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 19                                                                                                  | E                                            | E   | E   | E   | E   | ESE | E   | ESE | E   | SSE                                                                                     | SSE | SE  | SE  | ESE | E   | SE  | SSE | SE  | SE                  | ESE                    | E   | ESE | ESE | E             | 118    | ESE      |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 20                                                                                                  | ENE                                          | NNE | WNW | NE  | N   | E   | E   | ESE | E   | E                                                                                       | ENE | E   | E   | E   | E   | ESE | E   | E   | ESE                 | ESE                    | ESE | ESE | SE  | NE            | 97     | E        |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 21                                                                                                  | E                                            | E   | E   | NE  | N   | ENE | W   | E   | ESE | ESE                                                                                     | ESE | E   | E   | E   | E   | E   | E   | ESE | SE                  | SW                     | WNW | SE  | SW  | W             | 102    | E        |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 22                                                                                                  | E                                            | ESE | SSW | SW  | SW  | SW  | SW  | SW  | SW  | SW                                                                                      | SW  | SW  | SW  | SW  | C   | C   | C   | WSW | WSW                 | WSW                    | WSW | WSW | WSW | WSW           | 238    | SW       |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 23                                                                                                  | WSW                                          | W   | W   | W   | W   | W   | WSW | W   | WSW | WSW                                                                                     | WSW | WSW | W   | WSW | WSW | W   | WSW | WSW | WSW                 | WSW                    | WSW | WSW | WSW | WSW           | 258    | WSW      |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 24                                                                                                  | WSW                                          | WSW | WSW | WSW | WSW | WSW | WSW | WSW | W   | W                                                                                       | W   | W   | WSW | W   | NW  | NW  | NW  | NW  | NW                  | NNW                    | NNE | ESE | E   | N             | NNE    | 269      | W |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 25                                                                                                  | SSE                                          | SSE | ENE | NNE | NW  | W   | WSW | W   | W   | W                                                                                       | WNW | WNW | NNW | WNW | WNW | WSW | W   | NW  | N                   | NNE                    | NNE | NNW | WSW | NNE           | 298    | WNW      |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 26                                                                                                  | ENE                                          | NNE | NE  | NE  | NE  | ENE | NE  | WSW | WSW | WSW                                                                                     | WSW | WSW | WSW | WSW | WSW | W   | WSW | WSW | WSW                 | WSW                    | SW  | SW  | SW  | N             | 253    | WSW      |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 27                                                                                                  | WNW                                          | NNE | ENE | NNE | NW  | WSW | WSW | WSW | W   | W                                                                                       | W   | W   | WSW | WSW | WSW | W   | WNW | N   | N                   | SSE                    | E   | NE  | NE  | NNW           | 273    | W        |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 28                                                                                                  | NW                                           | SE  | ENE | ENE | NE  | NE  | NE  | W   | W   | WSW                                                                                     | W   | W   | W   | WSW | WSW | WSW | WSW | WSW | WSW                 | WSW                    | SW  | NW  | NNW | ESE           | 258    | WSW      |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 29                                                                                                  | ENE                                          | NE  | NE  | S   | NNE | ENE | NNE | SE  | W   | WNW                                                                                     | WSW | W   | W   | WNW | W   | WNW | WNW | WNW | NNW                 | N                      | NNE | NNW | W   | WSW           | 293    | WNW      |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 30                                                                                                  | NNW                                          | NNE | W   | NW  | WNW | WSW | NNW | NW  | WNW | WSW                                                                                     | SSE | W   | SW  | N   | E   | NE  | E   | NE  | N                   | E                      | ENE | ENE | ESE | ENE           | 54     | NE       |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Jul 31                                                                                                  | ESE                                          | NNE | NW  | NNW | NNE | NNE | ESE | ESE | ESE | SE                                                                                      | SE  | ESE | SE  | SE  | ESE | S   | ESE | ESE | E                   | E                      | E   | E   | NE  | N             | 119    | ESE      |   |  |  |      |  |  |  |  |  |  |  |  |  |
| C                                                                                                       | Monthly Calibration                          |     |     |     |     |     |     |     | S   | Daily Zero-Span Check                                                                   |     |     |     |     |     |     |     | Q   | Quality Assurance   |                        |     |     |     |               |        |          |   |  |  |      |  |  |  |  |  |  |  |  |  |
| K                                                                                                       | Collection Error                             |     |     |     |     |     |     |     | N   | No Data (Machine Not in Service)                                                        |     |     |     |     |     |     |     | Y   | Routine Maintenance |                        |     |     |     |               |        |          |   |  |  |      |  |  |  |  |  |  |  |  |  |
| X                                                                                                       | Invalid Data (Machine Malfunction /Recovery) |     |     |     |     |     |     |     | NRM | UnitMaint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |     |     |     |     |     |     |     |     |                     |                        |     |     |     |               |        |          |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                              |     |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     |                        |     |     |     |               |        |          |   |  |  |      |  |  |  |  |  |  |  |  |  |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                              |     |     |     |     |     |     |     |     |                                                                                         |     |     |     |     |     |     |     |     |                     |                        |     |     |     |               |        |          |   |  |  |      |  |  |  |  |  |  |  |  |  |

***Timeseries Chart of Hourly Average for VWD - AQHI - Cadotte Lake Station***







# PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - July 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr & WIND DIRECTION (VWD) in sector

| WIND SPEED            |                                 |                                |      |     |      |      |      |      |      |      |      |      |      |      |                        |      |      |      |      |      |      |     |      |               |               |               |      |     |  |
|-----------------------|---------------------------------|--------------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|------------------------|------|------|------|------|------|------|-----|------|---------------|---------------|---------------|------|-----|--|
| Maximum Hourly Value: |                                 | 25.9 kph on July 22 at hour 17 |      |     |      |      |      |      |      |      |      |      |      |      | Hours in Service:      |      | 744  |      |      |      |      |     |      |               |               |               |      |     |  |
| Maximum Daily Value:  |                                 | 17.1 kph on July 23            |      |     |      |      |      |      |      |      |      |      |      |      | Hours of Data:         |      | 737  |      |      |      |      |     |      |               |               |               |      |     |  |
| Minimum Hourly Value: |                                 | 0.0 kph on July 8 at hour 20   |      |     |      |      |      |      |      |      |      |      |      |      | Hours of Missing Data: |      | 4    |      |      |      |      |     |      |               |               |               |      |     |  |
| Minimum Daily Value:  |                                 | 0.8 kph on July 30             |      |     |      |      |      |      |      |      |      |      |      |      | Hours of Calibration:  |      | 3    |      |      |      |      |     |      |               |               |               |      |     |  |
| Monthly Average:      |                                 | 1.8 kph                        |      |     |      |      |      |      |      |      |      |      |      |      | Operational Uptime:    |      | 99.5 |      |      |      |      |     |      |               |               |               |      |     |  |
| WIND DIRECTION        |                                 |                                |      |     |      |      |      |      |      |      |      |      |      |      |                        |      |      |      |      |      |      |     |      |               |               |               |      |     |  |
| Monthly Average:      |                                 | 258 (WSW) degree               |      |     |      |      |      |      |      |      |      |      |      |      |                        |      |      |      |      |      |      |     |      |               |               |               |      |     |  |
| Day                   | Hourly Period Starting at (MST) |                                |      |     |      |      |      |      |      |      |      |      |      |      |                        |      |      |      |      |      |      |     |      | Daily Minimum | Daily Maximum | Daily Average |      |     |  |
| Jul 1                 | 7.8                             | 9.0                            | 3.0  | 1.0 | 3.2  | 6.6  | 6.6  | 8.2  | 9.8  | 6.3  | 7.2  | 5.8  | 5.6  | 3.1  | 10.9                   | 10.8 | 11.8 | 10.7 | 9.0  | 8.4  | 11.6 | 7.5 | 3.3  | 2.6           | 1.0           | 11.8          | 2.7  |     |  |
| Jul 2                 | E                               | E                              | E    | NW  | NNW  | NNE  | NNE  | ENE  | E    | E    | E    | E    | S    | WSW  | W                      | NW   | NW   | NW   | NW   | WNW  | NW   | NW  | NW   | NNW           | NNW           | 0.9           | 16.8 | 6.4 |  |
| Jul 3                 | 1.3                             | 4.8                            | 5.3  | 3.5 | 1.4  | 3.4  | 1.7  | 2.0  | 0.9  | 1.9  | 3.2  | 3.3  | 7.5  | 9.0  | 7.9                    | 7.4  | 14.3 | 16.8 | 16.2 | 12.8 | 11.2 | 9.5 | 9.5  | 6.9           | 2.8           | 13.0          | 8.4  |     |  |
| Jul 4                 | W                               | W                              | WNW  | WNW | NW   | W    | NW   | NNW  | NNW  | N    | WNW  | WNW  | W    | WNW  | WNW                    | WSW  | WSW  | W    | W    | W    | W    | W   | W    | W             | W             | 2.8           | 13.0 | 8.4 |  |
| Jul 5                 | 7.8                             | 8.9                            | 9.5  | 8.3 | 9.2  | 9.5  | 12.4 | 11.5 | 9.5  | 10.6 | 13.0 | 12.2 | 11.0 | 7.7  | 10.1                   | 8.9  | 10.5 | 10.0 | 10.4 | 7.5  | 8.6  | 6.6 | 5.3  | 2.8           | 0.5           | 8.2           | 3.7  |     |  |
| Jul 6                 | W                               | W                              | W    | W   | W    | W    | W    | W    | W    | W    | W    | WNW  | NW   | NNW  | NW                     | NNW  | NNW  | NNW  | NNW  | NNW  | NNW  | NNW | NNW  | NNW           | NNW           | 0.5           | 8.2  | 3.7 |  |
| Jul 7                 | 2.1                             | 2.4                            | 2.6  | 1.3 | 1.4  | 2.7  | 3.2  | 4.4  | 4.7  | 5.6  | 7.3  | 7.7  | 5.6  | 6.3  | 7.8                    | 6.4  | 8.2  | 7.7  | 6.5  | 6.9  | 6.7  | 3.0 | 2.8  | 0.5           | 0.2           | 11.5          | 4.7  |     |  |
| Jul 8                 | W                               | W                              | WNW  | WNW | WNW  | NNW  | NNW  | NNW  | NNW  | NNW  | NNW  | NNW  | N    | NNE  | NNE                    | NNE  | NE   | NE   | ENE  | NE   | NE   | NE  | NE   | NE            | NE            | 0.2           | 11.5 | 4.7 |  |
| Jul 9                 | 0.3                             | 0.2                            | 0.3  | 0.5 | 0.4  | 0.2  | 3.7  | 5.2  | 2.0  | 3.3  | 3.9  | 7.2  | 8.4  | 11.0 | 11.5                   | 10.0 | 7.6  | 6.8  | 8.0  | 8.1  | 6.6  | 3.7 | 5.4  | 5.4           | 0.4           | 11.5          | 2.7  |     |  |
| Jul 10                | NNW                             | W                              | NNW  | NW  | NW   | SSW  | E    | E    | ENE  | ESE  | E    | NE   | ENE  | ESE  | E                      | E    | E    | E    | E    | E    | E    | E   | E    | E             | E             | 0.4           | 11.5 | 2.7 |  |
| Jul 11                | 4.9                             | 4.8                            | 3.8  | 2.7 | 2.4  | 5.4  | 6.9  | 6.0  | 5.3  | 4.7  | 5.5  | 4.5  | 4.7  | 9.5  | 10.8                   | 11.1 | 11.5 | 10.4 | 10.8 | 8.6  | 1.1  | 0.4 | 1.2  | 1.4           | 0.1           | 12.6          | 3.7  |     |  |
| Jul 12                | E                               | E                              | E    | E   | E    | E    | E    | SE   | SE   | SSE  | SE   | SE   | SSE  | SW   | SW                     | SW   | SW   | WSW  | WSW  | WSW  | W    | ENE | ENE  | ENE           | ENE           | 0.1           | 12.6 | 3.7 |  |
| Jul 13                | 0.8                             | 2.4                            | 0.6  | 0.2 | 0.2  | 0.1  | 2.3  | 3.0  | 4.7  | 5.6  | 7.0  | 7.7  | 8.3  | 9.1  | 11.1                   | 12.3 | 12.6 | 11.7 | 9.7  | 6.0  | 3.6  | 2.3 | 2.1  | 3.7           | 0.0           | 16.3          | 3.5  |     |  |
| Jul 14                | ENE                             | ENE                            | NE   | N   | NNE  | NW   | E    | ESE  | SE   | SE   | SE   | SSE  | S    | SW   | SW                     | SW   | WSW  | WSW  | SW   | SSW  | S    | SSE | ENE  | ENE           | ENE           | 0.0           | 16.3 | 3.5 |  |
| Jul 15                | 3.0                             | 3.1                            | 1.6  | 3.9 | 1.5  | 0.4  | 0.3  | 0.4  | 2.8  | 1.0  | 3.6  | 8.1  | 11.8 | 16.3 | 12.9                   | 13.5 | 13.0 | 9.1  | 7.4  | 3.0  | 0.0  | 0.2 | 0.2  | 0.5           | 0.2           | 9.3           | 2.0  |     |  |
| Jul 16                | SE                              | ESE                            | NNE  | ENE | NE   | NNE  | W    | NNE  | N    | NNW  | WNW  | W    | WSW  | WSW  | SW                     | WSW  | WSW  | SW   | WSW  | W    | SSW  | NE  | NE   | NNE           | NNE           | 0.2           | 9.3  | 2.0 |  |
| Jul 17                | 0.8                             | 0.6                            | 0.2  | 0.7 | 0.8  | 1.0  | 0.6  | 0.2  | 0.9  | 1.0  | 0.7  | 2.9  | 7.4  | 7.2  | 6.2                    | 8.5  | 9.3  | 8.3  | 7.3  | 3.7  | 2.9  | 0.9 | 1.0  | 2.6           | 0.7           | 19.8          | 5.4  |     |  |
| Jul 18                | ENE                             | NNE                            | NNW  | NE  | W    | W    | N    | ESE  | SE   | ENE  | ENE  | S    | WSW  | WSW  | SW                     | WSW  | WSW  | WSW  | S    | S    | SSE  | ENE | ENE  | ENE           | ENE           | 0.7           | 19.8 | 5.4 |  |
| Jul 19                | 0.7                             | 1.5                            | 1.2  | 1.4 | 2.3  | 0.9  | 1.5  | 1.4  | 0.7  | 8.5  | 5.0  | 15.9 | 11.3 | 12.5 | 16.3                   | 19.8 | 14.3 | 9.9  | 8.9  | 7.6  | 6.3  | 2.4 | 1.0  | 1.0           | 0.7           | 19.8          | 5.4  |     |  |
| Jul 20                | NNE                             | ENE                            | ENE  | E   | E    | ENE  | WSW  | E    | WSW  | WSW  | WSW  | WSW  | WSW  | WSW  | WSW                    | WSW  | W    | W    | NNW  | NNW  | W    | W   | NW   | WSW           | 0.0           | 17.3          | 7.6  |     |  |
| Jul 21                | 1.2                             | 0.6                            | 0.2  | 0.9 | 0.5  | 3.6  | 7.8  | 9.6  | 11.4 | 14.1 | 15.2 | 16.1 | 16.1 | 13.2 | 15.2                   | 17.3 | 13.3 | 11.9 | 9.2  | 6.9  | 3.2  | 0.0 | 0.3  | 0.4           | 0.0           | 17.3          | 7.6  |     |  |
| Jul 22                | SSE                             | NNE                            | SSE  | N   | W    | WNW  | WNW  | W    | W    | W    | W    | W    | W    | WNW  | W                      | W    | WNW  | WNW  | WNW  | WNW  | W    | N   | NNW  | NNE           | NNE           | 0.1           | 10.0 | 3.1 |  |
| Jul 23                | 0.5                             | 0.2                            | 0.6  | 0.3 | 0.8  | 0.3  | 0.9  | 2.7  | 6.0  | 5.7  | 7.3  | 8.7  | 10.0 | 8.3  | 8.4                    | 7.8  | 7.7  | 6.6  | 3.8  | 6.1  | 4.0  | 2.7 | 0.5  | 0.1           | 0.1           | 10.0          | 3.1  |     |  |
| Jul 24                | NNW                             | W                              | N    | NW  | W    | NNE  | W    | NNW  | NNW  | W    | W    | W    | W    | W    | NNW                    | NW   | W    | W    | NNE  | NE   | NE   | E   | E    | ESE           | ESE           | 0.3           | 9.1  | 4.0 |  |
| Jul 25                | 0.6                             | 1.1                            | 0.3  | 2.9 | 1.9  | 1.2  | 2.5  | 2.9  | 4.6  | 4.8  | 4.7  | 4.6  | 7.1  | 5.6  | 6.6                    | 9.1  | 7.4  | 4.8  | 6.9  | 7.7  | 5.5  | P   | P    | P             | 0.3           | 9.1           | 4.0  |     |  |
| Jul 26                | WSW                             | NE                             | ENE  | E   | E    | ESE  | ESE  | ESE  | ESE  | SE   | SE   | SSE  | SE   | SSE  | SE                     | SSE  | SE   | ESE  | ESE  | ESE  | ESE  | P   | P    | P             | 0.5           | 12.7          | 2.4  |     |  |
| Jul 27                | P                               | 5.3                            | 5.2  | 3.5 | 0.8  | 5.0  | 5.5  | 5.4  | 5.5  | 5.3  | 5.2  | 5.6  | 6.8  | 8.2  | 8.7                    | 10.4 | 12.7 | 12.6 | 12.5 | 8.5  | 0.5  | 0.8 | 0.8  | 2.5           | 0.5           | 12.7          | 2.4  |     |  |
| Jul 28                | P                               | E                              | E    | E   | ENE  | E    | E    | E    | E    | ESE  | SSE  | SSE  | SE   | SSW  | SW                     | WSW  | WSW  | WSW  | WSW  | WSW  | ENE  | NNE | ENE  | ENE           | 0.4           | 13.9          | 5.4  |     |  |
| Jul 29                | 1.9                             | 2.4                            | 1.0  | 0.7 | 0.4  | 2.6  | 9.8  | 13.9 | 13.2 | 10.3 | 11.1 | 11.8 | 10.2 | 7.4  | 8.8                    | 9.3  | 9.9  | 8.8  | 8.2  | 6.7  | 3.6  | 5.5 | 3.3  | 6.3           | 0.8           | 11.7          | 6.5  |     |  |
| Jul 30                | NE                              | NE                             | NNE  | NW  | NW   | W    | WSW  | WSW  | W    | W    | NNW  | NNW  | NW   | NW   | NNW                    | NW   | NW   | NNW  | NNW  | NNW  | N    | N   | NNW  | N             | 0.8           | 11.7          | 6.5  |     |  |
| Jul 31                | 9.5                             | 3.4                            | 0.8  | 1.0 | 1.4  | 3.8  | 7.0  | 10.4 | 10.0 | 10.5 | 9.8  | 10.7 | 7.4  | 7.0  | 7.8                    | 9.5  | 8.3  | 5.2  | 5.2  | 6.6  | 7.0  | 8.9 | 11.0 | 11.7          | 0.8           | 11.7          | 6.5  |     |  |
| Jul 1                 | N                               | NNE                            | NNW  | NNW | N    | NE   | ENE  | ENE  | ENE  | E    | E    | E    | ESE  | E    | E                      | ENE  | E    | ENE  | ENE  | ENE  | E    | E   | E    | E             | E             | 6.1           | 14.4 | 9.7 |  |
| Jul 2                 | 14.4                            | 14.1                           | 12.2 | 9.8 | 10.1 | 12.0 | 9.2  | 11.7 | 11.7 | 10.5 | 10.1 | 11.9 | 9.2  | 9.5  | 9.6                    | 7.8  | 7.3  | 7.1  | 7.9  | 6.1  | 7.2  | 7.9 | 9.0  | 6.8           | 2.9           | 9.1           | 5.6  |     |  |
| Jul 3                 | E                               | E                              | E    | E   | ENE  | ENE  | E    | ENE  | E    | E    | E    | E    | E    | E    | E                      | E    | E    | E    | E    | E    | E    | E   | E    | E             | E             | 2.9           | 9.1  | 5.6 |  |
| Jul 4                 | 5.0                             | 4.6                            | 5.4  | 5.1 | 5.3  | 5.9  | 6.7  | 6.5  | 6.9  | 7.1  | 6.6  | 7.8  | 6.7  | 9.1  | 8.4                    | 7.3  | 5.9  | 3.6  | 4.3  | 2.9  | 4.0  | 3.6 | 4.5  | 4.7           | 0.1           | 11.1          | 4.4  |     |  |
| Jul 5                 | E                               | E                              | E    | E   | E    | E    | E    | E    | E    | ESE  | E    | E    | E    | E    | E                      | ENE  | E    | ENE  | ENE  | E    | E    | ESE | E    | ESE           | ESE           | 0.1           | 11.1 | 4.4 |  |
| Jul 6                 | 4.0                             | 4.1                            | 2.7  | 5.3 | 5.3  | 4.0  | 4.4  | 3.2  | 4.6  | 5.5  | 4.8  | 6.0  | 7.4  | 7.8  | 7.4                    | 5.5  | 6.3  | 8.2  | 6.5  | 6.5  | 4.9  | 3.5 | 2.9  | 3.0           | 0.1           | 11.1          | 4.4  |     |  |
| Jul 7                 | E                               | E                              | E    | E   | E    | ESE  | E    | ESE  | SSE  | SSE  | SE   | SE   | ESE  | E    | SE                     | SSE  | SE   | SE   | ESE  | E    | ESE  | ESE | ESE  | E             | E             | 0.1           | 11.1 | 4.4 |  |
| Jul 8                 | 2.1                             | 0.2                            | 0.1  | 0.3 | 0.2  | 0.8  | 2.0  | 3.8  | 4.3  | 6.9  | 7.4  | 9.5  | 11.1 | 8.1  | 6.5                    | 6.0  | 6.9  | 7.3  | 6.6  | 6.6  | 5.7  | 3.8 | 2.6  | 0.7           | 0.1           | 11.1          | 4.4  |     |  |
| Jul 9                 | ENE                             | NNE                            | WNW  | NE  | N    | E    | E    | ESE  | E    | E    | E    | ENE  | E    | E    | E                      | ESE  | E    | E    | ESE  | ESE  | ESE  | ESE | SE   | NE            | 0.1           | 11.1          | 4.4  |     |  |



