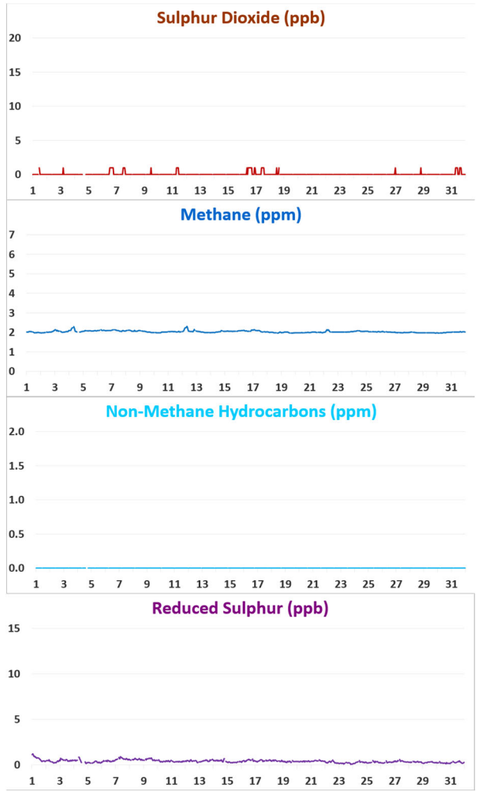
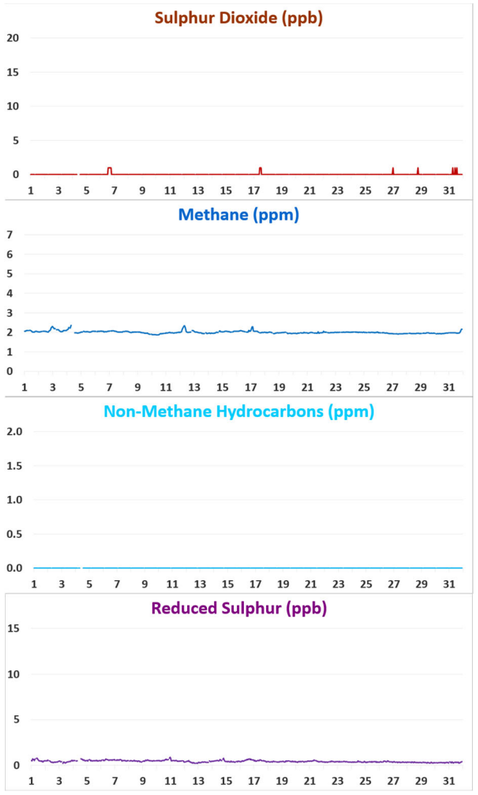
October 2022: Active Monitoring Program

PEACE RIVER AREA MONITORING PROGRAM

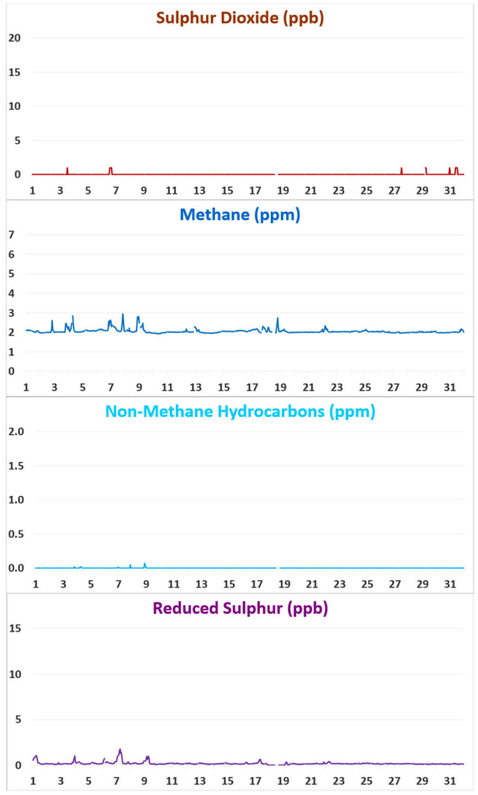
Station 986-C



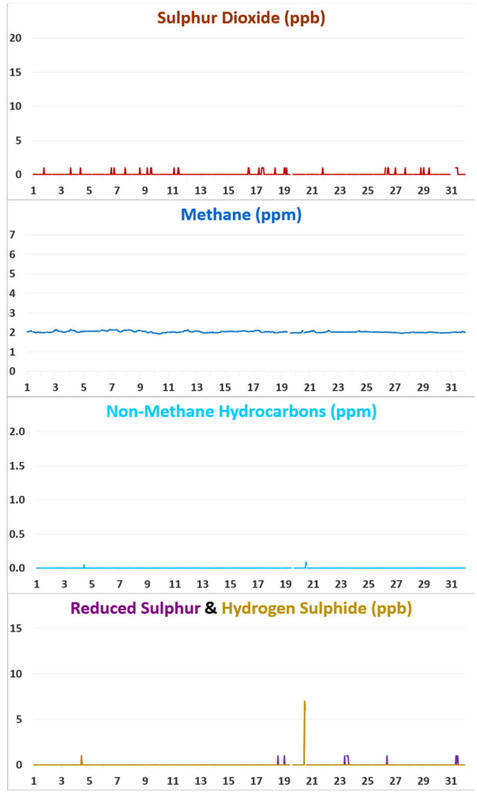
Station 842-B



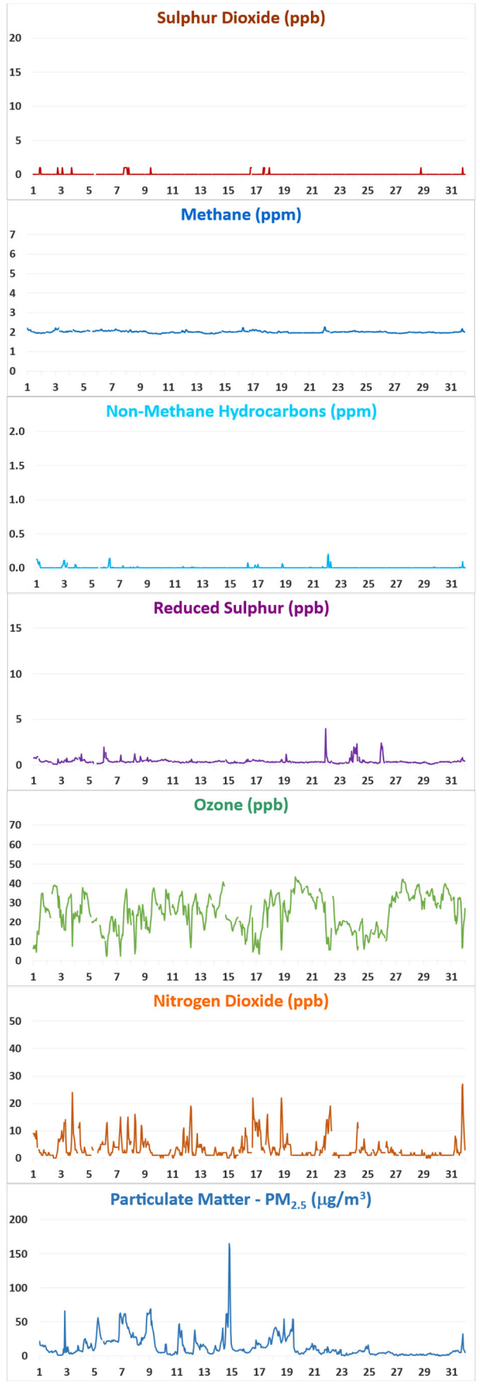
Reno Station



PRC Station



AQHI Station – Grimshaw



Field Operations Summary (detailed field operations notes can be found in the monthly technical reports on the PRAMP website)

986c Station

- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.

