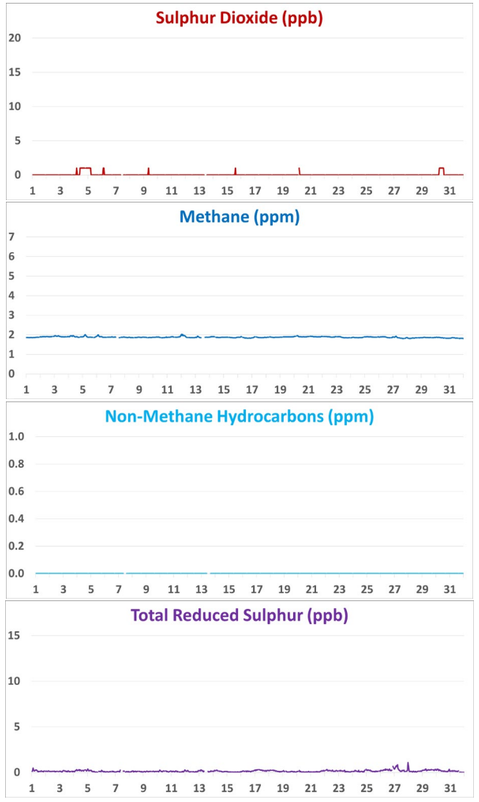
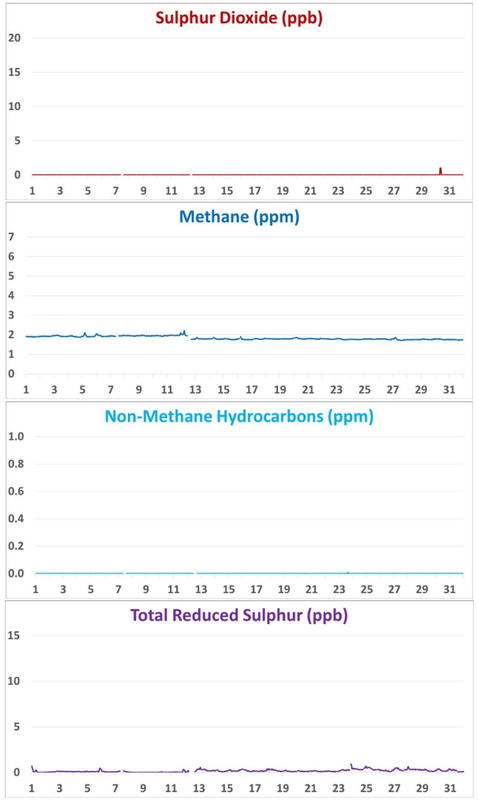
May 2021: Continuous Monitoring Program