# PEACE RIVER AREA MONITORING PROGRAM

AQHI - Cadotte Lake Station - July 2021

Summary of Hourly Averages

VECTOR WIND SPEED (VWS) in km/hr & WIND DIRECTION (VWD) in sector

| WIND SPEED                                                                                              |                                               |                                |      |      |      |      |      |      |                                                                                          |      |      |                        |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------|------|------|------|------|------|------|------------------------------------------------------------------------------------------|------|------|------------------------|------|------|------|------|---------------------|------|------|------|------|------|------|---------------|---------------|---------------|------|
| Maximum Hourly Value:                                                                                   |                                               | 25.9 kph on July 22 at hour 17 |      |      |      |      |      |      |                                                                                          |      |      | Hours in Service:      |      | 744  |      |      |                     |      |      |      |      |      |      |               |               |               |      |
| Maximum Daily Value:                                                                                    |                                               | 17.1 kph on July 23            |      |      |      |      |      |      |                                                                                          |      |      | Hours of Data:         |      | 737  |      |      |                     |      |      |      |      |      |      |               |               |               |      |
| Minimum Hourly Value:                                                                                   |                                               | 0.0 kph on July 8 at hour 20   |      |      |      |      |      |      |                                                                                          |      |      | Hours of Missing Data: |      | 4    |      |      |                     |      |      |      |      |      |      |               |               |               |      |
| Minimum Daily Value:                                                                                    |                                               | 0.8 kph on July 30             |      |      |      |      |      |      |                                                                                          |      |      | Hours of Calibration:  |      | 3    |      |      |                     |      |      |      |      |      |      |               |               |               |      |
| Monthly Average:                                                                                        |                                               | 1.8 kph                        |      |      |      |      |      |      |                                                                                          |      |      | Operational Uptime:    |      | 99.5 |      |      |                     |      |      |      |      |      |      |               |               |               |      |
| WIND DIRECTION                                                                                          |                                               |                                |      |      |      |      |      |      |                                                                                          |      |      |                        |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |
| Monthly Average:                                                                                        |                                               | 258 (WSW, degree)              |      |      |      |      |      |      |                                                                                          |      |      |                        |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |
| Day                                                                                                     | Hourly Period Starting at (MST)               |                                |      |      |      |      |      |      |                                                                                          |      |      |                        |      |      |      |      |                     |      |      |      |      |      |      | Daily Minimum | Daily Maximum | Daily Average |      |
|                                                                                                         | 0                                             | 1                              | 2    | 3    | 4    | 5    | 6    | 7    | 8                                                                                        | 9    | 10   | 11                     | 12   | 13   | 14   | 15   | 16                  | 17   | 18   | 19   | 20   | 21   | 22   | 23            |               |               |      |
| Jul 21                                                                                                  | 1.2                                           | 3.3                            | 2.0  | 0.8  | 0.6  | 0.8  | 0.7  | 4.6  | 5.8                                                                                      | 7.3  | 8.2  | 10.7                   | 8.3  | 6.3  | 6.4  | 6.5  | 8.0                 | 7.0  | 3.1  | 7.0  | 4.5  | 2.0  | 3.1  | 0.5           | 0.5           | 10.7          | 3.2  |
|                                                                                                         | E                                             | E                              | E    | NE   | N    | ENE  | W    | E    | ESE                                                                                      | ESE  | ESE  | E                      | E    | E    | E    | E    | E                   | ESE  | SE   | SW   | WNW  | SE   | SW   | W             |               |               |      |
| Jul 22                                                                                                  | 1.3                                           | 2.3                            | 3.1  | 7.5  | 7.8  | 6.4  | 9.3  | 11.3 | 13.8                                                                                     | 20.7 | 21.7 | 22.1                   | 21.1 | C    | C    | C    | 18.8                | 25.9 | 23.7 | 20.5 | 19.6 | 21.2 | 14.5 | 16.1          | 1.3           | 25.9          | 14.3 |
|                                                                                                         | E                                             | ESE                            | SSW  | SW   | SW   | SW   | SW   | SW   | SW                                                                                       | SW   | SW   | SW                     | SW   | C    | C    | C    | WSW                 | WSW  | WSW  | WSW  | WSW  | WSW  | WSW  | WSW           |               |               |      |
| Jul 23                                                                                                  | 15.8                                          | 18.5                           | 19.7 | 16.2 | 14.9 | 12.9 | 13.5 | 15.5 | 15.3                                                                                     | 13.8 | 17.0 | 23.3                   | 19.8 | 21.1 | 19.4 | 21.3 | 22.4                | 17.3 | 15.2 | 18.1 | 19.1 | 16.2 | 13.8 | 10.9          | 10.9          | 23.3          | 17.1 |
|                                                                                                         | WSW                                           | W                              | W    | W    | W    | W    | WSW  | W    | WSW                                                                                      | WSW  | WSW  | WSW                    | W    | WSW  | WSW  | W    | WSW                 | WSW  | WSW  | WSW  | WSW  | WSW  | WSW  | WSW           |               |               |      |
| Jul 24                                                                                                  | 10.1                                          | 12.8                           | 12.6 | 10.5 | 9.5  | 10.5 | 13.8 | 13.8 | 13.3                                                                                     | 10.4 | 13.1 | 15.7                   | 16.7 | 15.9 | 9.1  | 5.7  | 3.8                 | 4.6  | 2.8  | 2.3  | 1.9  | 1.0  | 2.2  | 7.7           | 1.0           | 16.7          | 7.8  |
|                                                                                                         | WSW                                           | WSW                            | WSW  | WSW  | WSW  | WSW  | WSW  | WSW  | W                                                                                        | W    | W    | WSW                    | W    | NW   | NW   | NW   | NW                  | NW   | NNE  | NNE  | E    | N    | NNE  |               |               |               |      |
| Jul 25                                                                                                  | 0.8                                           | 0.7                            | 1.1  | 0.4  | 0.5  | 0.8  | 1.0  | 0.8  | 1.8                                                                                      | 2.2  | 4.4  | 2.7                    | 2.1  | 4.5  | 6.9  | 9.3  | 9.3                 | 5.4  | 2.1  | 7.2  | 2.8  | 0.6  | 0.3  | 0.6           | 0.3           | 9.3           | 2.0  |
|                                                                                                         | SSE                                           | SSE                            | ENE  | NNE  | NW   | W    | WSW  | W    | W                                                                                        | W    | WNW  | WNW                    | NNW  | WNW  | WNW  | WSW  | W                   | NW   | N    | NNE  | NNE  | NNW  | WSW  | NNE           |               |               |      |
| Jul 26                                                                                                  | 0.8                                           | 0.6                            | 0.6  | 0.6  | 0.8  | 2.2  | 1.1  | 4.2  | 9.7                                                                                      | 9.4  | 12.7 | 15.7                   | 13.4 | 14.8 | 15.1 | 12.4 | 16.0                | 14.6 | 8.9  | 6.0  | 0.9  | 0.5  | 2.8  | 0.9           | 0.5           | 16.0          | 6.2  |
|                                                                                                         | ENE                                           | NNE                            | NE   | NE   | NE   | ENE  | NE   | WSW  | WSW                                                                                      | WSW  | WSW  | WSW                    | WSW  | WSW  | WSW  | WSW  | W                   | WSW  | WSW  | WSW  | WSW  | SW   | SW   | SW            | N             |               |      |
| Jul 27                                                                                                  | 0.3                                           | 1.6                            | 2.7  | 1.9  | 0.6  | 1.0  | 8.4  | 11.5 | 13.7                                                                                     | 11.1 | 8.9  | 10.1                   | 10.7 | 13.6 | 13.0 | 9.0  | 10.3                | 5.8  | 1.0  | 1.8  | 0.3  | 0.3  | 0.4  | 0.3           | 0.3           | 13.7          | 4.8  |
|                                                                                                         | WNW                                           | NNE                            | ENE  | NNE  | NW   | WSW  | WSW  | WSW  | WSW                                                                                      | W    | W    | W                      | WSW  | WSW  | W    | WNW  | N                   | N    | SSE  | E    | NE   | NE   | NNW  |               |               |               |      |
| Jul 28                                                                                                  | 0.6                                           | 0.6                            | 1.4  | 1.1  | 1.2  | 1.8  | 2.2  | 2.7  | 6.5                                                                                      | 12.0 | 15.4 | 13.5                   | 11.3 | 13.6 | 14.6 | 13.1 | 15.0                | 13.8 | 12.3 | 8.6  | 1.9  | 0.3  | 0.6  | 1.5           | 0.3           | 15.4          | 6.0  |
|                                                                                                         | NW                                            | SE                             | ENE  | ENE  | NE   | NE   | NE   | W    | W                                                                                        | WSW  | W    | W                      | W    | WSW  | WSW  | WSW  | WSW                 | WSW  | WSW  | WSW  | WSW  | SW   | NW   | NNW           | ESE           |               |      |
| Jul 29                                                                                                  | 1.1                                           | 1.4                            | 0.5  | 0.2  | 0.9  | 0.5  | 0.8  | 0.1  | 3.3                                                                                      | 6.9  | 12.4 | 7.1                    | 7.1  | 8.2  | 8.8  | 8.4  | 7.7                 | 6.0  | 5.5  | 4.3  | 1.4  | 0.2  | 0.4  | 0.5           | 0.1           | 12.4          | 3.2  |
|                                                                                                         | ENE                                           | NE                             | NE   | S    | NNE  | ENE  | NNE  | SE   | W                                                                                        | WNW  | WSW  | W                      | W    | NNW  | W    | WNW  | WNW                 | WNW  | NNW  | N    | NNE  | NNW  | W    | WSW           |               |               |      |
| Jul 30                                                                                                  | 0.2                                           | 0.2                            | 0.6  | 0.9  | 0.4  | 0.3  | 0.1  | 0.2  | 0.7                                                                                      | 0.3  | 1.8  | 3.7                    | 3.5  | 3.2  | 3.3  | 4.5  | 4.4                 | 3.7  | 3.5  | 4.3  | 1.3  | 1.1  | 2.6  | 1.1           | 0.1           | 4.5           | 0.8  |
|                                                                                                         | NNW                                           | NNE                            | W    | NW   | WNW  | WSW  | NNW  | NW   | WNW                                                                                      | WSW  | SSE  | W                      | SW   | N    | E    | NE   | E                   | NE   | N    | E    | ENE  | ENE  | ESE  | ENE           |               |               |      |
| Jul 31                                                                                                  | 0.1                                           | 0.0                            | 0.1  | 0.1  | 0.2  | 0.1  | 0.3  | 4.9  | 4.1                                                                                      | 4.4  | 5.3  | 5.6                    | 6.1  | 5.7  | 3.6  | 3.4  | 5.9                 | 7.2  | 7.5  | 4.7  | 3.7  | 0.7  | 1.0  | 0.3           | 0.0           | 7.5           | 2.9  |
|                                                                                                         | ESE                                           | NNE                            | NW   | NNW  | NNE  | NNE  | ESE  | ESE  | ESE                                                                                      | SE   | SE   | ESE                    | SE   | SE   | ESE  | S    | ESE                 | ESE  | E    | E    | E    | E    | NE   | N             |               |               |      |
| C                                                                                                       | Monthly Calibration                           |                                |      |      |      |      |      | S    | Daily Zero-Span Check                                                                    |      |      |                        |      |      |      | Q    | Quality Assurance   |      |      |      |      |      |      |               |               |               |      |
| K                                                                                                       | Collection Error                              |                                |      |      |      |      |      | N    | No Data (Machine Not in Service)                                                         |      |      |                        |      |      |      | Y    | Routine Maintenance |      |      |      |      |      |      |               |               |               |      |
| X                                                                                                       | Invalid Data (Equipment Malfunction/Recovery) |                                |      |      |      |      |      | NRM  | Unit/Maint (Repeat Calibration / Repeat Daily Zero-Span Check / Non-Routine Maintenance) |      |      |                        |      |      |      | P    | Power Failure       |      |      |      |      |      |      |               |               |               |      |
| Daily Average is shown "-" if minimum data completeness criteria of 75% or 18 hours per day is not met. |                                               |                                |      |      |      |      |      |      |                                                                                          |      |      |                        |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |
| Monthly Average is shown "-" if minimum data completeness criteria of 75% of days per month is not met. |                                               |                                |      |      |      |      |      |      |                                                                                          |      |      |                        |      |      |      |      |                     |      |      |      |      |      |      |               |               |               |      |