842b Station

- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.

Reno Station

- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.
- **BP:** The sensor failed on October 10 hour 13 due to an output error. The sensor was reset on October 13 hour 7. Data collected between October 10 and October 13 were invalidated. Sixty-seven hours of downtime were recorded.

PRC Station

- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.
- SO2: The analyzer failed due to low sample flow rate on October 30 hour 22. The issue was fixed, and a zero-span check was completed on October 31. Night hours of downtime were recorded due to this issue.

AQHI Station – Grimshaw

- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) and /or Alberta Ambient Air Quality Guidelines (AAAQGs) where applicable, except PM2.5. 3 1-hour and 4 24-hour PM2.5 exceedances were recorded and were caused by wildfires.

NMHCs Canister Sampling Program

- One NMHC canister events were recorded at the Reno station; on October 8 at 21:55, at concentration of 0.44ppm.

October 2022: Active Monitoring Program

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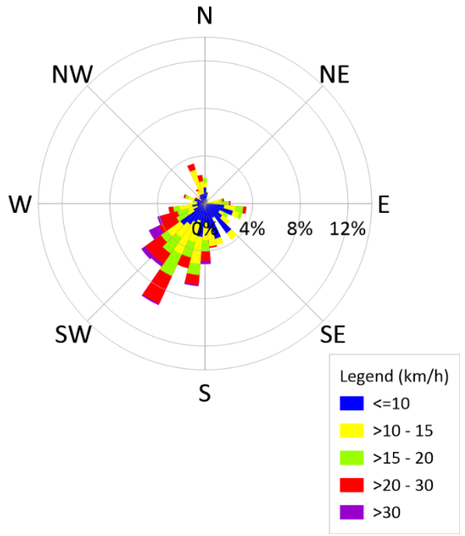
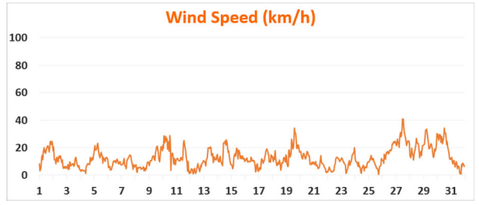
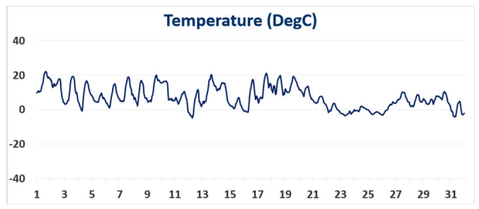
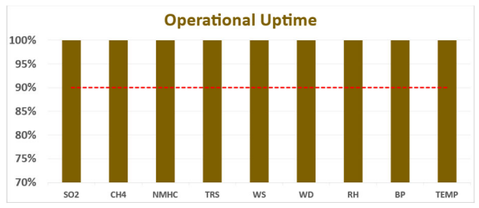
PEACE RIVER AREA MONITORING PROGRAM