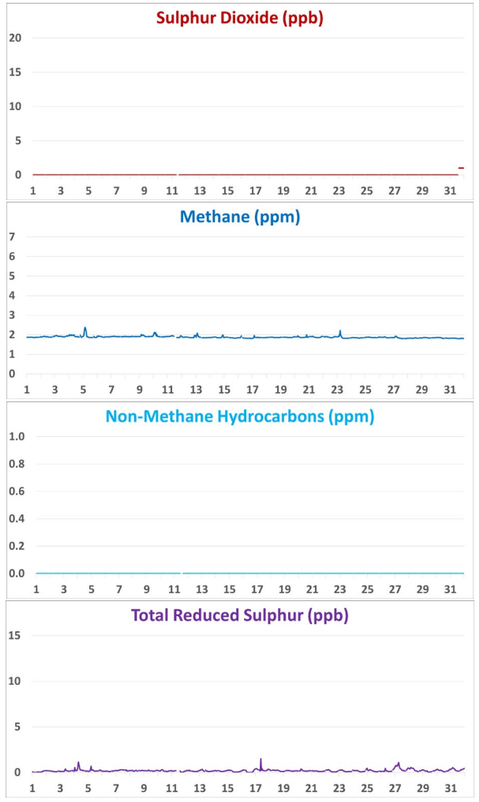
Station 986c



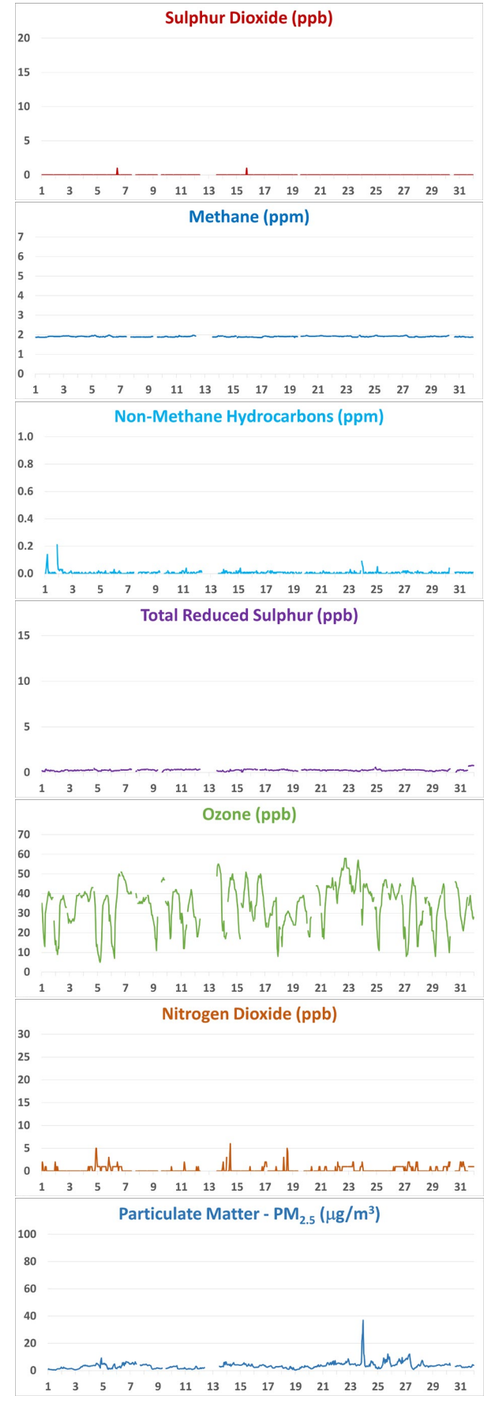
Station 842b



Reno Station



AQHI Station – Cadotte Lake



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

986c Station

- **All Parameters:** A power failure event occurred on May 7. Four hours of downtime for all gas parameters and three hours of downtime for all meteorological channels were recorded. For the HC channels, data that was collected at hour 13 was also discarded as the analyzer was recovering from the power failure.

842b Station

- **THC/CH4/NMHC:** A baseline shift was identified after the monthly calibration on May 12. No issues were identified during the calibration. The shift was likely caused by equipment that were used in this calibration. Differences between calibration systems are normal and expected (<=5%). In order to minimize differences, calibration gas cylinders used across the PRAMP network were selected based on apparent concentration. Alternative solutions are being investigated to try to minimize any difference due to concentration variations from calibration gases.
- **All parameters:** A power failure event occurred on May 7. Four hours of downtime were recorded due to this event.

Reno Station

- No major operational issues to report.

AQHI – Cadotte Lake Station

- **All Parameters:** Power outage events occurred on May 7, 9, 12, 13 and 30. Forty hours of downtime for all meteorological channels and forty-five hours downtime for all gas parameters were recorded. Following the power outages, extra instrument recovery time were needed for all gas parameters on May 7 hour 17 and May 13 hour 11. For the TRS and HC channels, data collected on May 9 hour 14 and May 30 hour 15 were also invalidated as the analyzer required extra recovery time from the power outages.
- **TRS:** The analyzer failed on May 16 between hour 12 and hour 14 and recovered spontaneously during hour 15. The cause was likely due to unstable power supply to the analyzer. Three hours of downtime were recorded. Hourly data collected on May 17 hour 5 were discarded as less than 75% of valid 1- minute data in the hour were recorded. The issue was likely due to unstable power supply to the analyzer.

VOC Canister Sampling program

- No canisters were collected in May 2021. Note: Methane triggered canister collection was paused on February 1, 2021.