## END OF REPORT

This page, 229 of 229, ends the July 2021 Monthly Ambient Air Quality Monitoring Report.



## **Peace River Area Monitoring Program**

# **JULY 2021**

## **Ambient Air Monitoring Calibration Report**

**- AQHI - CADOTTE LAKE STATION-**

**CAL-PRAMP-202107-01651**

### **Operation and Maintenance:**

Bureau Veritas Canada

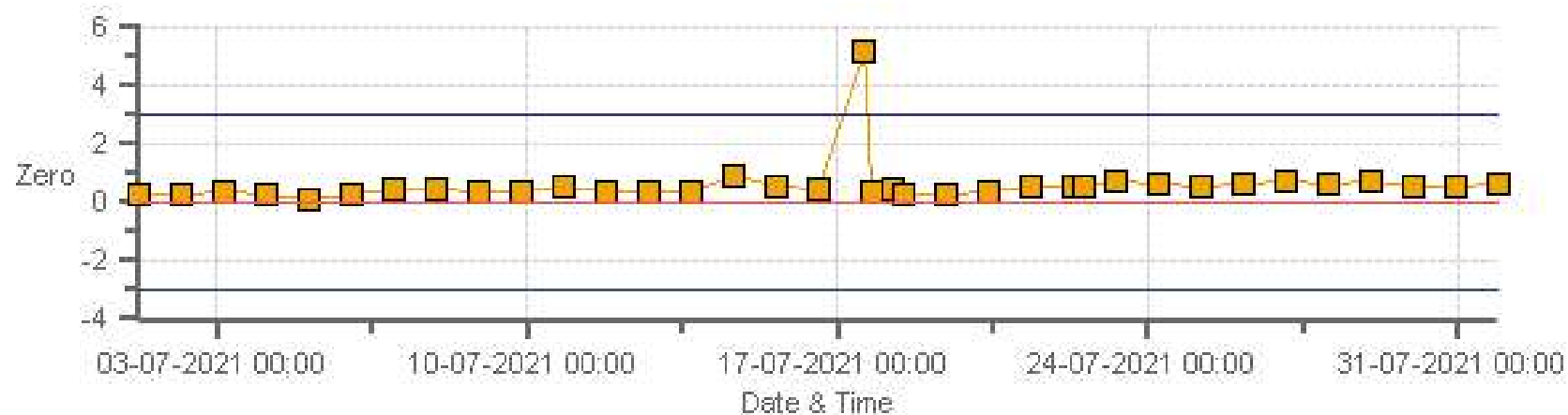
### **Data Validation and Report:**

Bureau Veritas Canada

August 18, 2021

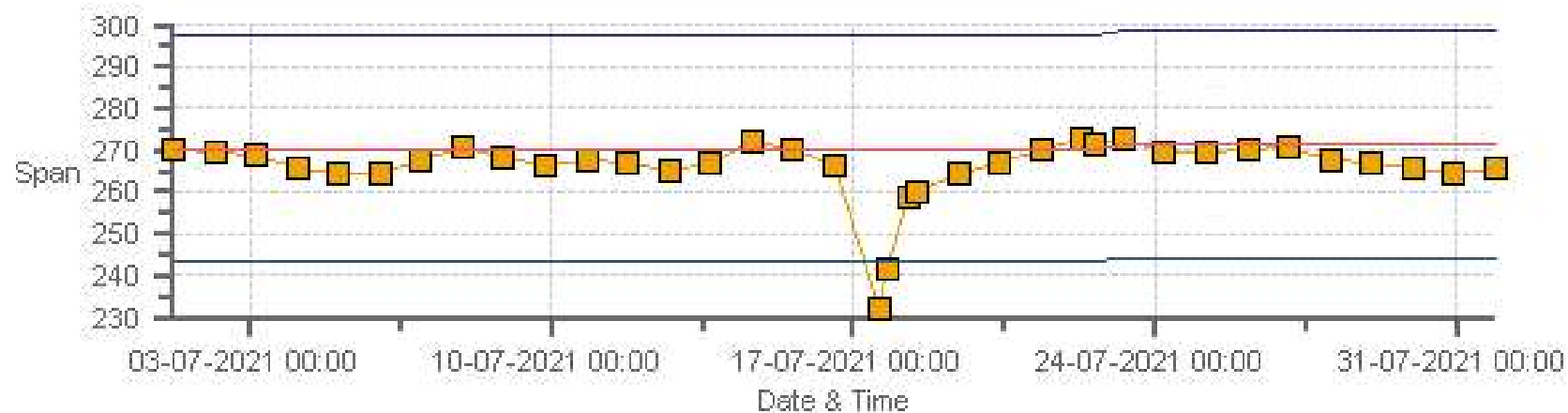
# **DAILY INTERNAL ZERO-SPAN CALIBRATION RECORDS**

SO2[ppb] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Zero



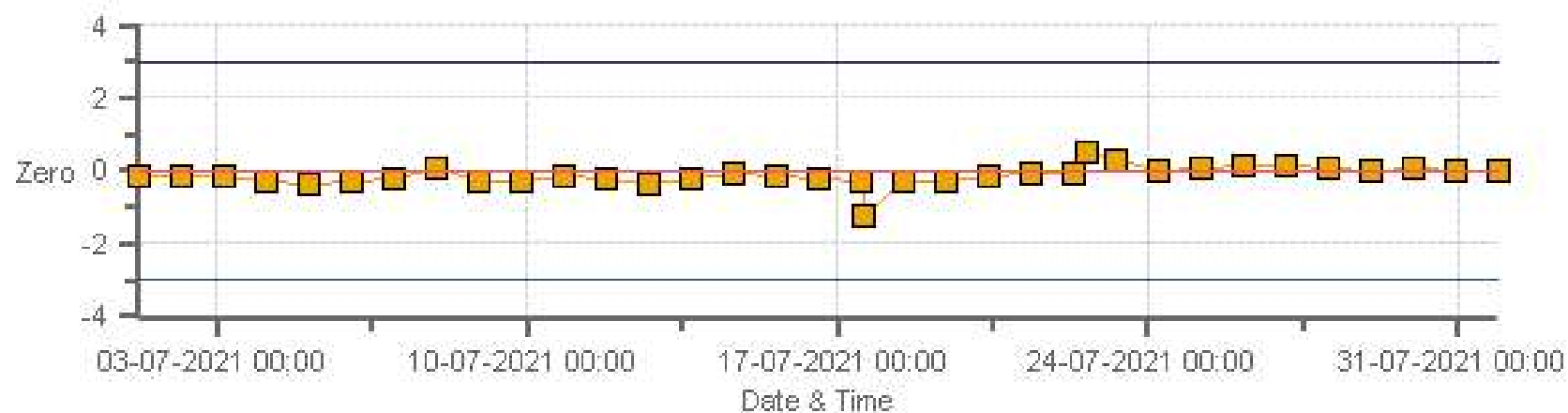
Zero Zero Ref Zero Low Zero High

SO2[ppb] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Span



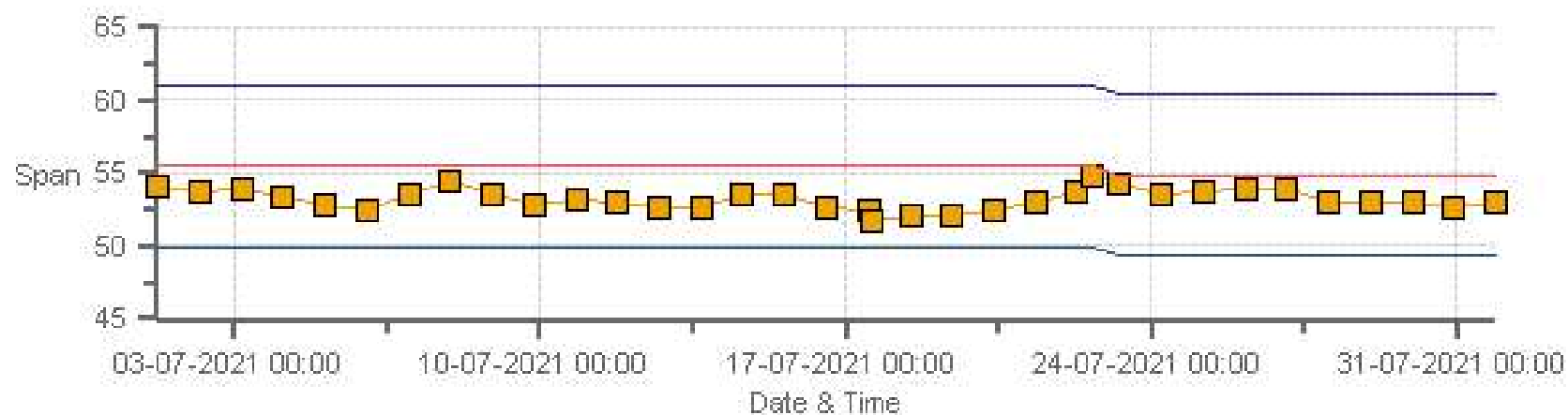
Span SpanRef Span Low Span High

TRS[ppb] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Zero



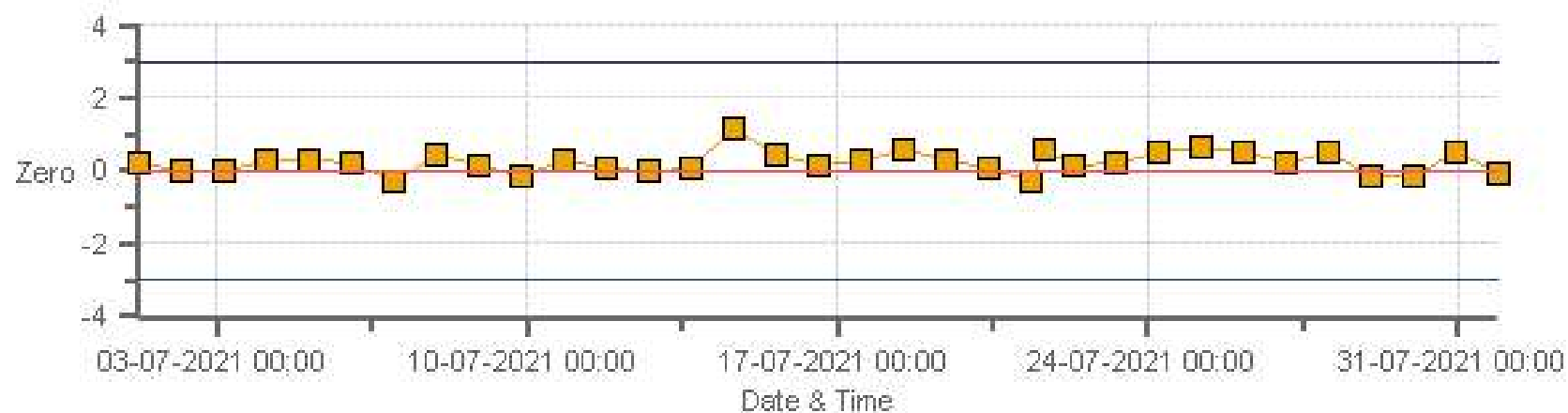
Zero Zero Ref Zero Low Zero High

TRS[ppb] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Span



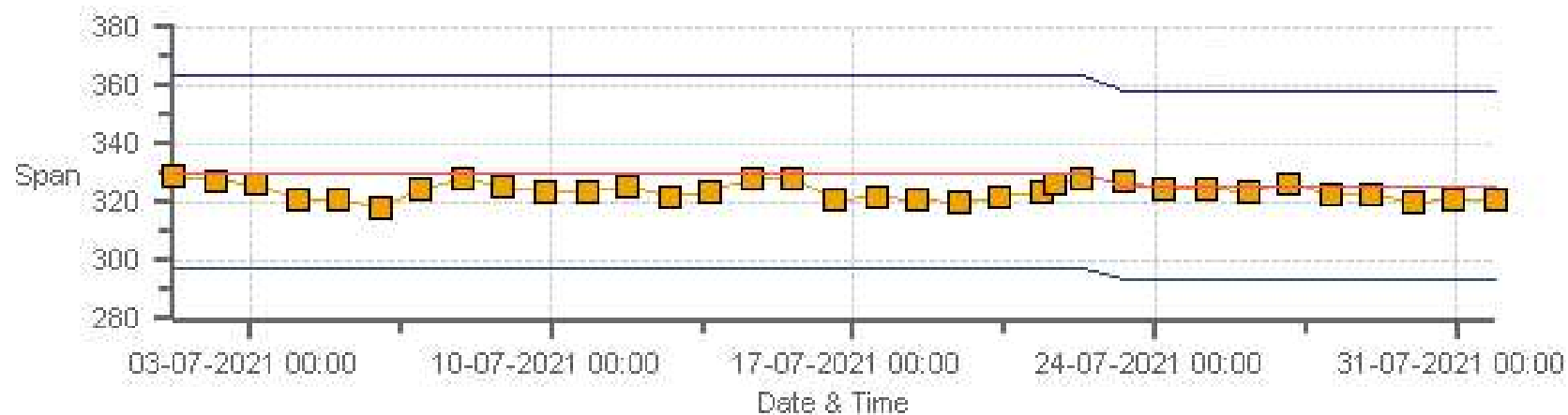
Span SpanRef Span Low Span High

NOX[ppb] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

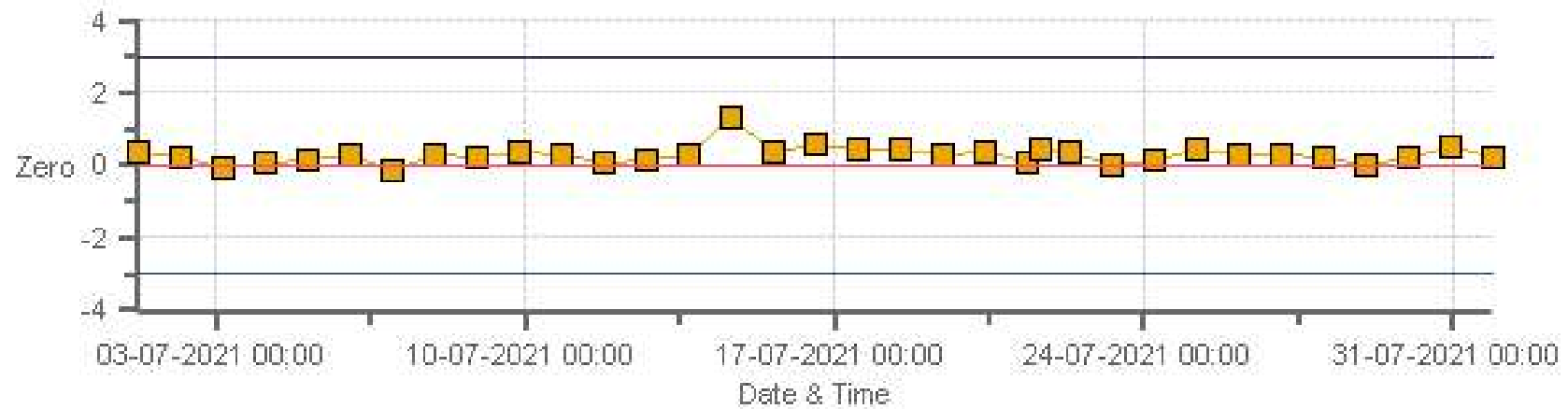
NOX[ppb] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High