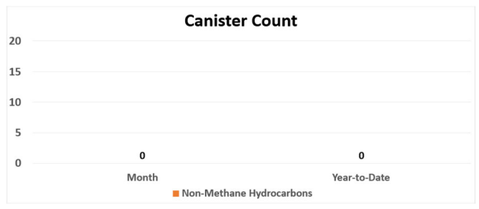
Station 986-C



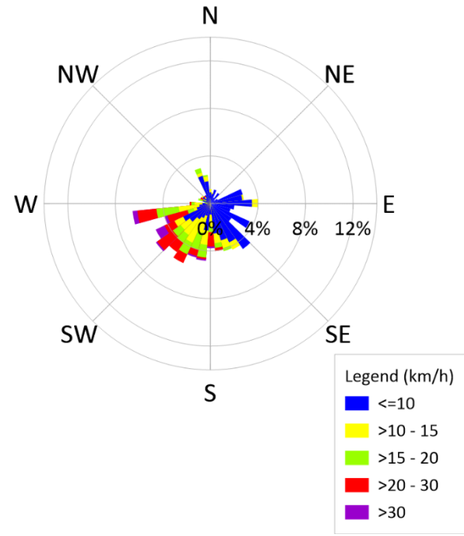


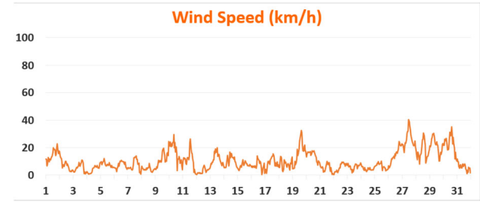


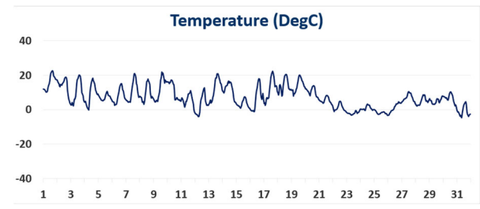


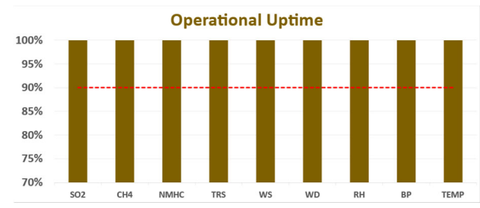


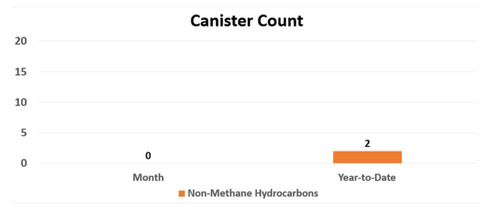
Station 842-B



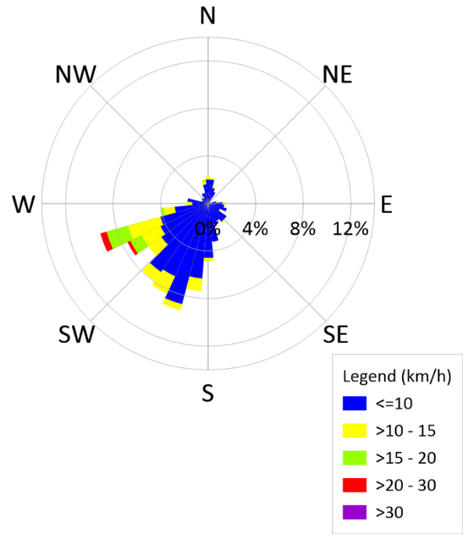


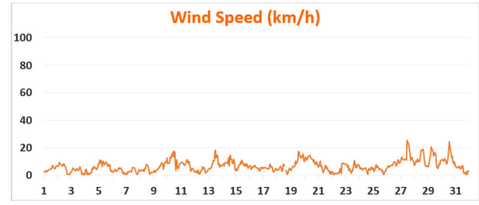


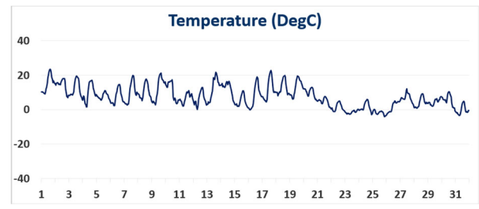


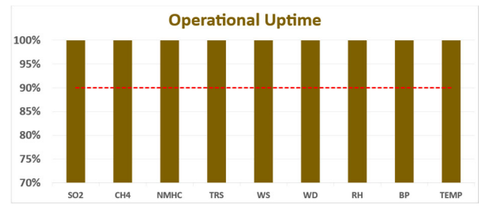


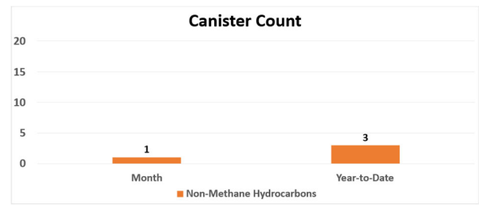
Reno Station



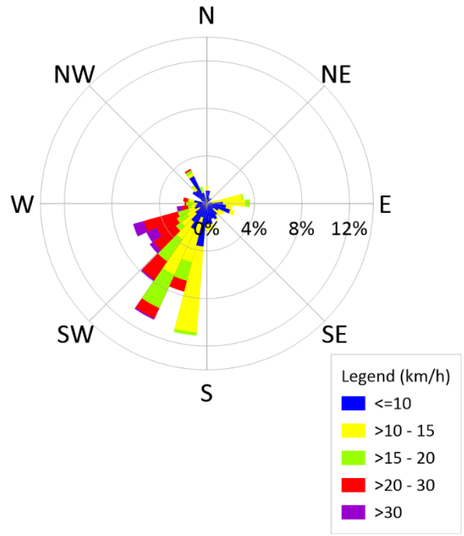


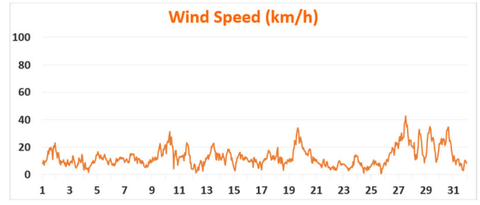


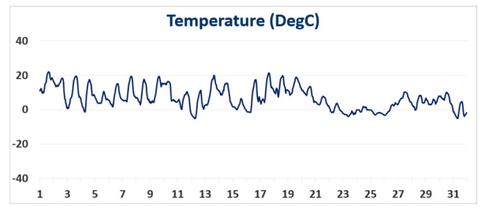


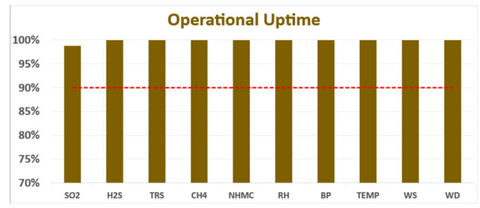


PRC Station





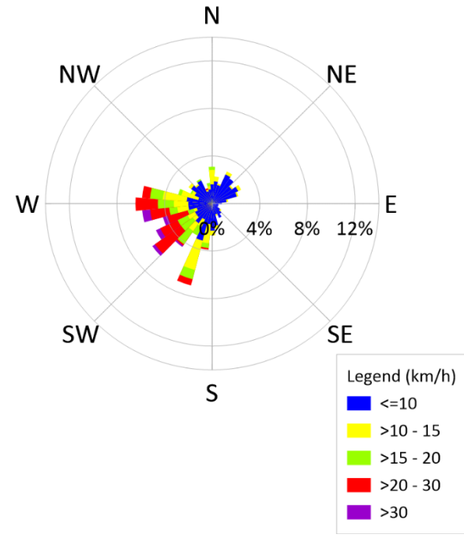


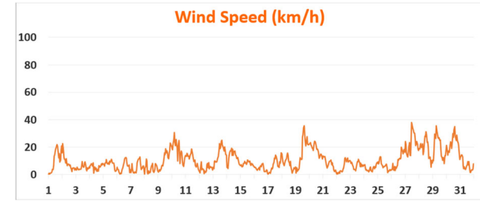


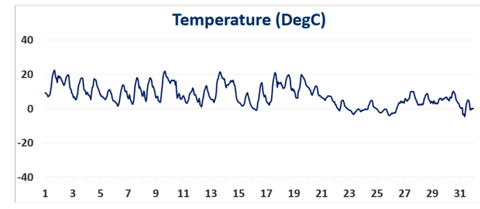
Targets, Guidelines, and Objectives

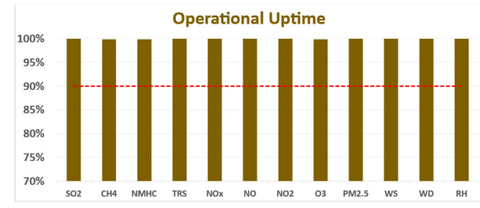
- Sulphur Dioxide 1h AAAQO = 172 ppb
- Ozone 1h AAAQO = 76 ppb
- Particulate Matter ($PM_{2.5}$) 1h AAAQG = 80 µg/m^3
- Nitrogen Dioxide 1h AAAQO = 159 ppb
- Operational Uptime Requirement = 90%
- AQHI Risk Value = 1-3 Low, 4-6 Moderate, 7-10 High, >10 Very High

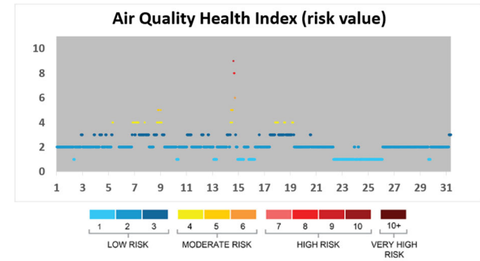
AQHI Station – Grimshaw











November 2022: Active Monitoring Program

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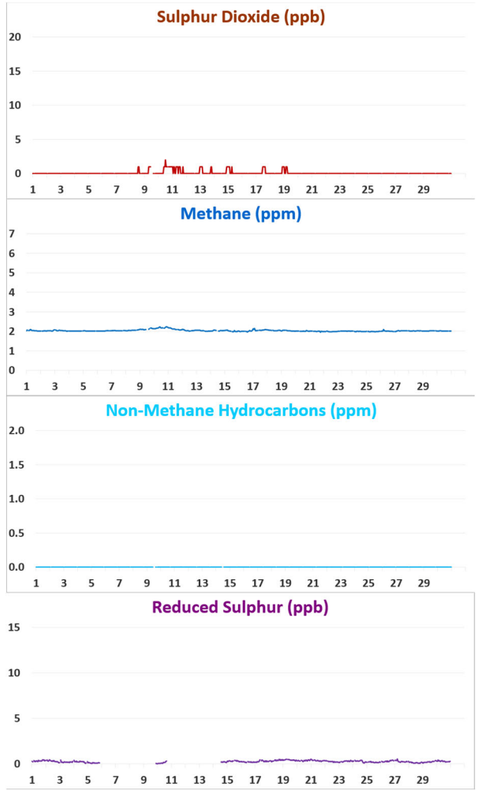
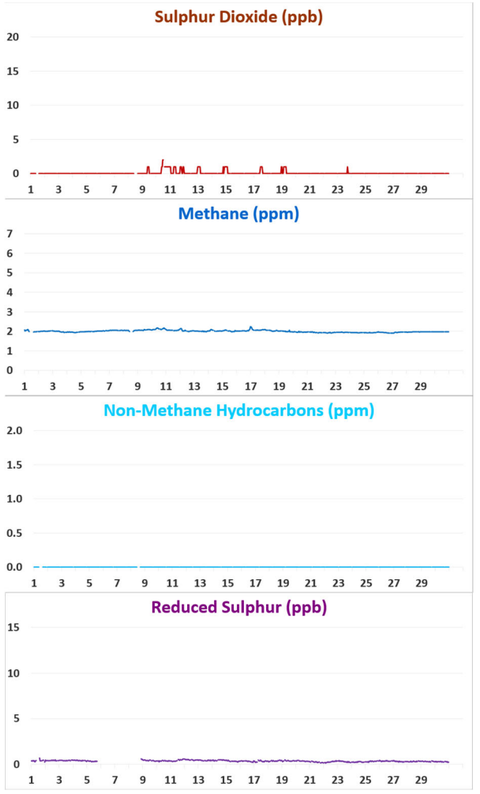
PEACE RIVER AREA MONITORING PROGRAM