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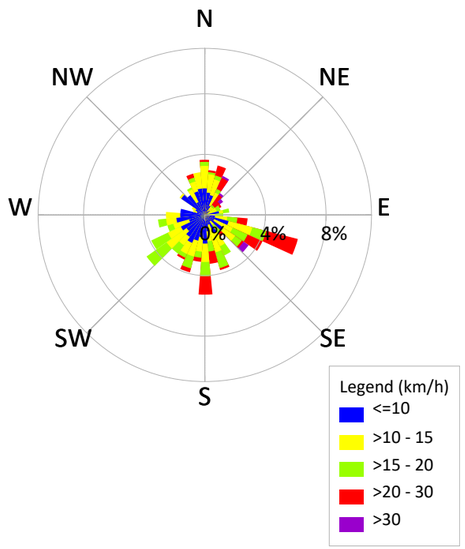
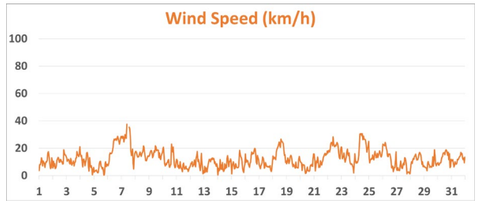
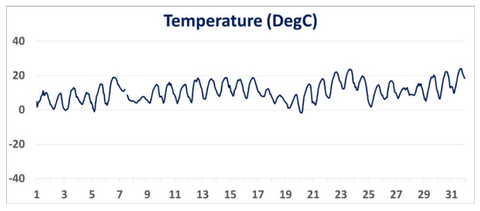
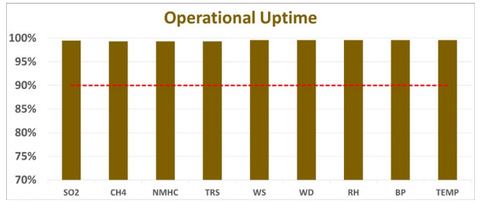
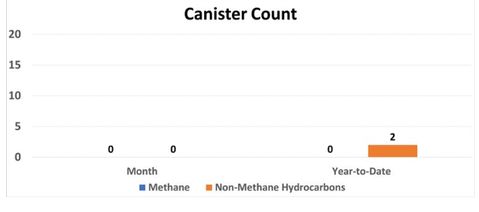
Station 986c



