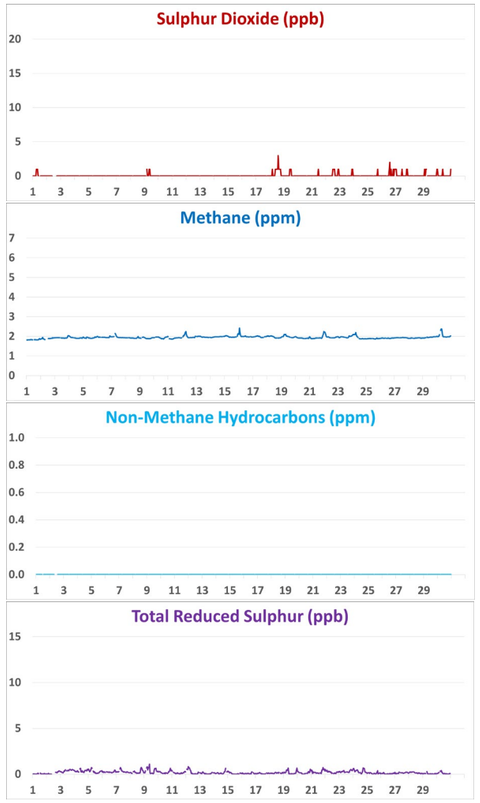
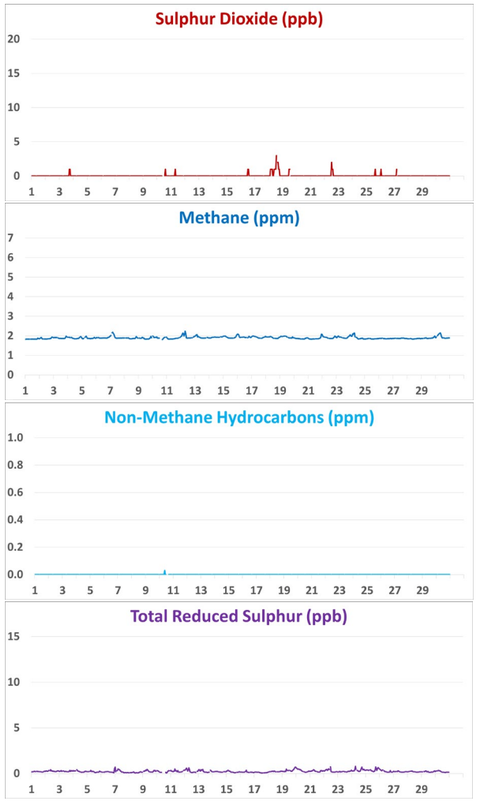
September 2020: Continuous Monitoring Program