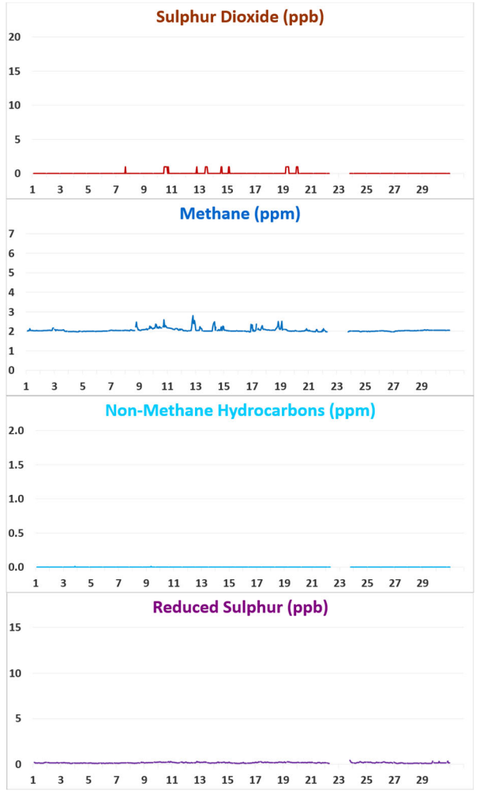
Station 986-C



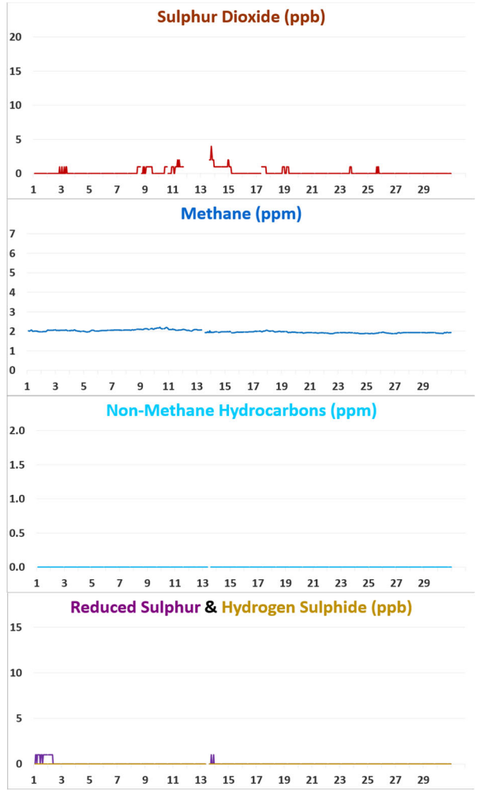
Station 842-B



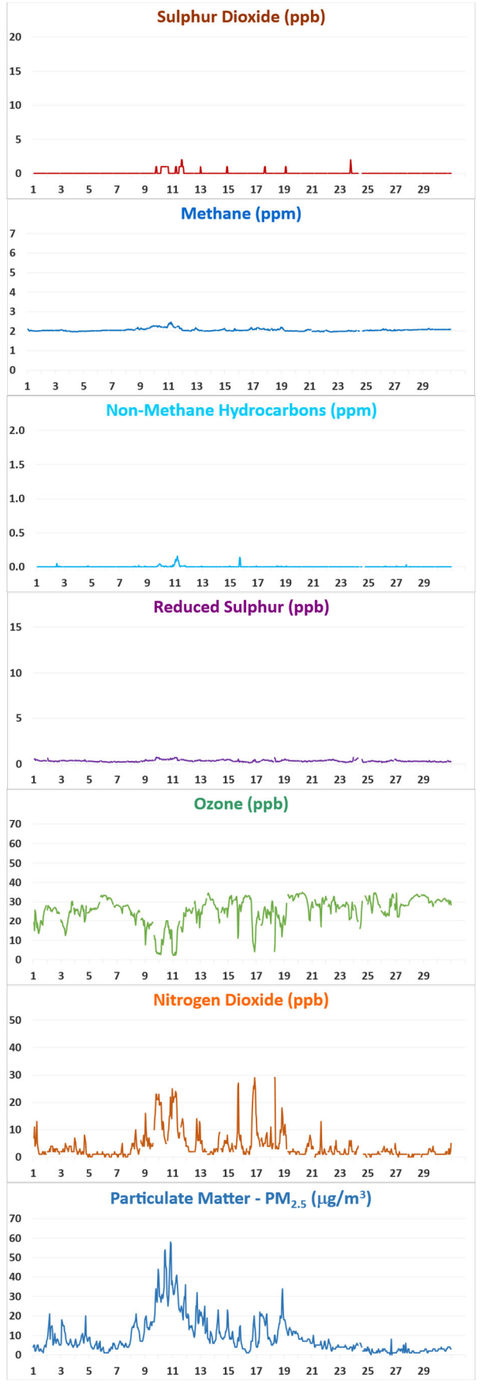
Reno / Reno-B Station



PRC Station



AQHI Station – Grimshaw



Field Operations Summary (detailed field operations notes can be found in the monthly technical reports on the PRAMP website)

986c Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable. All parameters met the 90% operational uptime requirement, except TRS (73.5%). **AEP reference #: 407836**.
- **TRS:** The analyzer failed the as-found points check on November 9. The issue was likely from the scrubber material. Data were invalidated back to the last valid calibration check, which was November 5. 88 hours of downtime were recorded. The analyzer failed the daily zero-span check on November 11 and failed the shut-down calibration on November 13. Data were invalidated back to the last valid calibration check, which was November 10. 90 hours of downtime were recorded.

842b Station

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable. All parameters met the 90% operational uptime requirement, except TRS (89.4%). **AEP reference #: 407837**.
- **TRS**: The analyzer failed the as-found points check on November 8. The issue was likely from the scrubber material. Data were invalidated back to the last valid calibration check, which was November 5. 70 hours of downtime were recorded.

Reno / Reno-B Station

- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.
- The air monitoring station was relocated on November 22, from 55.86936 North, -117.05739 West to 55.890868 North, 117.137080 West. The station name was changed from Reno to Reno-B to distinguish between the old and new locations. All analyzers, meteorological systems and the datalogger were installed and calibrated/audited on November 23. The station was brought back online on November 23.

PRC Station

- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.

AQHI Station – Grimshaw

- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) and /or Alberta Ambient Air Quality Guidelines (AAAQGs) where applicable, except **PM2.5**. One 24-hour PM2.5 exceedance wase recorded and was caused by stagnant weather conditions.

NMHCs Canister Sampling Program

- There were no canister events recorded this month.