NO2[ppb] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Zero



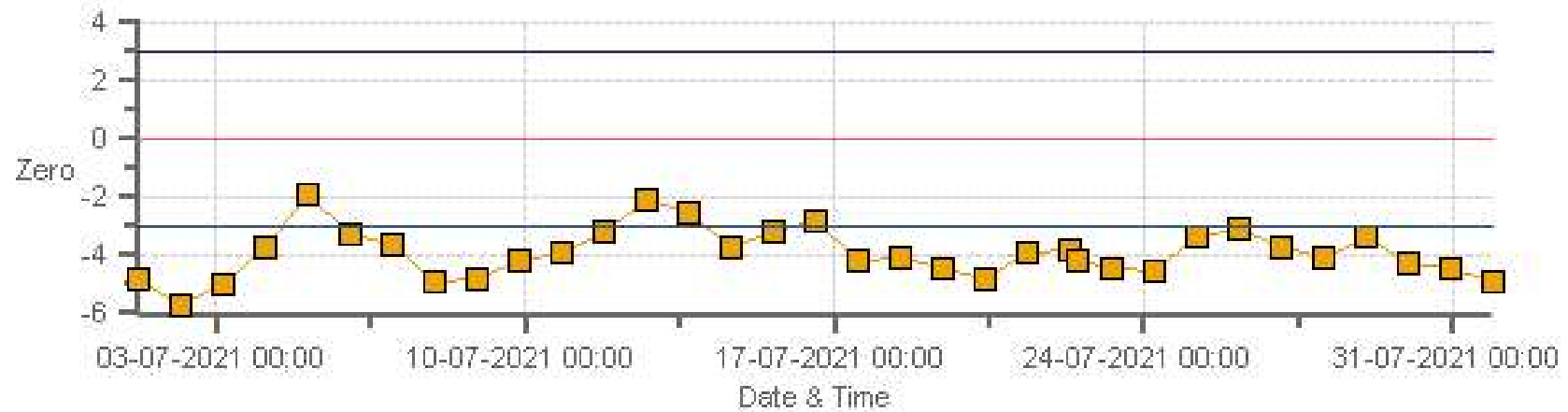
Zero Zero Ref Zero Low Zero High

NO2[ppb] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Span



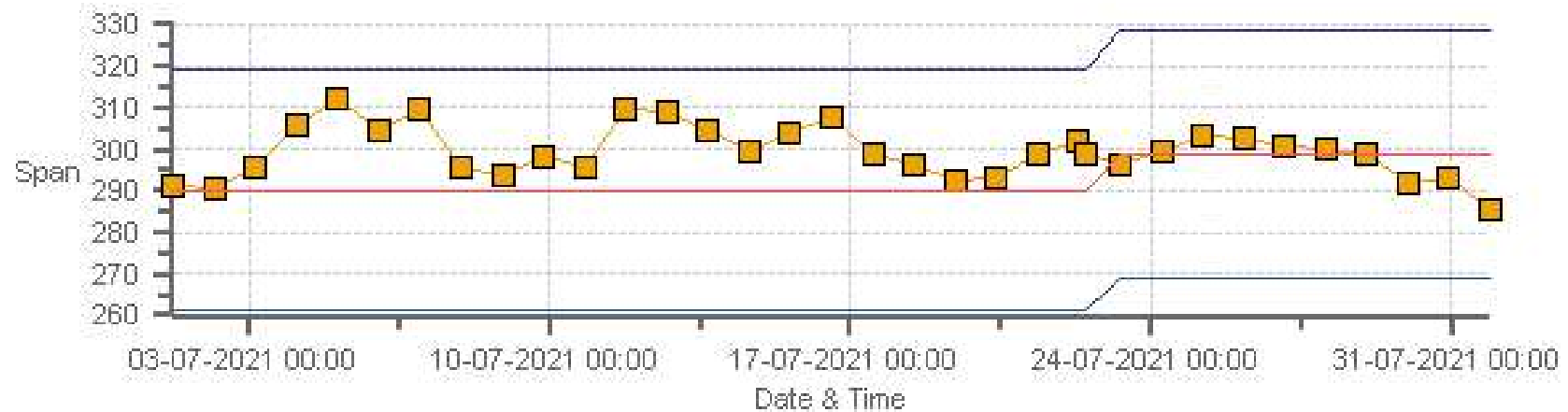
Span SpanRef Span Low Span High

03[ppb] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Zero



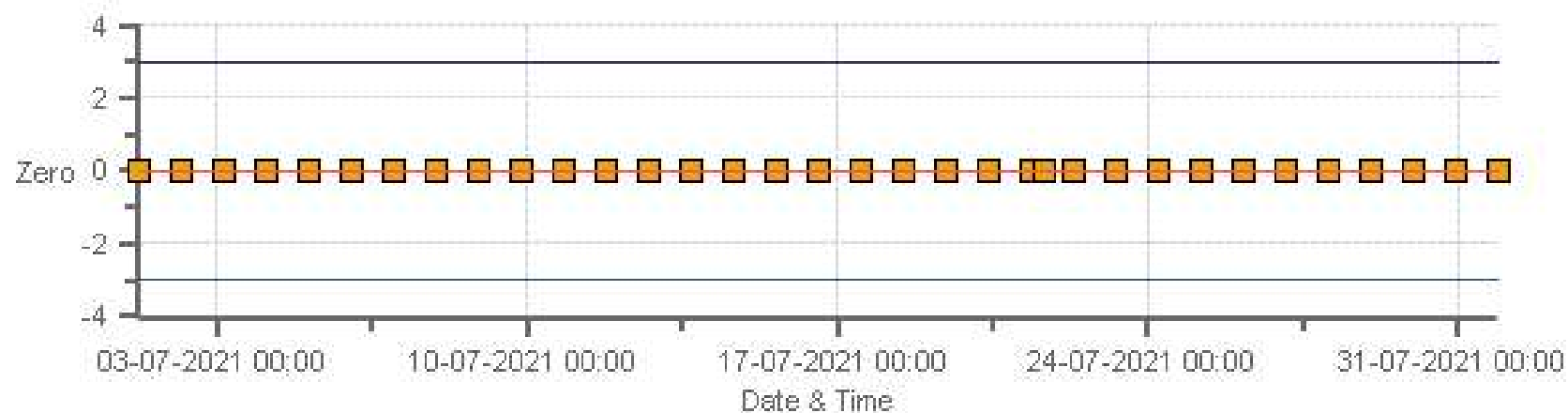
Zero Zero Ref Zero Low Zero High

03[ppb] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Span



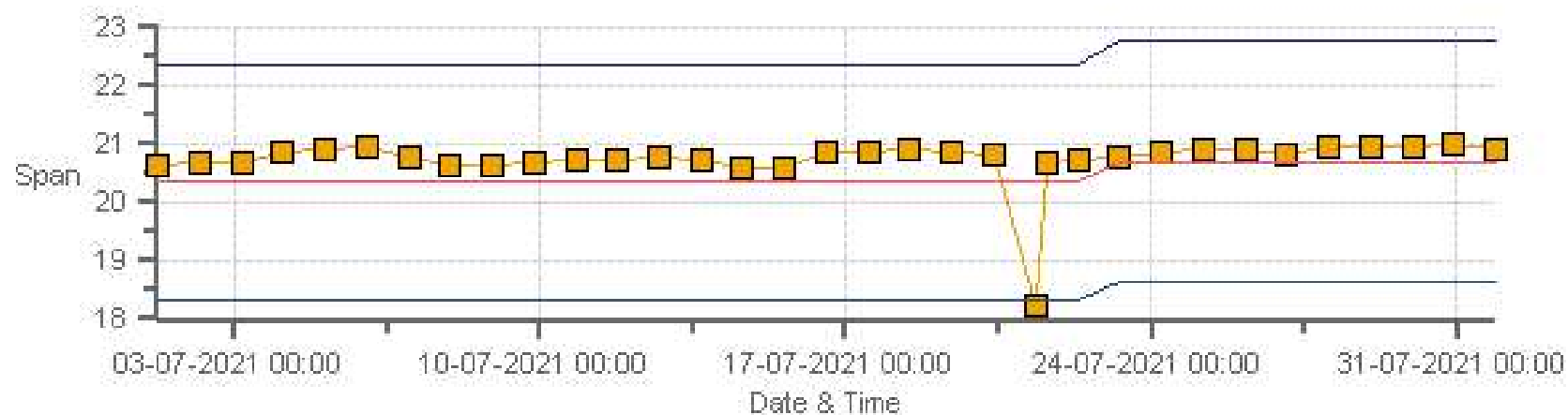
Span SpanRef Span Low Span High

THC55[ppm] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Zero



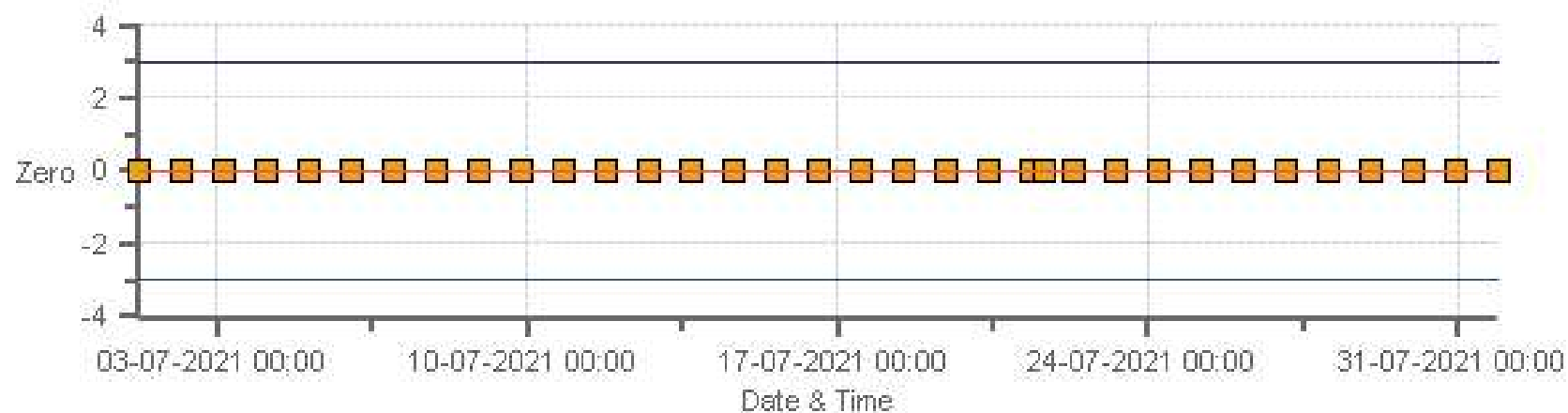
Zero Zero Ref Zero Low Zero High

THC55[ppm] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Span



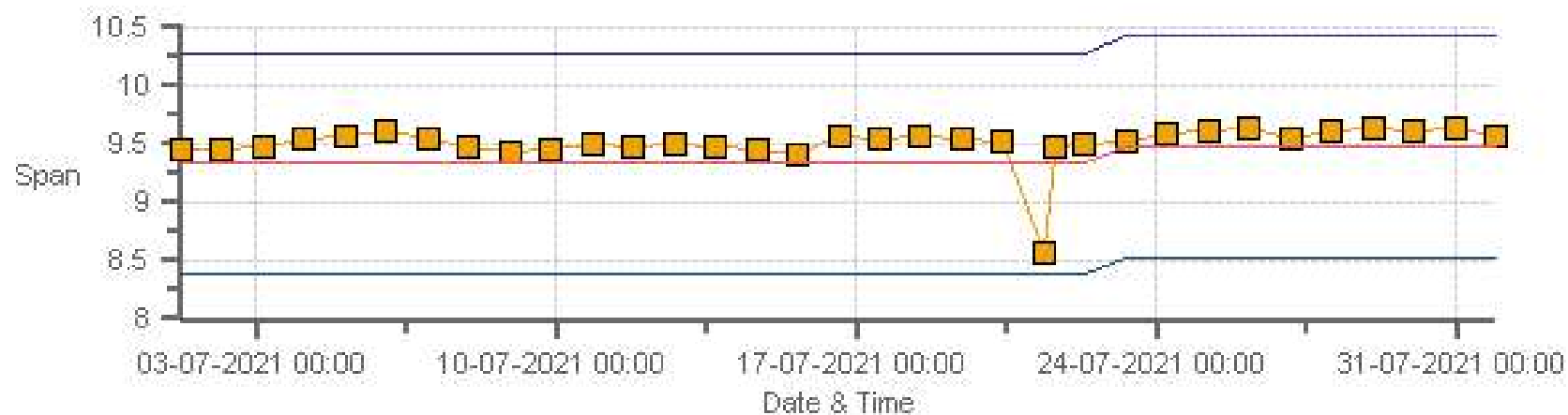
Span Span Ref Span Low Span High

CH4[ppm] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Zero



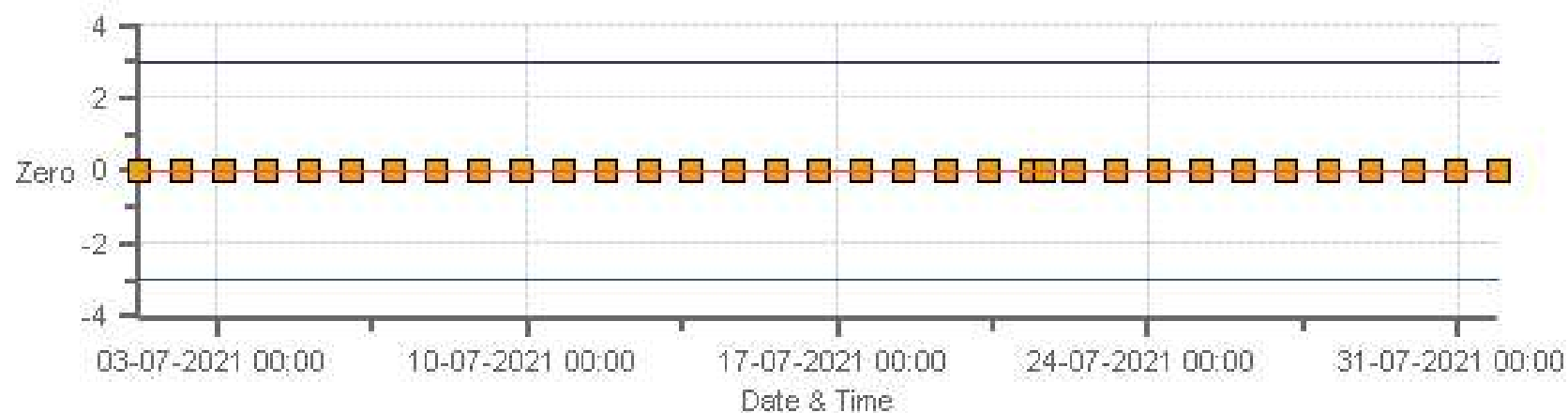
Zero Zero Ref Zero Low Zero High

CH4[ppm] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Span



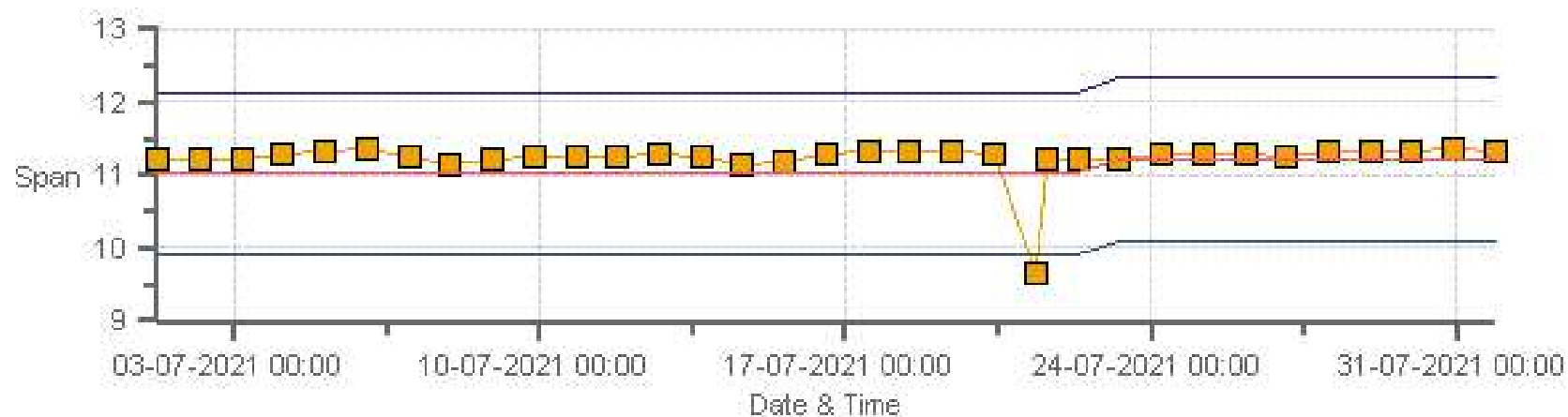
Span SpanRef Span Low Span High

NMHC[ppm] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Zero



Zero Zero Ref Zero Low Zero High

NMHC[ppm] Calibration: AQHI Cadotte Lake Monthly: 07-2021 Type: SpanAndZero - Span



Span Span Ref Span Low Span High

# MULTI-POINT CALIBRATION RECORDS

# SO2 Analyzer Calibration by Dilution



|               |               |                             |             |
|---------------|---------------|-----------------------------|-------------|
| DATE:         | 22-Jul-2021   | PREVIOUS CALIBRATION DATE:  | 16-Jun-2021 |
| PARAMETER:    | SO2           | PREVIOUS CORRECTION FACTOR: | 1.000       |
| CLIENT:       | PRAMP         | TEMPERATURE (°C):           | 23.4        |
| LOCATION:     | Cadotte Lake  | BAROMETRIC (mBar):          | 938         |
| PURPOSE:      | Routine       | START TIME (MST):           | 07:53       |
| PERFORMED BY: | Ferdinand Roy | END TIME (MST):             | 14:08       |

## ANALYZER:

|                            |               |                            |         |
|----------------------------|---------------|----------------------------|---------|
| MAKE/MODEL                 | Teledyne T100 | RANGE                      | 500 ppb |
| SERIAL #                   | 722           | FLOW (mL/min)              | 525     |
| INITIAL                    |               | FINAL                      |         |
| BKG/OFFSET                 | 21.3          | BKG/OFFSET                 | 21      |
| COEF/SLOPE                 | 0.935         | COEF/SLOPE                 | 0.934   |
| Expected (reference) Value | 270.2         | Expected (reference) Value | 271.3   |

## CALIBRATION SYSTEM:

|                       |             |                             |     |