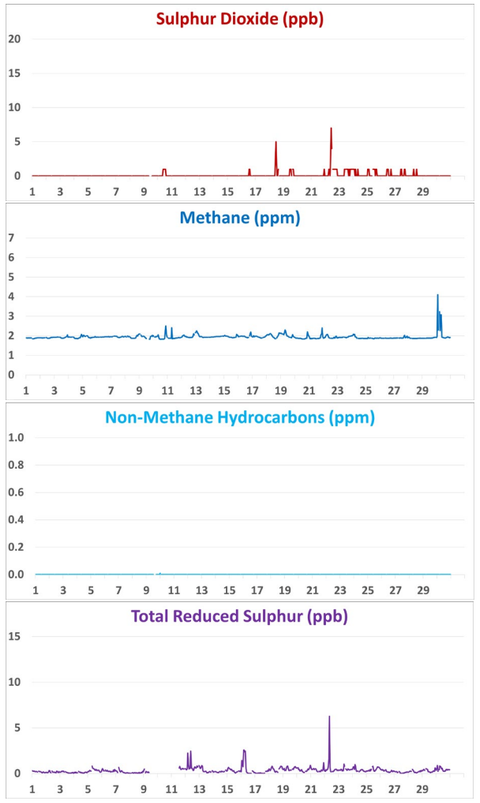
Station 986c



Station 842b



Reno Station



PRC Station *(coming soon)*

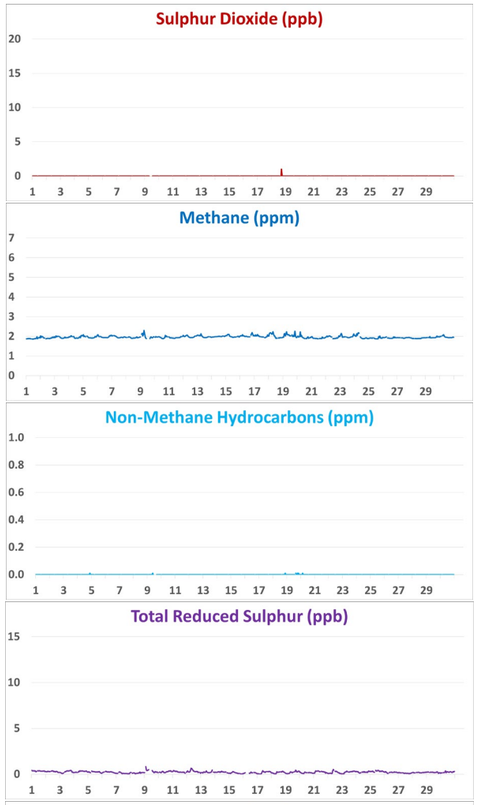
Sulphur Dioxide

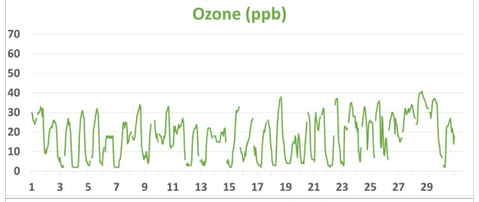
Methane

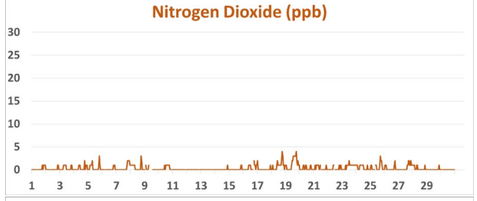
Non-Methane Hydrocarbons

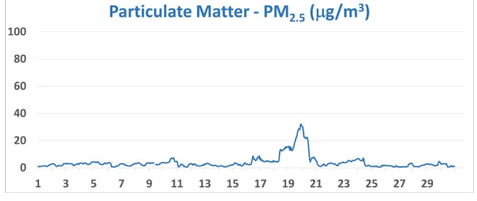
Total Reduced Sulphur + Hydrogen Sulphide

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 gas parameters: An automatic daily zero-span check, scheduled on September 1 hour 11, was interrupted by a short power outage. A successful repeat zero-span check was completed on September 1 hour 12. One hour of downtime was recorded due to the invalid zero-span check.

842b Station:

- No issues were identified this month.

Reno Station:

- SO2: The analyzer failed the daily span check on September 9 due to the permeation tube depletion. The permeation tube was replaced during the monthly calibration on September 9. As the issue was isolated in the zero-span system, data quality was not affected. No data were discarded.
- TRS: The analyzer failed the scrubber challenge test on September 9. On September 9, a shut-down calibration was successfully completed before the scrubber material was renewed. The converter temperature controller subsequently malfunctioned. A new converter was installed on September 10. Time was given to the analyzer to equilibrate overnight. A successful post-repair calibration was completed on September 11. Forty-four hours of downtime was recorded due to this event. The analyzer passed the last scrubber challenge, which was August 11. After reviewing the concentrations of SO2 between August 11 and September 9, most concentrations were recorded 0 ppb (only 3 hourly data were recorded at concentration of 1 ppb). As such, it is considered unlikely this scrubber challenge failure would have a significant effect on apparent, ambient TRS concentrations. No data were discarded as a result.