November 2022: Active Monitoring Program

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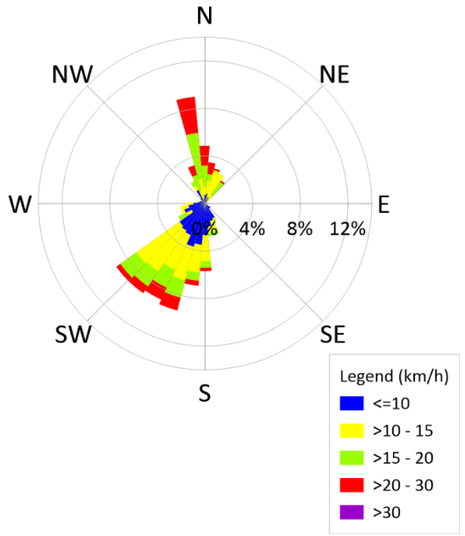
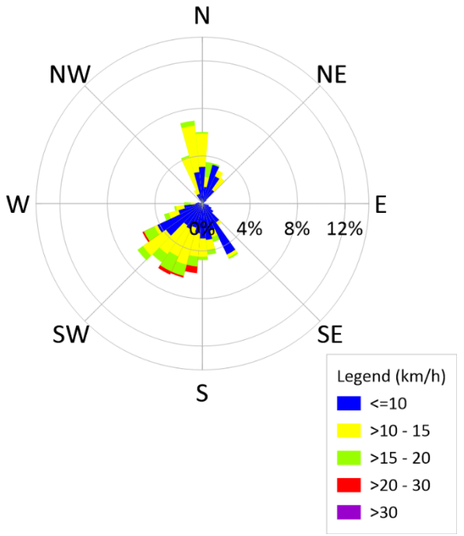
PEACE RIVER AREA MONITORING PROGRAM