|-----------------------|-------------|-----------------------------|-----|
| CALIBRATOR:           |             | ZERO AIR:                   |     |
| MAKE:                 | EnviroNics  | MAKE:                       | API |
| MODEL:                | 2000        | MODEL:                      | 701 |
| ID:                   | 1991        | ID:                         | 850 |
| MFC CALIBRATION DATE: | 23-Mar-2021 | OXIDIZER ID:                | n/a |
| CALIBRATION GAS:      |             | FLOWMETERS (if applicable): |     |
| CYLINDER ID:          | EY0002357   | HIGH ID                     | n/a |
| CONC (ppm):           | 24.90       | EXPIRY DATE                 | n/a |
| CYLINDER (psi):       | 1290        | LOW ID                      | n/a |
| EXPIRY DATE           | 13-Nov-2024 | EXPIRY DATE                 | n/a |

## CALIBRATION PARAMETERS:

|        |           |           |          |
|--------|-----------|-----------|----------|
| POINT  | HIGH      | MID       | LOW      |
| TARGET | 390       | 190       | 95       |
| RANGE  | 300 - 400 | 150 - 200 | 50 - 100 |

## SCRUBBER CHECK (15 MINS; TRS/H2S ONLY):

|             |     |                         |     |
|-------------|-----|-------------------------|-----|
| START TIME: | n/a | SO2 Conc (ppb)          | n/a |
| END TIME:   | n/a | Analyzer Response (ppb) | n/a |

## CALIBRATION:

| FLOW RATES<br>(mL/min) |                  |       | CONCENTRATION (ppb) |           |       | CORRECTION FACTOR |                  |
|------------------------|------------------|-------|---------------------|-----------|-------|-------------------|------------------|
| DILUENT                | GAS              | TOTAL | ACTUAL              | INDICATED |       | Initial           | Final            |
|                        |                  |       |                     | Initial   | Final |                   |                  |
| 4002                   | <del>61.04</del> | 4002  | 0.00                | 0         | 0     | <del>1.003</del>  | <del>1.000</del> |
| 3940                   | 61.04            | 4001  | 379.89              | 378.9     | 379.8 | 1.003             | 1.000            |
| 3970                   | 30.48            | 4001  | 189.73              | n/a       | 189.5 | n/a               | 1.001            |
| 3986                   | 14.41            | 4000  | 89.67               | n/a       | 89.7  | n/a               | 1.000            |

## LINEAR REGRESSION ANALYSIS:

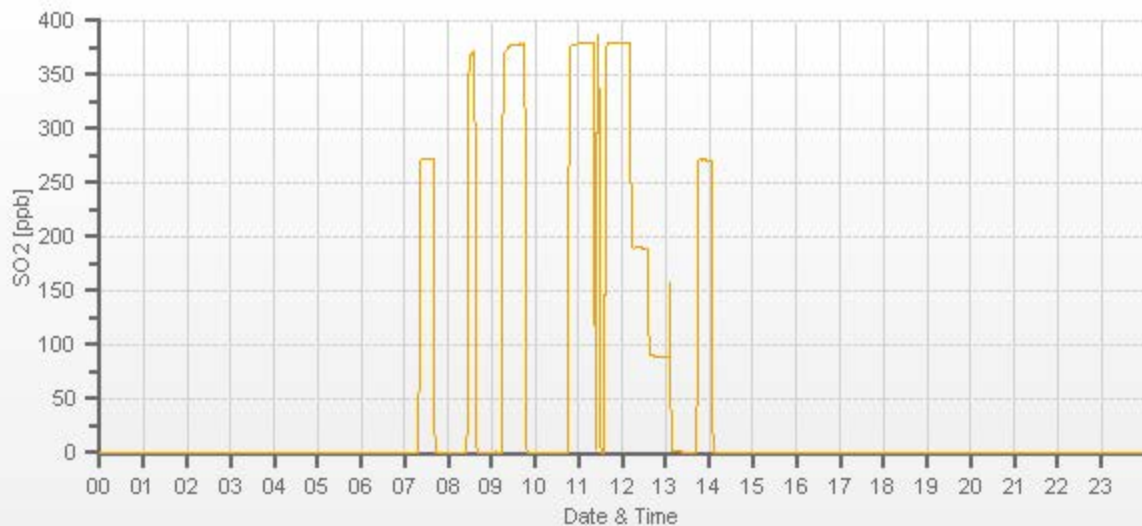
|       |             |       |           |
|-------|-------------|-------|-----------|
|       | CORRELATION | SLOPE | INTERCEPT |
| VALUE | 1.000       | 1.000 | 0.0%      |

## COMMENTS:

Stopped as-found high at 8:37 due to slow TRS response (calibrations operating in parallel). Restart at 09:15.

Sample filter changed.

SO2[ppb] Station: AQHI Cadotte Lake Daily: 22-07-2021 Type: AVG 1 Min. [1 Min.]