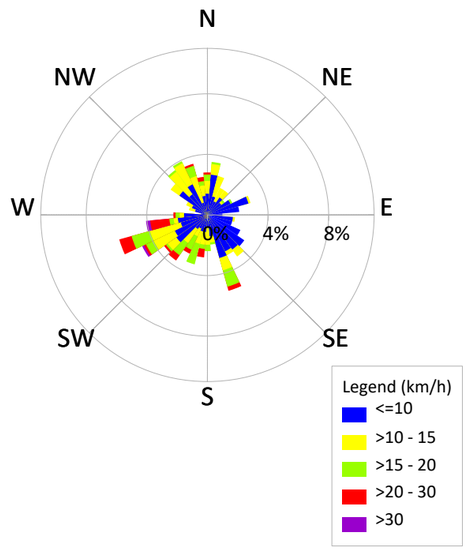


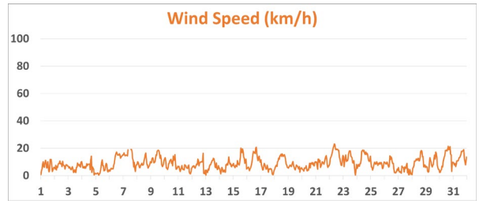


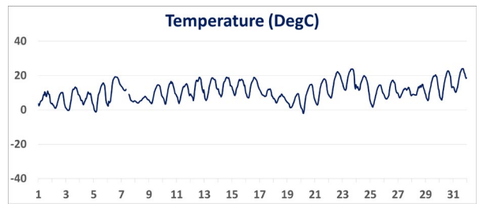


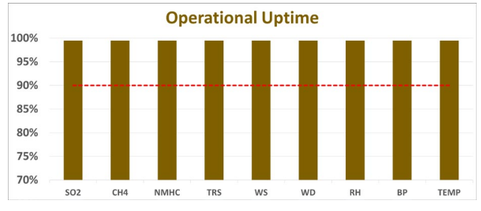


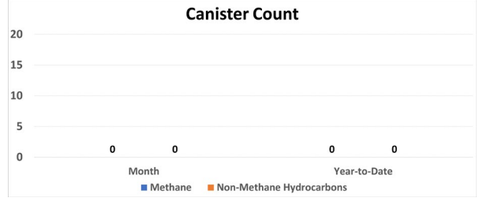
Station 842b



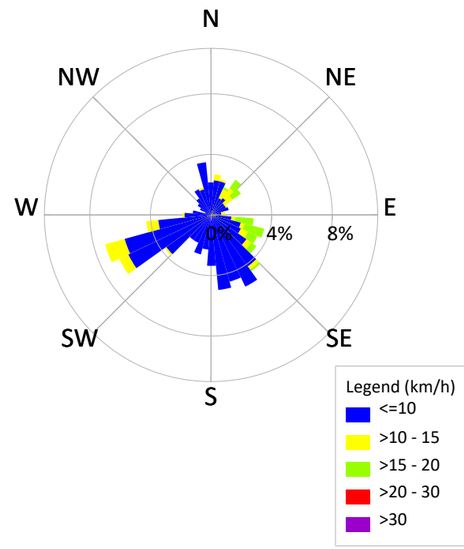


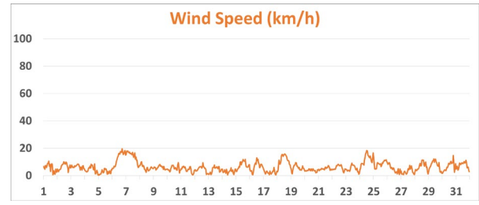


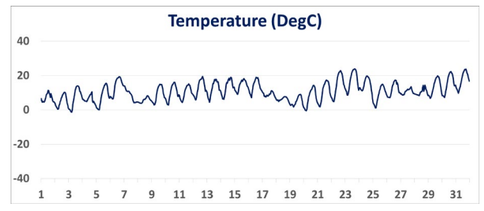


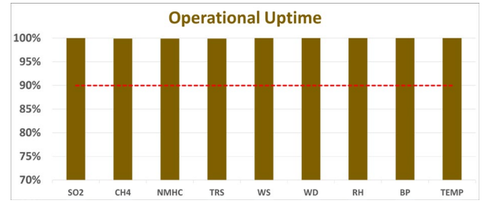


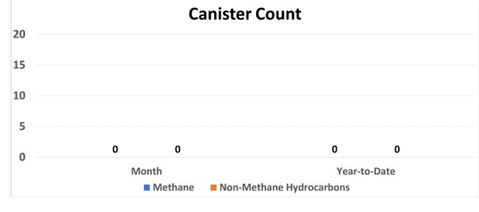
Reno Station



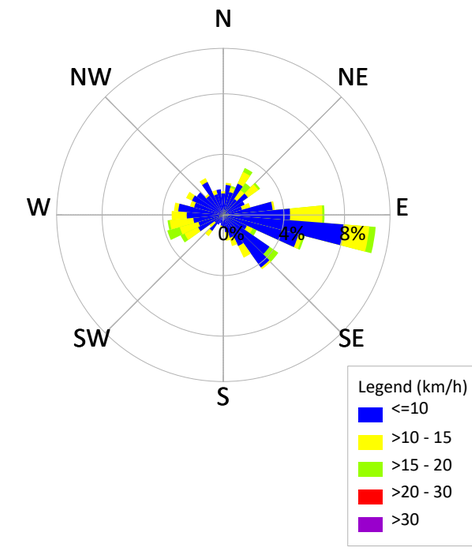


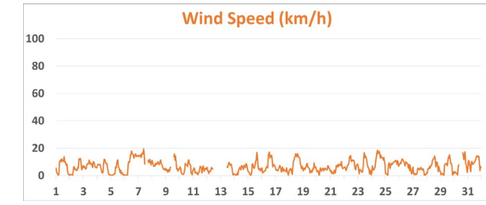


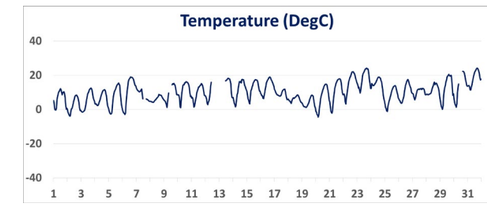


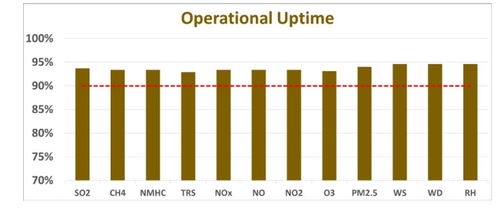


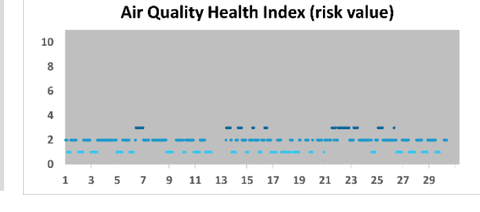
AQHI Station – Cadotte Lake









Targets, Guidelines, and Objectives

Sulphur Dioxide 1h AAAQO = 172 ppb
Ozone 1h AAAQO = 76 ppb
Particulate Matter AAAQG = 80 µg/m^3
Nitrogen Dioxide AAAQO = 159 ppb
Operational Uptime Requirement = 90%
AQHI Risk Value = 1-3 Low, 4-6 Moderate, 7-9 High, 10+ Very High