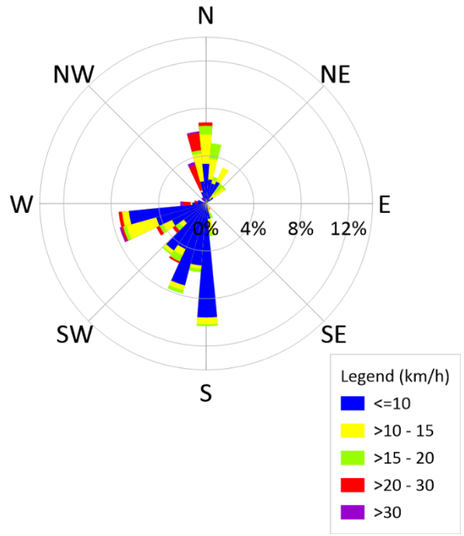
Station 986-C



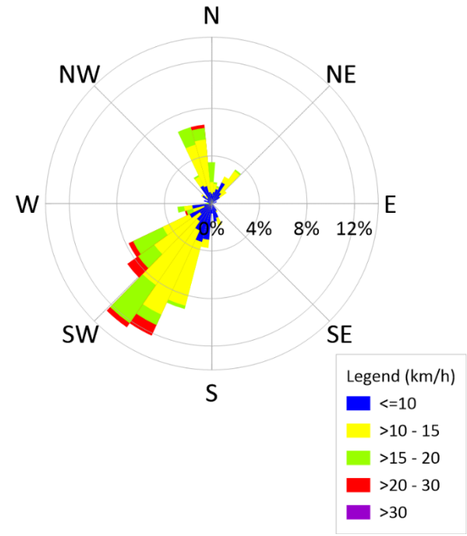
Station 842-B



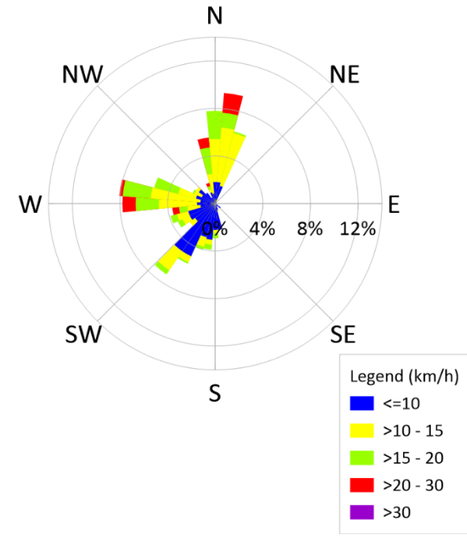
Reno / Reno-B Station

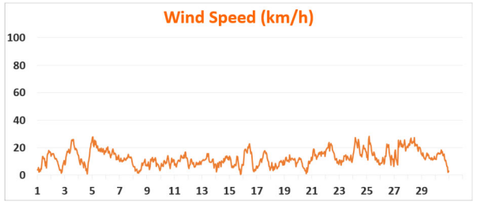


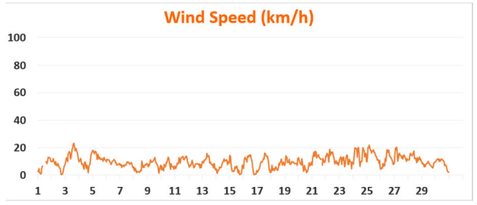
PRC Station

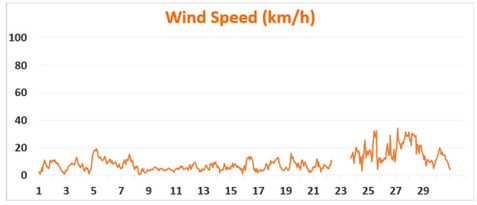


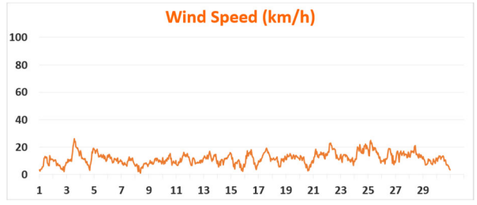
AQHI Station – Grimshaw

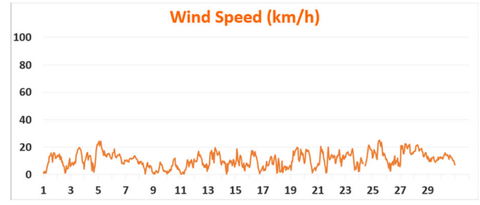


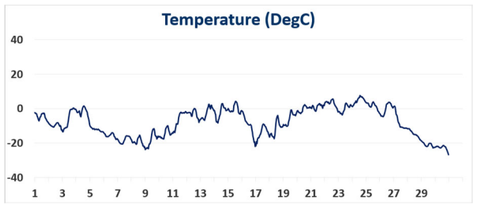


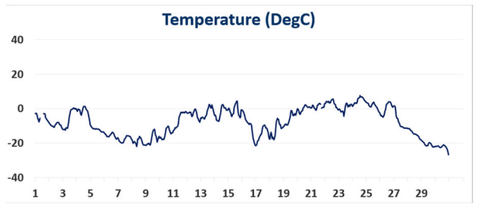


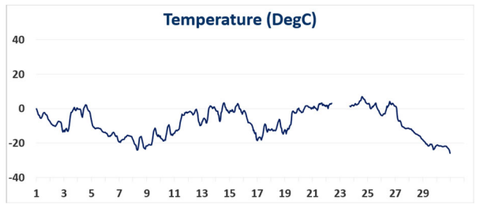


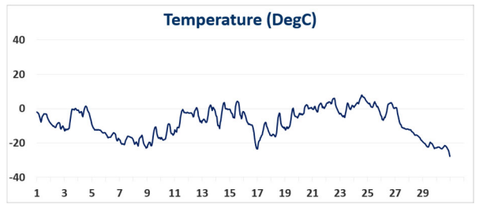


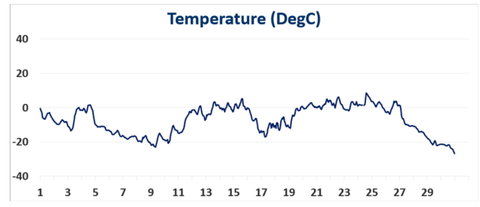


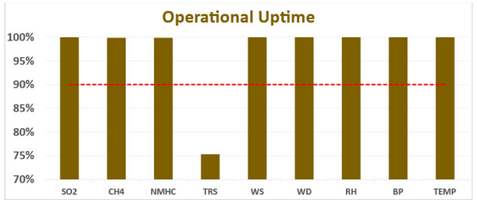


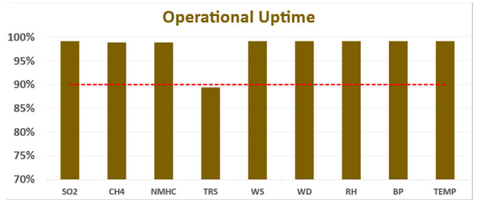


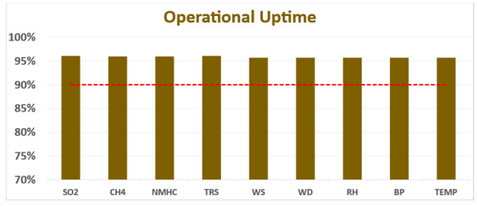


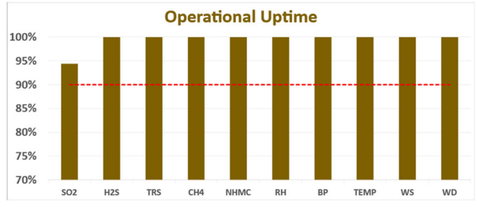


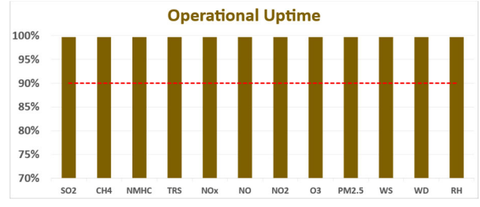


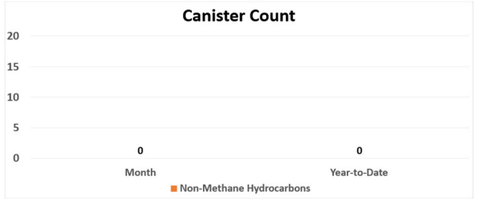


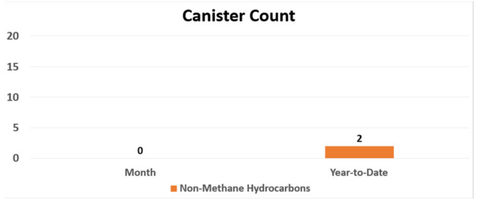


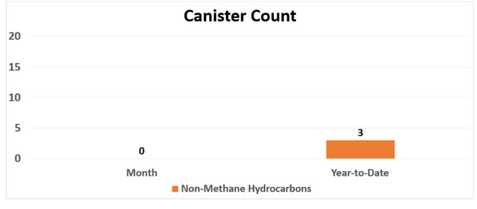












Targets, Guidelines, and Objectives

- Sulphur Dioxide 1h AAAQO = 172 ppb
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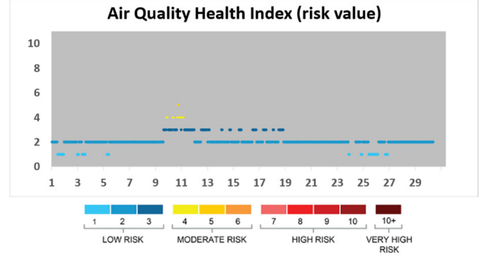
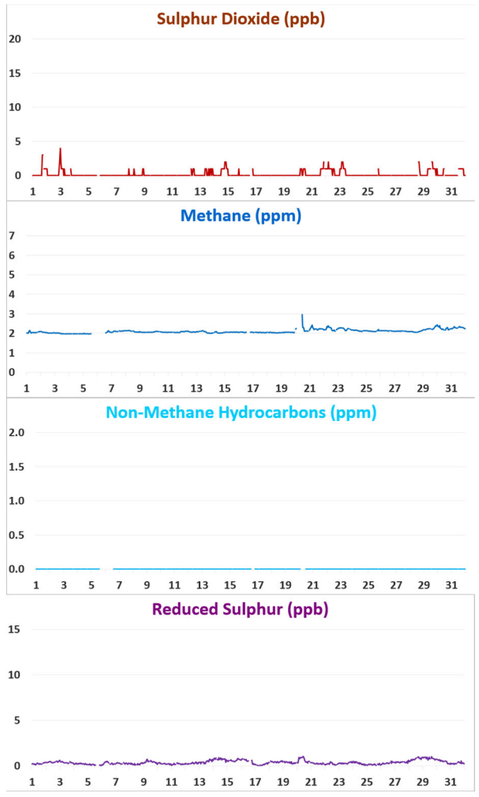


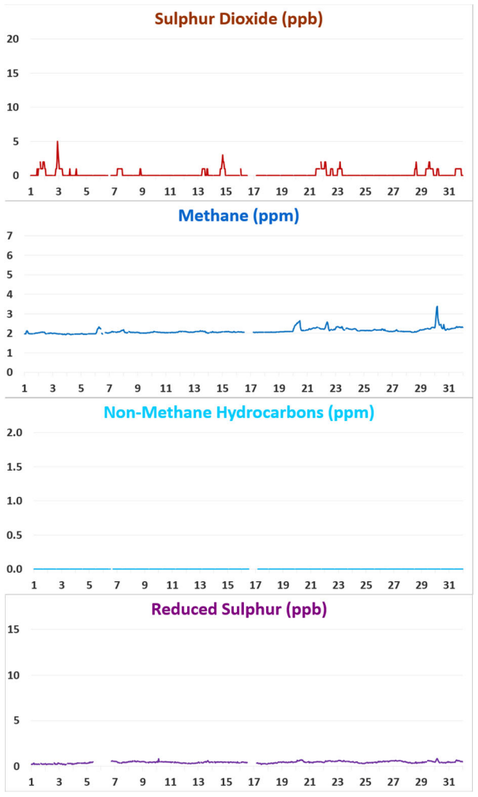
December 2022: Active Monitoring Program