CAL-PRAMP-202107-01651



# TRS Analyzer Calibration by Dilution



|               |               |                             |             |
|---------------|---------------|-----------------------------|-------------|
| DATE:         | 22-Jul-2021   | PREVIOUS CALIBRATION DATE:  | 16-Jun-2021 |
| PARAMETER:    | TRS           | PREVIOUS CORRECTION FACTOR: | 1.000       |
| CLIENT:       | PRAMP         | TEMPERATURE (°C):           | 23.4        |
| LOCATION:     | Cadotte Lake  | BAROMETRIC (mBar):          | 938         |
| PURPOSE:      | Routine       | START TIME (MST):           | 07:53       |
| PERFORMED BY: | Ferdinand Roy | END TIME (MST):             | 15:26       |

## ANALYZER:

|                            |                |                            |         |
|----------------------------|----------------|----------------------------|---------|
| MAKE/MODEL                 | Teledyne T100U | RANGE                      | 100 ppb |
| SERIAL #                   | 132            | FLOW (mL/min)              | 514     |
| INITIAL                    |                | FINAL                      |         |
| BKG/OFFSET                 | 24.1           | BKG/OFFSET                 | 23.8    |
| COEF/SLOPE                 | 1.039          | COEF/SLOPE                 | 1.044   |
| Expected (reference) Value | 55.49          | Expected (reference) Value | 54.89   |

## CALIBRATION SYSTEM:

|                       |             |                             |     |
|-----------------------|-------------|-----------------------------|-----|
| CALIBRATOR:           |             | ZERO AIR:                   |     |
| MAKE:                 | EnviroNics  | MAKE:                       | API |
| MODEL:                | 2000        | MODEL:                      | 701 |
| ID:                   | 1991        | ID:                         | 850 |
| MFC CALIBRATION DATE: | 23-Mar-2021 | OXIDIZER ID:                | n/a |
| CALIBRATION GAS:      |             | FLOWMETERS (if applicable): |     |
| CYLINDER ID:          | EY0002472   | HIGH ID                     | n/a |
| CONC (ppm):           | 9.41        | EXPIRY DATE                 | n/a |
| CYLINDER (psi):       | 1650        | LOW ID                      | n/a |
| EXPIRY DATE           | 10-Nov-2023 | EXPIRY DATE                 | n/a |

## CALIBRATION PARAMETERS:

|        |         |         |         |
|--------|---------|---------|---------|
| POINT  | HIGH    | MID     | LOW     |
| TARGET | 78      | 38      | 19      |
| RANGE  | 60 - 80 | 30 - 40 | 10 - 20 |

## SCRUBBER CHECK (15 MINS; TRS/H2S ONLY):

|             |     |                         |     |
|-------------|-----|-------------------------|-----|
| START TIME: | n/a | SO2 Conc (ppb)          | n/a |
| END TIME:   | n/a | Analyzer Response (ppb) | n/a |

## CALIBRATION:

| FLOW RATES<br>(mL/min) |                  |       | CONCENTRATION (ppb) |           |       | CORRECTION FACTOR |                  |
|------------------------|------------------|-------|---------------------|-----------|-------|-------------------|------------------|
| DILUENT                | GAS              | TOTAL | ACTUAL              | INDICATED |       | Initial           | Final            |
|                        |                  |       |                     | Initial   | Final |                   |                  |
| 4002                   | <del>33.23</del> | 4002  | 0.00                | -0.17     | 0     | <del>0.997</del>  | <del>1.000</del> |
| 3968                   | 33.23            | 4001  | 78.16               | 78.22     | 78.16 | 0.997             | 1.000            |
| 3984                   | 16.17            | 4000  | 38.04               | n/a       | 37.63 | n/a               | 1.011            |
| 3992                   | 8.10             | 4000  | 19.06               | n/a       | 18.38 | n/a               | 1.037            |

## LINEAR REGRESSION ANALYSIS:

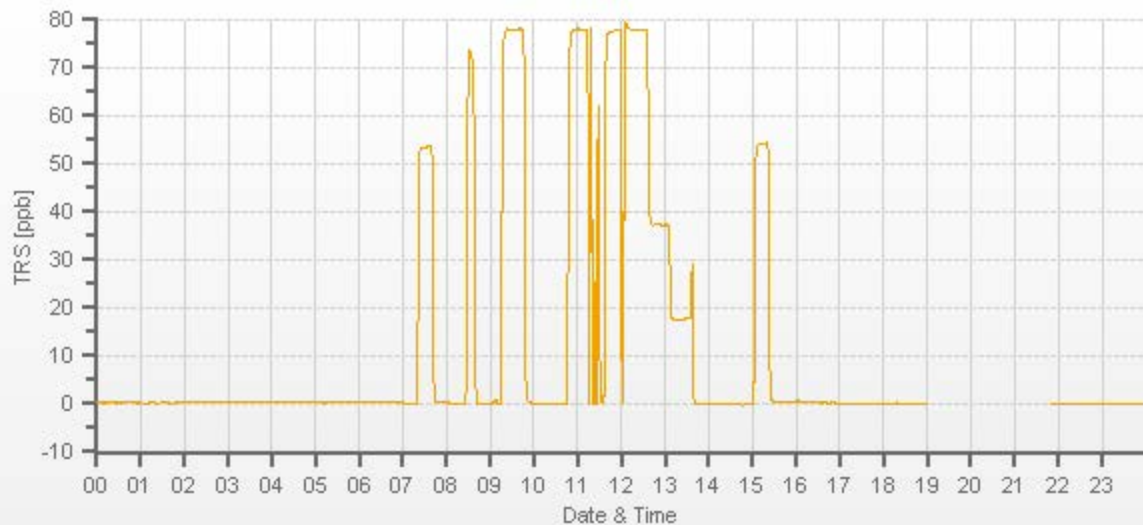
|       |             |       |           |
|-------|-------------|-------|-----------|
|       | CORRELATION | SLOPE | INTERCEPT |
| VALUE | 1.000       | 1.003 | -0.4%     |

## COMMENTS:

08:37 = Re-purge regulator due to low/slow response.

Sample filter changed.

TRS Converter CD NOVA CDN-101 #530.



# NOx Calibration by Dilution/Gas-Phase Titration



| CALIBRATION:  |               |                            |             | ANALYZER:     |               |              |       |
|---------------|---------------|----------------------------|-------------|---------------|---------------|--------------|-------|
| DATE:         | 21-Jul-2021   | PREVIOUS CALIBRATION DATE: | 17-Jun-2021 | MAKE/MODEL:   | Teledyne T200 | PREVIOUS CF. |       |
| CLIENT:       | PRAMP         | TEMPERATURE (°C):          | 21.7        | SERIAL #:     | 837           | NOx          | 1.000 |
| LOCATION:     | Cadotte Lake  | BAROMETRIC (mBar):         | 944         | FLOW (mL/min) | 441           | NO           | 1.000 |
| PURPOSE:      | Routine       | START TIME (MST):          | 08:50       | RANGE (ppb)   | 500           | NO2          | 1.004 |
| PERFORMED BY: | Ferdinand Roy | END TIME (MST):            | 16:45       | GPT FOR O3?   |               | Yes          |       |

| CALIBRATION SYSTEM:   |             |              |     | FLOWMETERS (if applicable): |             |              |     |
|-----------------------|-------------|--------------|-----|-----------------------------|-------------|--------------|-----|
| CALIBRATOR:           |             | ZERO AIR:    |     | CALIBRATION GAS:            |             |              |     |
| MAKE:                 | Sabio       | MAKE:        | API | CYLINDER ID:                | EY0002493   | HIGH ID:     | n/a |
| MODEL:                | 2010        | MODEL:       | 701 | NO/NOx (PPM):               | 50.9   51.1 | HIGH EXPIRY: | n/a |
| ID:                   | 17100415    | ID:          | 850 | CYLINDER (psi):             | 1010        | LOW ID:      | n/a |
| MFC CALIBRATION DATE: | 23-Mar-2021 | OXIDIZER ID: | n/a | EXPIRY DATE                 | 13-Nov-2028 | LOW EXPIRY:  | n/a |

| CALIBRATION SETTINGS: |       |       |        |                |       |       |        |
|-----------------------|-------|-------|--------|----------------|-------|-------|--------|
| INITIAL               | NOx   | NO    | NO2    | FINAL          | NOx   | NO    | NO2    |
| BKG/OFFSET:           | 0     | -0.2  | n/a    | BKG/OFFSET:    | -0.3  | -0.4  | n/a    |
| SLOPE/COEF/CE:        | 1.116 | 1.106 | 0.9993 | SLOPE/COEF/CE: | 1.113 | 1.103 | 0.9993 |

| EXPECTED (REFERENCE) VALUE: |       |     |       |       |       |     |       |
|-----------------------------|-------|-----|-------|-------|-------|-----|-------|
| INITIAL                     | NOx   | NO  | NO2   | FINAL | NOx   | NO  | NO2   |
|                             | 330.4 | 3.9 | 326.6 |       | 325.9 | 3.9 | 322.1 |

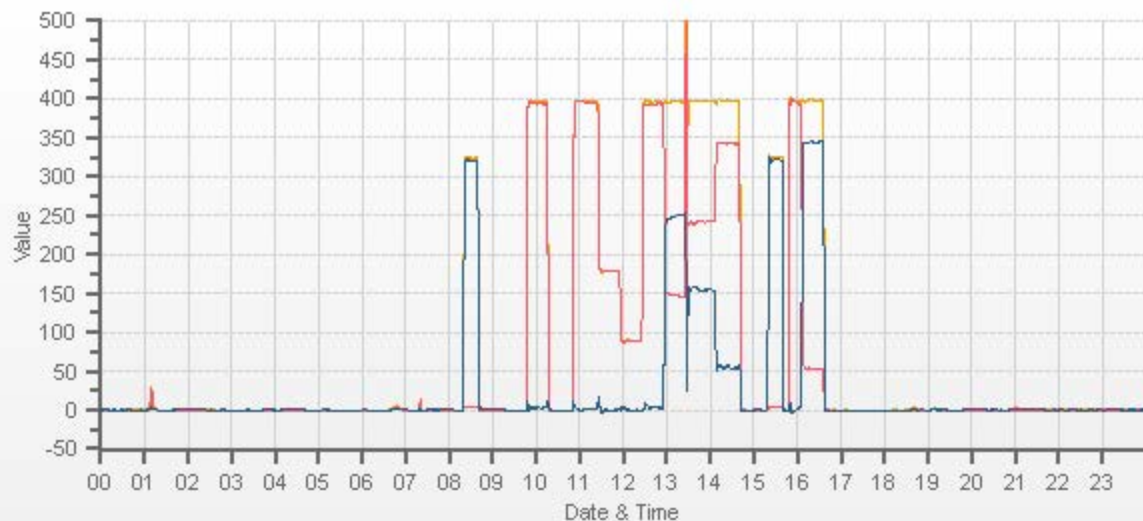
| CALIBRATION PARAMETERS: |                 |                  |           |          |
|-------------------------|-----------------|------------------|-----------|----------|
| POINT                   | NO TARGET (PPB) | NO2 TARGET (PPB) | NO2 RANGE | O3 POINT |
| HIGH                    | 395             | 250              | 240-275   | n/a      |
| MID                     | 180             | 154              | 150-157   | Mid      |
| LOW                     | 90              | 54               | 50-58     | Low      |
| EXTRA 1                 | n/a             | 340              | 300-370   | High     |

| FLOW RATE |                  |       | CONCENTRATION (ppb) |       |     |                   |       |     |                 |       |     | CORRECTION FACTOR (CF.) |                  |                  |                  |                  |                  |
|-----------|------------------|-------|---------------------|-------|-----|-------------------|-------|-----|-----------------|-------|-----|-------------------------|------------------|------------------|------------------|------------------|------------------|
| (mL/min)  |                  |       | CALCULATED          |       |     | INITIAL INDICATED |       |     | FINAL INDICATED |       |     | INITIAL                 |                  |                  | FINAL            |                  |                  |
| DILUENT   | GAS              | TOTAL | NO                  | NOx   | NO2 | NO                | NOx   | NO2 | NO              | NOx   | NO2 | NO                      | NOx              | NO2              | NO               | NOx              | NO2              |
| 4997      | <del>38.80</del> | 4997  | 0.0                 | 0.0   | 0.0 | -0.6              | -0.2  | 0.4 | 0.0             | 0.0   | 0.0 | <del>1.003</del>        | <del>1.000</del> | <del>1.000</del> | <del>1.000</del> | <del>1.000</del> | <del>1.000</del> |
| 4958      | 38.80            | 4997  | 395.2               | 396.8 | 1.6 | 393.5             | 396.7 | 3.3 | 395.2           | 396.7 | 1.5 | 1.003                   | 1.000            | 1.000            | 1.000            | 1.000            | 1.000            |
| 4980      | 17.70            | 4998  | 180.3               | 181.0 | 0.7 | n/a               | n/a   | n/a | 178.6           | 179.7 | 1.1 | n/a                     | n/a              | 1.009            | 1.007            | 1.007            | 1.007            |
| 4989      | 8.80             | 4998  | 89.6                | 90.0  | 0.4 | n/a               | n/a   | n/a | 89.4            | 89.7  | 0.3 | n/a                     | n/a              | 1.002            | 1.003            | 1.003            | 1.003            |

| GPT CALIBRATION:             |            |       |             |                 |       |       |                         |                  |                  |                   |
|------------------------------|------------|-------|-------------|-----------------|-------|-------|-------------------------|------------------|------------------|-------------------|
| Point                        | CALIBRATOR |       |             | INDICATED (ppb) |       |       | NO DROP / O3 Conc (ppb) | NO2 GAIN (ppb)   | NO2 Corr. FACTOR | CONV. EFFICIENCY  |
|                              | GAS        | TOTAL | O3 SETPOINT | NO              | NOx   | NO2   |                         |                  |                  |                   |
| REFERENCE                    | 38.80      | 4997  | 0           | 393.7           | 396.3 | 2.6   | <del>248</del>          | <del>247.8</del> | <del>1.001</del> | <del>99.92%</del> |
| AS-FOUND HIGH                | 38.80      | 4997  | 250         | 145.7           | 396.1 | 250.4 | 248                     | 247.8            | 1.001            | 99.92%            |
| ADJUSTED HIGH                | n/a        | n/a   | n/a         | n/a             | n/a   | n/a   | n/a                     | n/a              | n/a              | n/a               |
| MID                          | 38.80      | 4997  | 150         | 243.1           | 397.9 | 154.8 | 150.6                   | 152.2            | 0.989            | 101.06%           |
| LOW                          | 38.80      | 4997  | 50          | 342.0           | 397.3 | 55.3  | 51.7                    | 52.7             | 0.981            | 101.93%           |
| NO2 adjustment not required. |            |       |             |                 |       |       |                         |                  | AVERAGE:         | 100.97%           |

| LINEAR REGRESSION ANALYSIS: |             |       |           | COMMENTS: |
|-----------------------------|-------------|-------|-----------|-----------|
|                             | CORRELATION | SLOPE | INTERCEPT |           |
| NO                          | 1.000       | 1.000 | -0.09%    |           |
| NOx                         | 1.000       | 1.000 | -0.08%    |           |
| NO2                         | 1.000       | 0.994 | 0.34%     |           |