AQHI – Cadotte Lake Station:

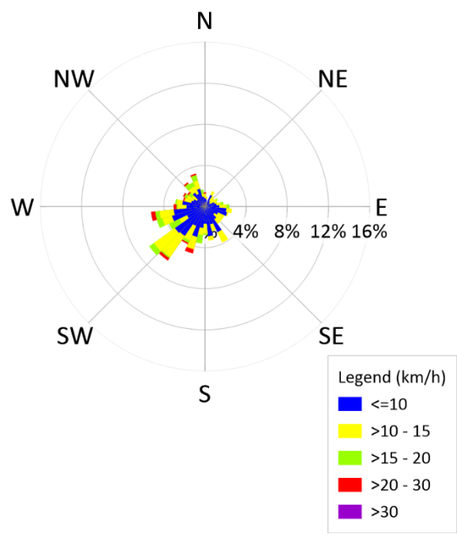
- TRS: Due to a firmware crash on September 16, data were not recorded from 04:28 to 06:40. The analyzer was remotely reset between 06:41-06:43. After the reset, ambient concentrations were recorded below than historical averages until 09:32. As data quality could not be confirmed, data were considered invalid. Hourly data that were collected between hour 4 and hour 9 on September 16 were discarded due to this event.

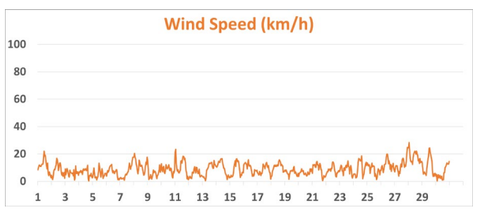
VOC Canister Sampling Program:

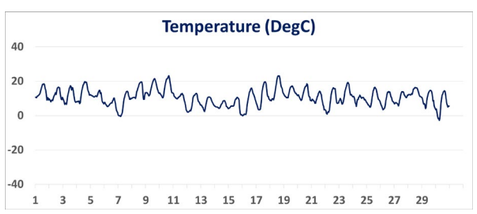
- One methane-triggered canister was recorded at the Reno station on September 30 at 02:10; the trigger concentration was 6.24 ppm.

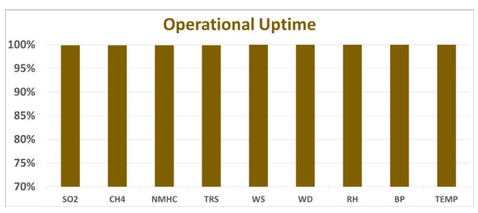
September 2020: Continuous Monitoring Program