PEACE RIVER AREA MONITORING PROGRAM

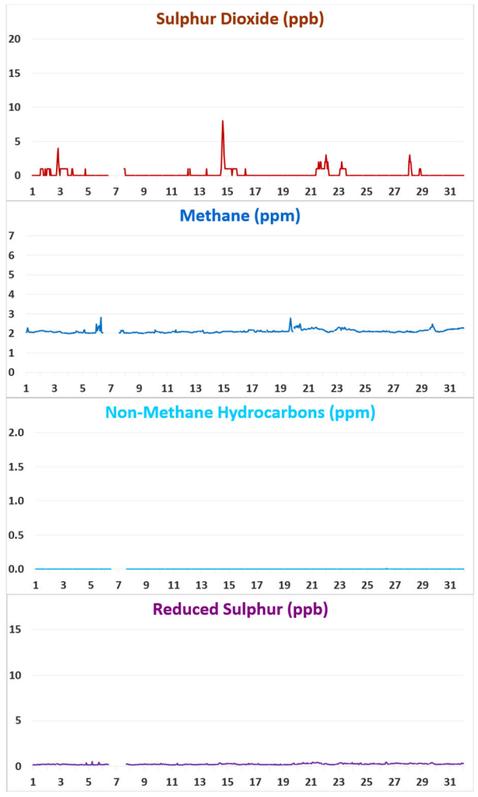
Station 986-C



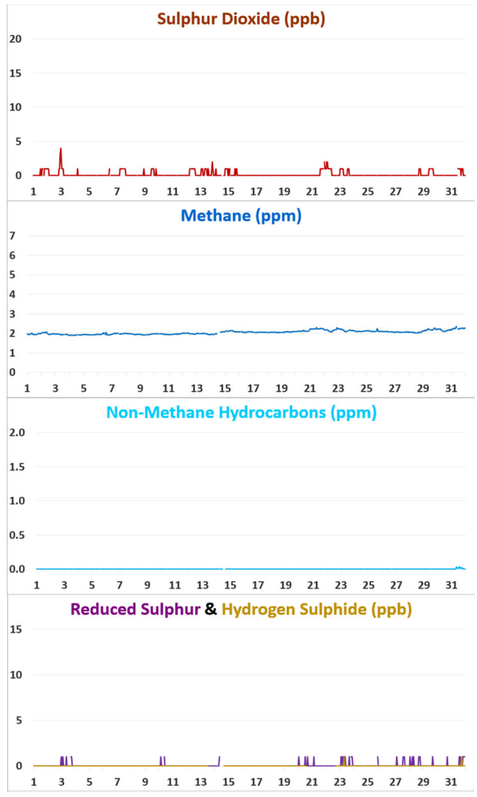
Station 842-B



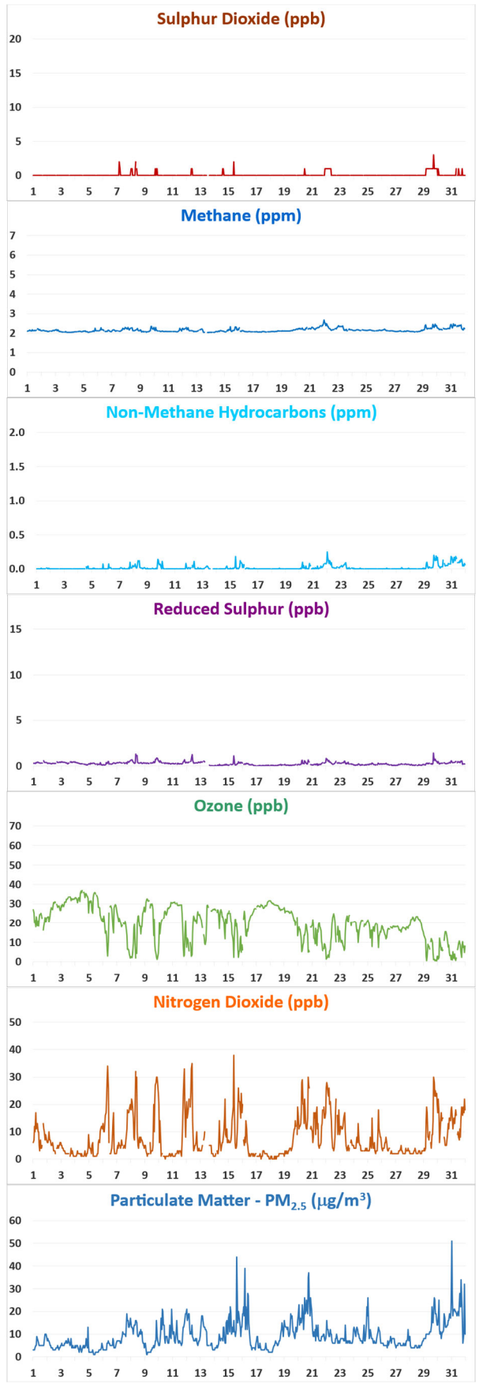
Reno-B Station



PRC Station



AQHI Station – Grimshaw



Field Operations Summary (detailed field operations notes can be found in the monthly technical reports on the PRAMP website)

All Stations:

- Low ambient temperatures had a marked effect on TRS/H2S span results. This is a perennial problem when the moisture levels in sample air drop very low, causing TRS/H2S analyzer to respond more slowly due to the SO2 scrubber requiring a certain ambient humidity to function optimally. Although daily span check results were often below the requirements, and the daily zero check results were occasionally close to or outside the allowable drift range, experience indicates the analyzer's performance remains in compliance with AMD performance criteria, and collected data remain valid. To minimize the impact by the ambient temperatures and humidity, a new batch of the SO2 scrubber beads were used in the field. The SO2 scrubber material is renewed as needed.

986-C Station

- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.
- **THC/CH4/NMHC:** The analyzer started having bad injections on December 1. Maintenance was performed on December 5. Data collected between December 1 and December 5 were reviewed and were discarded if data quality was affected by the injection issues. Hourly data collected on December 4 hour 5 was discarded as a result.

842-B Station

- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.

Reno-B Station

- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.

PRC Station

- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.

AQHI Station – Grimshaw

- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) and /or Alberta Ambient Air Quality Guidelines (AAAQGs) where applicable.

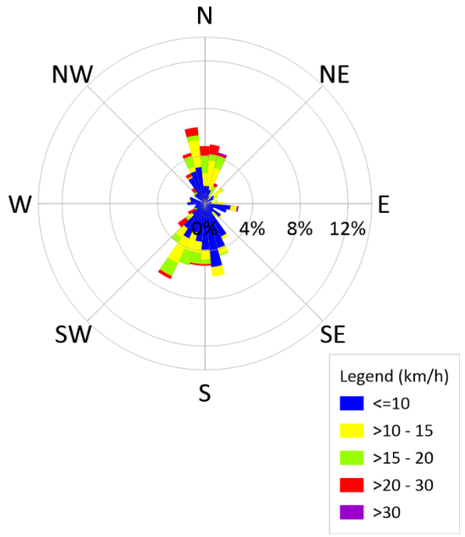
NMHCs Canister Sampling Program

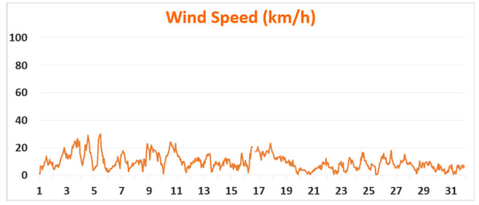
- There were no canister events recorded this month.

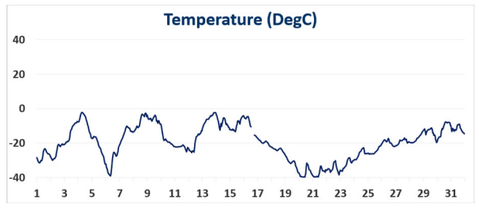
December 2022: Active Monitoring Program

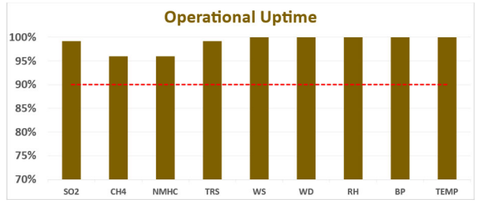
pramp
PEACE RIVER AREA MONITORING PROGRAM