13:25-13:27 (start of GPT mid) = operator error, incorrect target selected.  
15:48-16:44 = Additional point for O3: SETPOINT @ 340, NO DROP/O3 = 340.4



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NOX [ppb] NO [ppb] NO2 [ppb]

# Ozone Calibration by Direct GPT



|               |               |                             |             |
|---------------|---------------|-----------------------------|-------------|
| DATE:         | 22-Jul-2021   | PREVIOUS CALIBRATION DATE:  | 18-Jun-2021 |
| PARAMETER:    | O3            | PREVIOUS CORRECTION FACTOR: | 1.000       |
| CLIENT:       | PRAMP         | TEMPERATURE (°C):           | 23.4        |
| LOCATION:     | Cadotte Lake  | BAROMETRIC (mBar):          | 938         |
| PURPOSE:      | Routine       | START TIME (MST):           | 07:53       |
| PERFORMED BY: | Ferdinand Roy | END TIME (MST):             | 12:04       |

## ANALYZER:

|                            |               |                            |         |
|----------------------------|---------------|----------------------------|---------|
| MAKE/MODEL                 | Teledyne T400 | RANGE                      | 500 ppb |
| SERIAL #                   | 824           | FLOW (mL/min)              | 741     |
| INITIAL                    |               | FINAL                      |         |
| BKG/OFFSET                 | -0.9          | BKG/OFFSET                 | -1      |
| COEF/SLOPE                 | 1.045         | COEF/SLOPE                 | 1.029   |
| Expected (reference) Value | 290.2         | Expected (reference) Value | 298.9   |

## CALIBRATION SYSTEM:

|                       |             |               |       |
|-----------------------|-------------|---------------|-------|
| CALIBRATOR:           |             | ZERO AIR:     |       |
| MAKE:                 | Sabio       | MAKE:         | API   |
| MODEL:                | 2010        | MODEL:        | 701   |
| ID:                   | 17100415    | ID:           | 850   |
| MFC CALIBRATION DATE: | 23-Mar-2021 | OXIDIZER ID:  | n/a   |
| CALIBRATION METHOD:   |             | Direct GPT    |       |
| GPT DATE:             | 21-Jul-2021 | GPT END TIME: | 16:36 |

## CALIBRATION PARAMETERS:

|       |           |           |          |
|-------|-----------|-----------|----------|
| POINT | HIGH      | MID       | LOW      |
| RANGE | 300 - 400 | 150 - 200 | 50 - 100 |

## CALIBRATION:

| FLOW RATES |                 |       | CONCENTRATION (ppb) |           |       | CORRECTION FACTOR |                 |
|------------|-----------------|-------|---------------------|-----------|-------|-------------------|-----------------|
| (mL/min)   |                 |       | ACTUAL              | INDICATED |       | Initial           | Final           |
| DILUENT    | GAS             | TOTAL |                     | Initial   | Final |                   |                 |
| 4997       | <del>XXXX</del> | 4997  | 0.0                 | -0.3      | 0.0   | <del>XXXX</del>   | <del>XXXX</del> |
| 4997       | <del>XXXX</del> | 4997  | 340.4               | 348.3     | 340.4 | 0.976             | 1.000           |
| 4997       | <del>XXXX</del> | 4997  | 150.6               | n/a       | 153.6 | n/a               | 0.980           |
| 4997       | <del>XXXX</del> | 4997  | 51.7                | n/a       | 53.6  | n/a               | 0.965           |

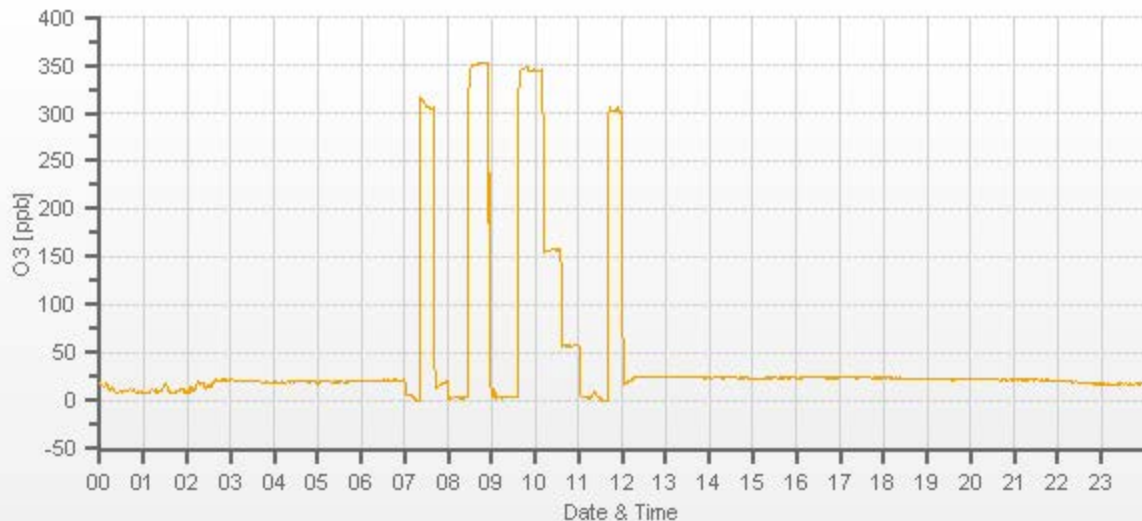
## LINEAR REGRESSION ANALYSIS:

|       |             |       |           |
|-------|-------------|-------|-----------|
|       | CORRELATION | SLOPE | INTERCEPT |
| VALUE | 1.000       | 0.998 | 0.3%      |

## COMMENTS:

Calibrator non-responsive after 18mins. as-found high. Power reset. Sample filter changed.

O3[ppb] Station: AQHI Cadotte Lake Daily: 22-07-2021 Type: AVG 1 Min. [1 Min.]



CAL-PRAMP-202107-01651

# Methane/Non-Methane Analyzer Calibration by Dilution



| CALIBRATION:  |               |                            |             | ANALYZER:    |            |            |               |
|---------------|---------------|----------------------------|-------------|--------------|------------|------------|---------------|
| DATE:         | 21-Jul-2021   | PREVIOUS CALIBRATION DATE: | 16-Jun-2021 | VALUE        | MAKE/MODEL | SERIAL     | FLOW (mL/min) |
| CLIENT:       | PRAMP         | TEMPERATURE (°C):          | 21.9        |              | Thermo 55i | 1191032505 | 1178.4        |
| LOCATION:     | Cadotte Lake  | BAROMETRIC (mBar):         | 944         | PARAMETER:   | CH4        | NMHC       | THC           |
| PURPOSE:      | Routine       | START TIME (MST):          | 09:49       | RANGE (ppm): | 20         | 20         | 40            |
| PERFORMED BY: | Ferdinand Roy | END TIME (MST):            | 15:26       | PREVIOUS CF: | 1.002      | 1.001      | 1.001         |

## CALIBRATION SYSTEM:

| CALIBRATOR:           |             | ZERO AIR:    |       | CALIBRATION GAS:                                      |               | FLOWMETERS (if applicable): |     |
|-----------------------|-------------|--------------|-------|-------------------------------------------------------|---------------|-----------------------------|-----|
| MAKE:                 | EnviroNics  | MAKE:        | API   | CYLINDER ID:                                          | LL84567       | HIGH ID:                    | n/a |
| MODEL:                | 2000        | MODEL:       | 701   | CH <sub>4</sub> /C <sub>3</sub> H <sub>8</sub> (ppm): | 591.0   200.0 | HIGH EXPIRY:                | n/a |
| ID:                   | 1991        | ID:          | 850   | CYLINDER (psi):                                       | 750           | LOW ID:                     | n/a |
| MFC CALIBRATION DATE: | 23-Mar-2021 | OXIDIZER ID: | 00941 | EXPIRY DATE                                           | 17-Jul-2027   | LOW EXPIRY:                 | n/a |

## CALIBRATION PARAMETERS:

| POINT (CH <sub>4</sub> /NMHC) | HIGH    | MID   | LOW   | CH <sub>4</sub> EQUIVILANCE                      |        |
|-------------------------------|---------|-------|-------|--------------------------------------------------|--------|
| TARGET                        | 14      | 7     | 3.5   | C <sub>3</sub> H <sub>8</sub> as CH <sub>4</sub> | 550.0  |
| RANGE                         | 12 - 16 | 6 - 8 | 2 - 4 | THC as CH <sub>4</sub>                           | 1141.0 |

## EXPECTED (REFERENCE) VALUE:

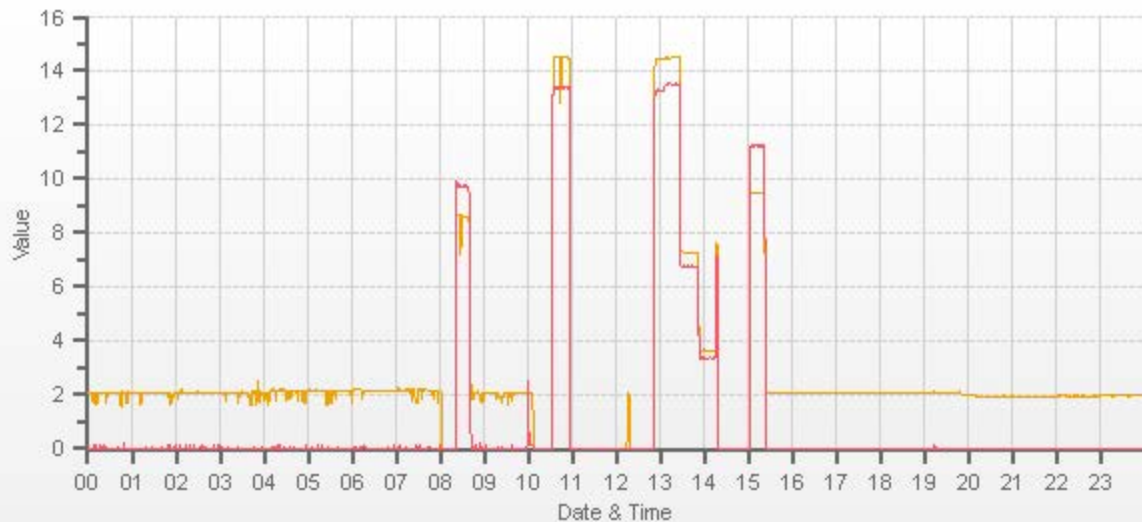
| INITIAL | CH <sub>4</sub> | NMHC  | THC   | FINAL | CH <sub>4</sub> | NMHC  | THC   |
|---------|-----------------|-------|-------|-------|-----------------|-------|-------|
|         | 9.33            | 11.03 | 20.35 |       | 9.48            | 11.23 | 20.70 |

## CALIBRATION:

| FLOW RATE |              |       | CONCENTRATION (PPM) |       |       |                   |       |       |                 |       |       | CORRECTION FACTOR (CF.) |              |              |                 |              |              |
|-----------|--------------|-------|---------------------|-------|-------|-------------------|-------|-------|-----------------|-------|-------|-------------------------|--------------|--------------|-----------------|--------------|--------------|
| (mL/min)  |              |       | CALCULATED          |       |       | INITIAL INDICATED |       |       | FINAL INDICATED |       |       | INITIAL                 |              |              | FINAL           |              |              |
| DILUENT   | GAS          | TOTAL | CH <sub>4</sub>     | NMHC  | THC   | CH <sub>4</sub>   | NMHC  | THC   | CH <sub>4</sub> | NMHC  | THC   | CH <sub>4</sub>         | NMHC         | THC          | CH <sub>4</sub> | NMHC         | THC          |
| 3001      | <del>X</del> | 3001  | 0.00                | 0.00  | 0.00  | 0.00              | 0.00  | 0.00  | 0.00            | 0.00  | 0.00  | <del>X</del>            | <del>X</del> | <del>X</del> | <del>X</del>    | <del>X</del> | <del>X</del> |
| 2928      | 73.59        | 3002  | 14.49               | 13.48 | 27.97 | 14.50             | 13.39 | 27.89 | 14.51           | 13.50 | 28.01 | 0.999                   | 1.007        | 1.003        | 0.998           | 0.999        | 0.999        |
| 2966      | 36.77        | 3003  | 7.24                | 6.73  | 13.97 | n/a               | n/a   | n/a   | 7.29            | 6.73  | 14.02 | n/a                     | n/a          | n/a          | 0.993           | 1.001        | 0.996        |
| 2984      | 18.39        | 3002  | 3.62                | 3.37  | 6.99  | n/a               | n/a   | n/a   | 3.66            | 3.38  | 7.04  | n/a                     | n/a          | n/a          | 0.989           | 0.997        | 0.993        |

## LINEAR REGRESSION ANALYSIS:

|                 | CORRELATION | SLOPE | INTERCEPT | Comments:                                                             |  |     |  |
|-----------------|-------------|-------|-----------|-----------------------------------------------------------------------|--|-----|--|
| CH <sub>4</sub> | 1.000       | 1.001 | 0.1%      | Sample filter changed. Zero Chrom 11:28 - 12:25 to improve stability. |  |     |  |
| NMHC            | 1.000       | 1.001 | 0.0%      |                                                                       |  |     |  |
| THC             | 1.000       | 1.001 | 0.1%      |                                                                       |  |     |  |
|                 |             |       |           | Use Zero Chrom?                                                       |  | Yes |  |



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CH4 [ppm] NMHC [ppm]





## Teledyne T640 Audit/Calibration

|                                                                  |               |                        |                                                 |                     |                                         |
|------------------------------------------------------------------|---------------|------------------------|-------------------------------------------------|---------------------|-----------------------------------------|
| Date/Previous Audit Date:                                        | July 21, 2021 | June 8, 2021           | Weather Conditions:                             | Cloudy/Overcast     |                                         |
| Company:                                                         | PRAMP         |                        | Start Time (mst):                               | 12:42               |                                         |
| Station:                                                         | Cadotte Lake  |                        | End Time (mst):                                 | 13:11               |                                         |
| Parameter:                                                       | PM 2.5        | Performed By/Reviewer: | Ferdinand Roy                                   | Chris Wesson        |                                         |
| Instrument Data:                                                 |               |                        |                                                 |                     |                                         |
| Make/Model:                                                      | Teledyne T640 |                        | Serial Number:                                  | 318                 |                                         |
| Owner:                                                           | PRAMP         |                        | Alarms (detail in comments):                    | No                  |                                         |
| Reference Standards/I.D./Expiry Date:                            |               |                        |                                                 |                     |                                         |
| Flow Standard: Maxxam ID #3 expires June 29, 2022                |               |                        | Temperature: F.S. 160348895 expires Sep 4, 2022 |                     |                                         |
| Digital Manometer: Dwyer 475 Mark III id# 2 expires Feb 17, 2022 |               |                        | Pressure: F.S. 10528 expires Feb 17, 2022       |                     |                                         |
| DIAGNOSTICS:                                                     |               |                        |                                                 |                     |                                         |
| Ambient Pressure (mmHg)                                          | 707.2         | Ambient Temp (°C)      | 18.0                                            | ASC Heater Duty (%) | 58.3                                    |
| Box Temp (°C)                                                    | 26.8          | Current PMT HV (V)     | 1544                                            | LED Temp (°C)       | 37.16                                   |
| P3 Value                                                         | 44            | PMT Setting (V)        | 1547                                            | Pump PWM (%)        | 38                                      |
| Sample Flow (L/min)                                              | 5.06          | Sample RH (%RH)        | 35.5                                            | Sample Temp (°C)    | 32.0                                    |
| Item:                                                            | As-found      |                        | As-left                                         |                     | Tolerance                               |
|                                                                  | Reference     | T640x                  | Reference                                       | T640x               |                                         |
| Zero Test (Leak Check)                                           | PM10          | 0.0                    | 0                                               | 0.0                 | 0.0 to 0.2                              |
|                                                                  | PM2.5         | 0.0                    | 0                                               | 0.0                 |                                         |
| Ambient Pressure (mmHg)                                          | 707.3         | 707.2                  | 707.3081                                        | 707                 | +/- 10 mm Hg                            |
| Ambient Temperature (°C)                                         | 19.29         | 18.2                   | n/a                                             |                     | +/- 2°C                                 |
| Sample Flow (L/min)                                              | 5.04          | 4.98                   | 5.01                                            | 5                   | +/- 5% of T640x (e.g., 4.75 – 5.25 lpm) |
| Additional Monthly Maintenance :                                 |               |                        |                                                 |                     | Completed                               |
| Inlet cleaned?                                                   |               |                        |                                                 |                     | Yes                                     |
| Sample tubing inspected (inner and outer)?                       |               |                        |                                                 |                     | Yes                                     |
| Comments:                                                        |               |                        |                                                 |                     |                                         |
| No issues.                                                       |               |                        |                                                 |                     |                                         |

# Meteorological System Checklist



|                                                                  |                                    |                                |                  |
|------------------------------------------------------------------|------------------------------------|--------------------------------|------------------|
| Date:                                                            | July 21, 2021                      |                                |                  |
| Technician:                                                      | Ferdinand Roy                      |                                |                  |
| Station:                                                         | PRAMP Cadotte Lake                 |                                |                  |
| <b>Unit:</b>                                                     | <b>Make:</b>                       | <b>Model:</b>                  | <b>Serial #:</b> |
| Temperature Sensor:                                              | Vaisala                            | HMP155                         | N2910506         |
| Barometric Pressure Sensor:                                      | Met One                            | 92                             | A2397            |
| Relative Humidity Sensor:                                        | Vaisala                            | HMP155                         | N2910506         |
| Anemometer:                                                      | RM Young                           | 05305AQ                        | 174801           |
| <b>AMBIENT TEMPERATURE SENSOR CHECK</b>                          |                                    |                                |                  |
| Previous check date:                                             | June 17, 2021                      |                                |                  |
| Parameter:                                                       | Temperature @ 2 metres             |                                |                  |
| Reference Thermometer ID:                                        | F.S. 160348895 expires Sep 4, 2022 |                                |                  |
| Reference Temperature (°C):                                      | 17.9                               |                                |                  |
| Station - Ambient Temperature (°C):                              | 17.3                               |                                |                  |
| Temperature Difference (°C):                                     | 0.6                                |                                |                  |
| <b>BAROMETRIC PRESSURE SENSOR CHECK</b>                          |                                    |                                |                  |
| Previous check date:                                             | June 17, 2021                      |                                |                  |
| Reference Barometer ID:                                          | FS 10528 February 17, 2022         |                                |                  |
| Reference Pressure - Units/Reading:                              | millibar                           | 943                            |                  |
| Station Pressure - Units/Reading:                                | millibar                           | 944.2                          |                  |
| Pressure Tolerance +/- 15% of error:                             | 802 - 1084                         | -0.13%                         |                  |
| <b>RELATIVE HUMIDITY (HYGROMETER) SENSOR CHECK</b>               |                                    |                                |                  |
| Previous check date:                                             | June 17, 2021                      |                                |                  |
| Reference Hygrometer ID:                                         | F.S. 160348895 expires Sep 4, 2022 |                                |                  |
| Reference Hygrometer % RH- Reading:                              | 77.68                              |                                |                  |
| Station Hygrometer % RH- Reading:                                | 83.00                              |                                |                  |
| RH Tolerance +/- 15% of difference:                              | 66.03 - 89.33                      | -6.8%                          |                  |
| <b>ANEMOMETER - WIND SPEED &amp; WIND DIRECTION SENSOR CHECK</b> |                                    |                                |                  |
| <b>WIND SPEED</b>                                                |                                    | <b>WIND DIRECTION</b>          |                  |
| Previous check date:                                             | June 17, 2021                      | Previous check date:           | June 17, 2021    |
| Wind Speed Observed (kph):                                       | 10~15                              | Wind Direction Observed:       | E                |
| Wind speed on Data Logger (kph):                                 | 12                                 | Wind Direction on Data Logger: | E                |
|                                                                  |                                    | Wind Direction Pass/Fail?:     | Pass             |
| Comments                                                         |                                    |                                |                  |
| No issues. Temp @12:00; RH@12:03; WS/Wd @ 12:06; BP@12:02        |                                    |                                |                  |



# Meteorological Sensor Audit/Calibration

## Location Information

Company: PRAMP  
Audit Location: Cadotte Lake  
Audit Date: June 18, 2020  
Calibration Purpose: installation

Performed By: Chris Wesson  
Reviewed By: Ferdinand Roy  
Start/End Time (mst): 14:28 / 15:15  
Weather Conditions: Mix of sun and clouds

## Wind Sensor Information

| Sensor ID Data:          |          | Sensor Outputs:                 |       |
|--------------------------|----------|---------------------------------|-------|
| Sensor Make:             | RM Young | Velocity Voltage Output Range:  | n/a   |
| Sensor Model:            | 05305AQ  | Velocity Unit Output Range:     | 0-180 |
| Serial #:                | 174801   | Direction Voltage Output Range: | n/a   |
| Previous Cal/Audit Date: | n/a      | Direction Unit Output Range:    | 0-360 |

## Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18802 id# CA03309 expires November 20, 2020

## Wind Speed Audit Data **\*\*+/- 2% of the average correction factor is the limit\*\***

| RPM                               | Wind Speed Generated kph | Clockwise Wind Speed kph | Counter Clockwise Wind Speed kph | Correction Factor |
|-----------------------------------|--------------------------|--------------------------|----------------------------------|-------------------|
| 0                                 | 0                        | 0.0                      | 0.0                              | -                 |
| 1000                              | 18.4                     | 18.3                     | 18.3                             | 1.007             |
| 2000                              | 36.9                     | 36.7                     | 36.7                             | 1.004             |
| 3000                              | 55.3                     | 55.1                     | 55.1                             | 1.003             |
| 4000                              | 73.7                     | 73.6                     | 73.6                             | 1.002             |
| 5000                              | 92.2                     | 92.0                     | 92.0                             | 1.002             |
| 6000                              | 110.6                    | 110.5                    | 110.5                            | 1.001             |
| 7000                              | 129.0                    | 128.9                    | 128.9                            | 1.001             |
| 8000                              | 147.4                    | 147.3                    | 147.3                            | 1.001             |
| 9000                              | 165.9                    | 165.8                    | 165.8                            | 1.000             |
| 10000                             | 184.3                    | 184.2                    | 184.2                            | 1.001             |
| The audit meets AMD requirements. |                          |                          | Average Correction Factor=       | 1.002             |

## Wind Direction Audit Data **\*\*+/- 3° of the absolute average degrees difference for all points is the limit\*\***

| Generated Wind Direction 0-360 (Up) | Generated Wind Direction 360-0 (Down) | Indicated Wind Direction 0-360 (Up) | Indicated Wind Direction 360-0 (Down) | Degrees Difference 0-360 (Up)        | Degrees Difference 360-0 (Down) | Average Absolute Degrees Difference |
|-------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|--------------------------------------|---------------------------------|-------------------------------------|
| 0                                   | 355                                   | 0                                   | 353                                   | 0.1                                  | 2.0                             | 1.1                                 |
| 30                                  | 330                                   | 28                                  | 329                                   | 2.0                                  | 1.0                             | 1.5                                 |
| 60                                  | 300                                   | 58                                  | 299                                   | 2.0                                  | 1.0                             | 1.5                                 |
| 90                                  | 270                                   | 88                                  | 268                                   | 2.0                                  | 2.0                             | 2.0                                 |
| 120                                 | 240                                   | 119                                 | 239                                   | 1.0                                  | 1.0                             | 1.0                                 |
| 150                                 | 210                                   | 149                                 | 209                                   | 1.0                                  | 1.0                             | 1.0                                 |
| 180                                 | 180                                   | 179                                 | 179                                   | 1.0                                  | 1.0                             | 1.0                                 |
| 210                                 | 150                                   | 209                                 | 149                                   | 1.0                                  | 1.0                             | 1.0                                 |
| 240                                 | 120                                   | 239                                 | 119                                   | 1.0                                  | 1.0                             | 1.0                                 |
| 270                                 | 90                                    | 270                                 | 89                                    | 0.0                                  | 1.0                             | 0.5                                 |
| 300                                 | 60                                    | 299                                 | 58                                    | 1.0                                  | 2.0                             | 1.5                                 |
| 330                                 | 30                                    | 329                                 | 29                                    | 1.0                                  | 1.0                             | 1.0                                 |
| 355                                 | 0                                     | 354                                 | 1                                     | 1.0                                  | 0.6                             | 0.8                                 |
| The audit meets AMD requirements.   |                                       |                                     |                                       | Average Absolute Degrees Difference= |                                 | 1.1                                 |

## Comments:

Declination = 15deg East



# Meteorological Sensor Audit/Calibration

## Location Information

Company: PRAMP  
Audit Location: Cadotte Lake  
Audit Date: July 22, 2021  
Calibration Purpose: routine annual

Performed By: Ferdinand Roy  
Reviewed By: Chris Wesson  
Start/End Time (mst): 12:47-15:52  
Weather Conditions: Cloudy/Overcast

## Wind Sensor Information

| Sensor ID Data:          |               | Sensor Outputs:                 |       |
|--------------------------|---------------|---------------------------------|-------|
| Sensor Make:             | RM Young      | Velocity Voltage Output Range:  | n/a   |
| Sensor Model:            | 05305AQ       | Velocity Unit Output Range:     | 0-180 |
| Serial #:                | 174801        | Direction Voltage Output Range: | n/a   |
| Previous Cal/Audit Date: | June 18, 2020 | Direction Unit Output Range:    | 0-360 |

## Wind Calibrator Information

Calibrator I.D. and Expiry Date: RM Young 18802 id# CA03309 expires June 7, 2023

## Wind Speed Audit Data **\*\*+/- 2% of the average correction factor is the limit\*\***

| RPM   | Wind Speed Generated kph | Clockwise Wind Speed kph | Counter Clockwise Wind Speed kph | Correction Factor |
|-------|--------------------------|--------------------------|----------------------------------|-------------------|
| 0     | 0                        | 0.0                      | 0.0                              | -                 |
| 1000  | 18.4                     | 18.3                     | 18.3                             | 1.007             |
| 2000  | 36.9                     | 36.7                     | 36.7                             | 1.004             |
| 3000  | 55.3                     | 55.1                     | 55.1                             | 1.003             |
| 4000  | 73.7                     | 73.6                     | 73.6                             | 1.002             |
| 5000  | 92.2                     | 92.0                     | 92.0                             | 1.002             |
| 6000  | 110.6                    | 110.5                    | 110.5                            | 1.001             |
| 7000  | 129.0                    | 128.9                    | 128.9                            | 1.001             |
| 8000  | 147.4                    | 147.3                    | 147.3                            | 1.001             |
| 9000  | 165.9                    | 165.8                    | 165.8                            | 1.000             |
| 10000 | 184.3                    | 184.2                    | 184.2                            | 1.001             |
|       |                          |                          | Average Correction Factor=       | 1.002             |

## Wind Direction Audit Data **\*\*+/- 3° of the absolute average degrees difference for all points is the limit\*\***

| Generated Wind Direction 0-360 (Up) | Generated Wind Direction 360-0 (Down) | Indicated Wind Direction 0-360 (Up) | Indicated Wind Direction 360-0 (Down) | Degrees Difference 0-360 (Up)        | Degrees Difference 360-0 (Down) | Average Absolute Degrees Difference |
|-------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|--------------------------------------|---------------------------------|-------------------------------------|
| 0                                   | 355                                   | 0                                   | 353                                   | 0.1                                  | 2.0                             | 1.1                                 |
| 30                                  | 330                                   | 27                                  | 330                                   | 3.5                                  | -0.3                            | 1.9                                 |
| 60                                  | 300                                   | 56                                  | 300                                   | 3.9                                  | 0.1                             | 2.0                                 |
| 90                                  | 270                                   | 87                                  | 269                                   | 3.5                                  | 1.1                             | 2.3                                 |
| 120                                 | 240                                   | 118                                 | 238                                   | 2.4                                  | 2.5                             | 2.5                                 |
| 150                                 | 210                                   | 149                                 | 207                                   | 1.5                                  | 3.5                             | 2.5                                 |
| 180                                 | 180                                   | 178                                 | 177                                   | 1.8                                  | 2.8                             | 2.3                                 |
| 210                                 | 150                                   | 208                                 | 148                                   | 2.1                                  | 2.5                             | 2.3                                 |
| 240                                 | 120                                   | 239                                 | 117                                   | 1.1                                  | 2.9                             | 2.0                                 |
| 270                                 | 90                                    | 270                                 | 86                                    | -0.1                                 | 3.6                             | 1.9                                 |
| 300                                 | 60                                    | 300                                 | 57                                    | 0.2                                  | 3.5                             | 1.8                                 |
| 330                                 | 30                                    | 330                                 | 27                                    | -0.1                                 | 3.0                             | 1.6                                 |
| 355                                 | 0                                     | 353                                 | 0                                     | 1.8                                  | 0.1                             | 1.0                                 |
| The audit meets AMD requirements.   |                                       |                                     |                                       | Average Absolute Degrees Difference= |                                 | 1.9                                 |

## Comments:

Physical inspection completed - no issues.