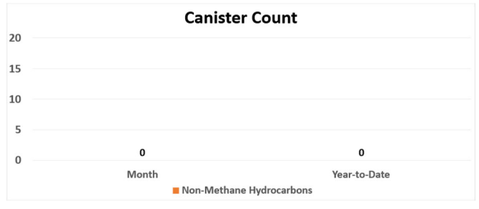
Station 986-C



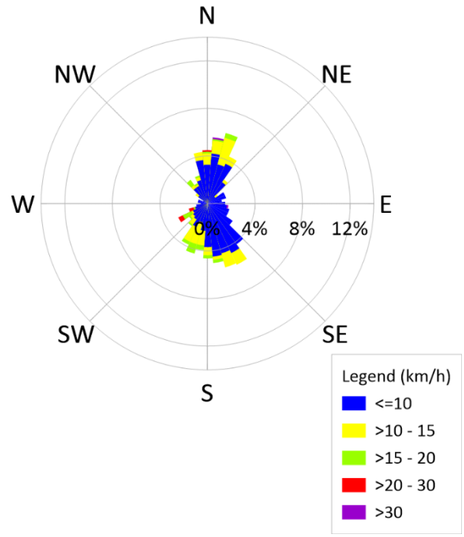


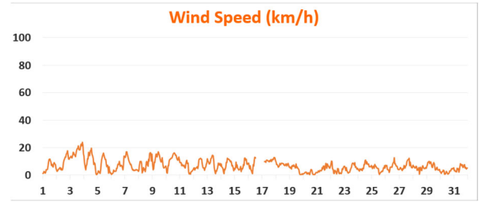


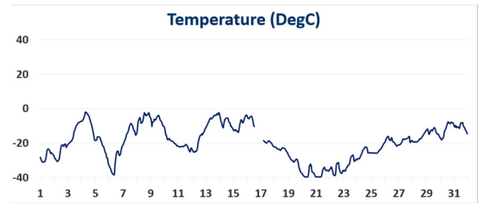


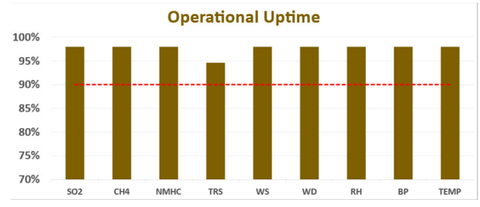


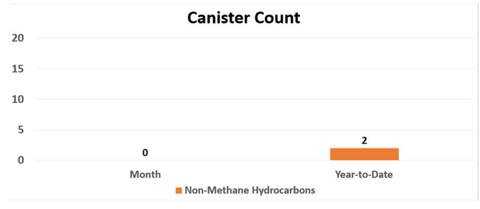
Station 842-B



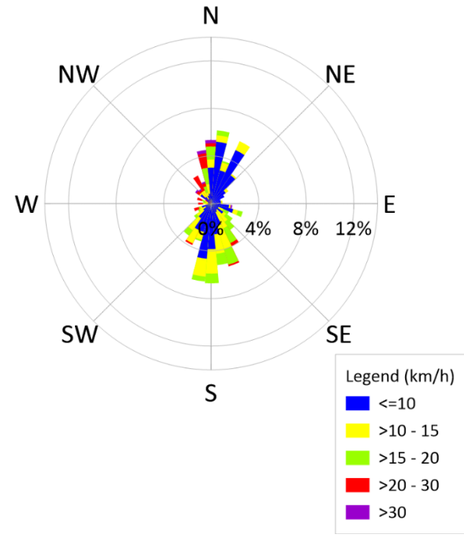


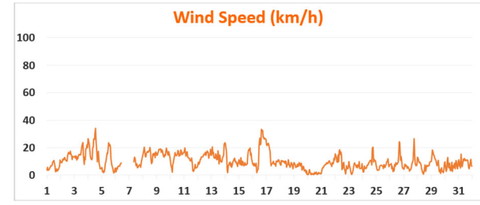


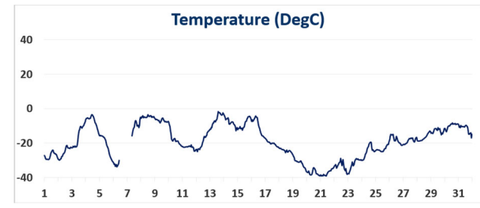


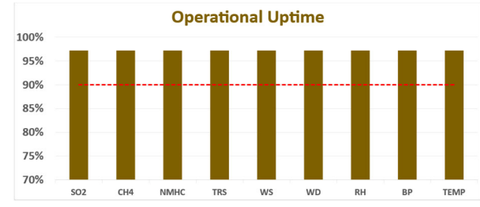


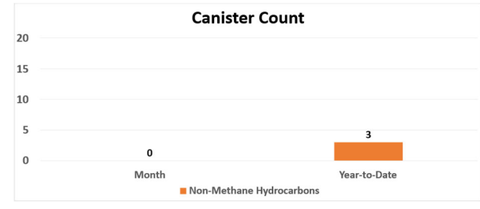
Reno-B Station



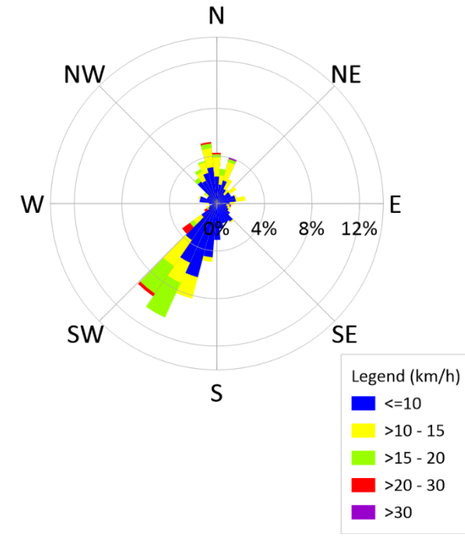


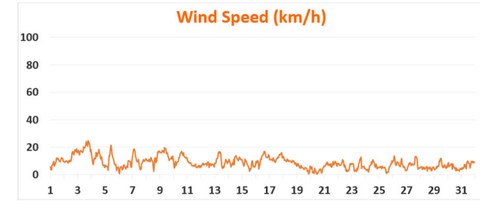


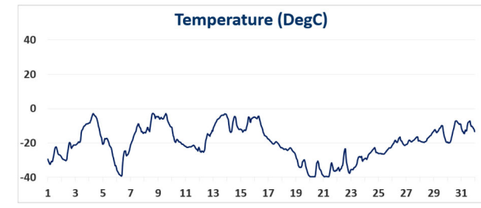


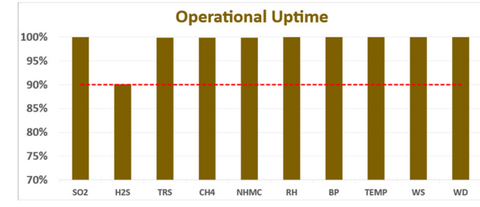


PRC Station









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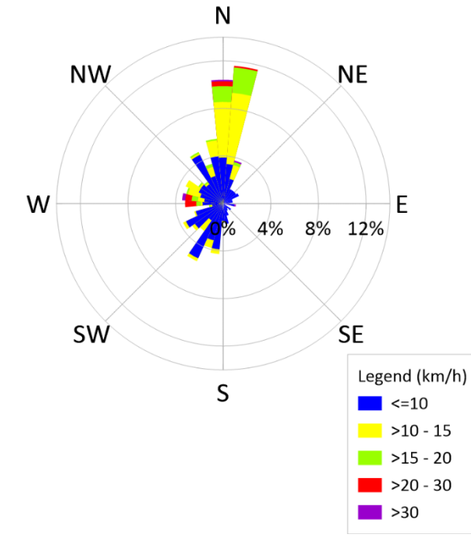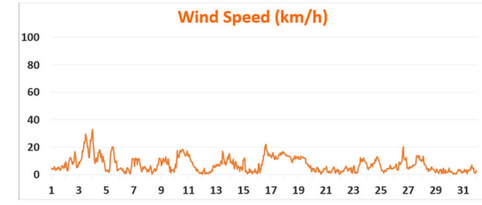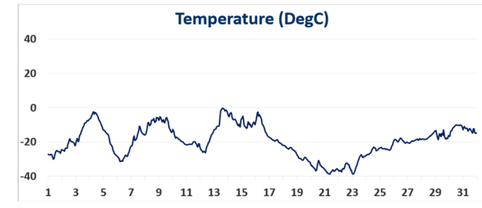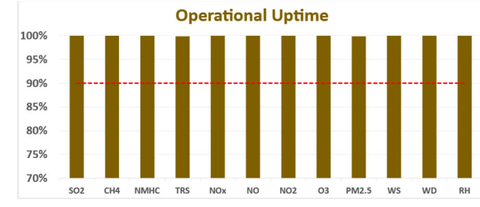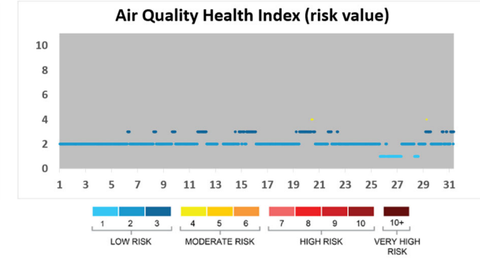
AQHI Station – Grimshaw