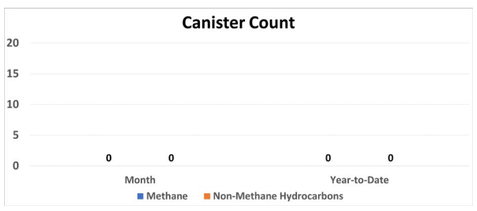
Station 986c



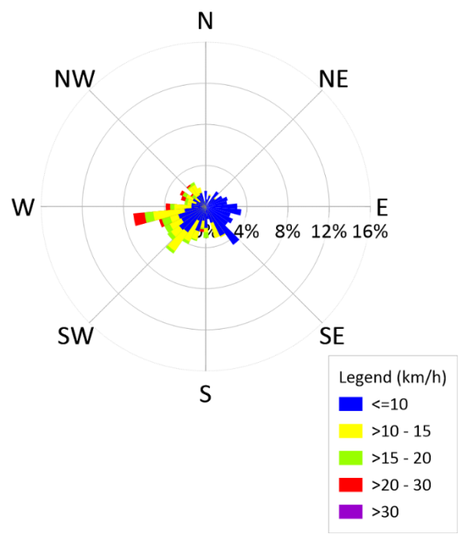


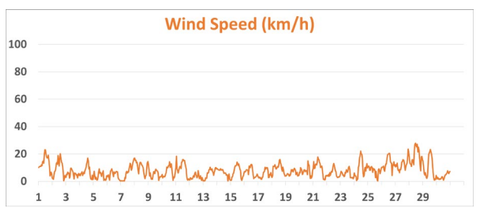


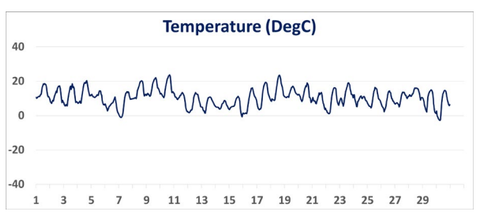


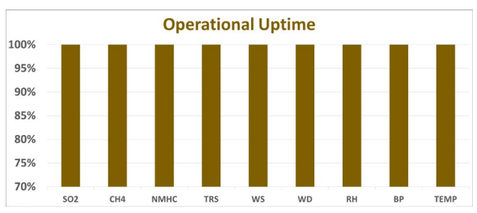


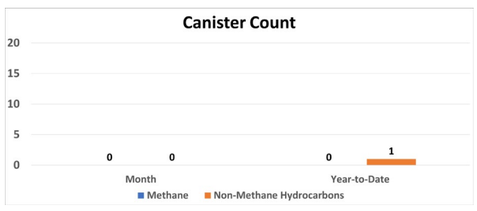
Station 842b



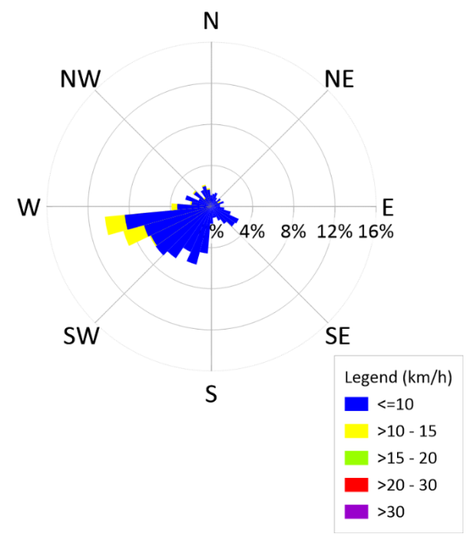


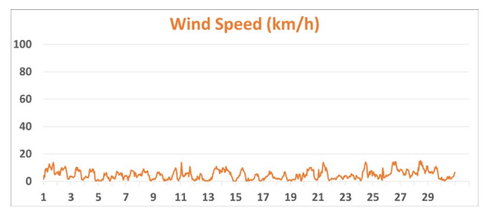


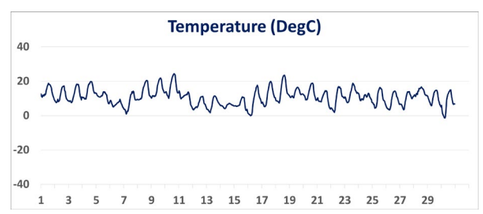


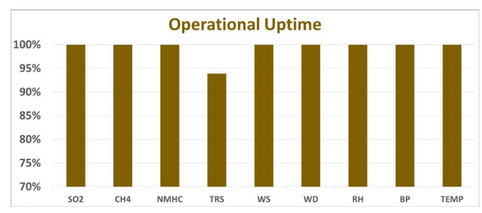


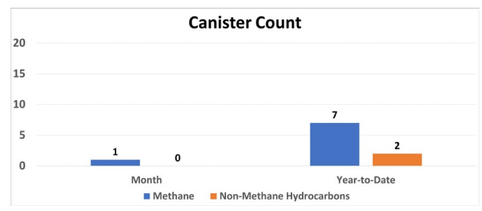
Reno Station











PRC Station *(coming soon)*

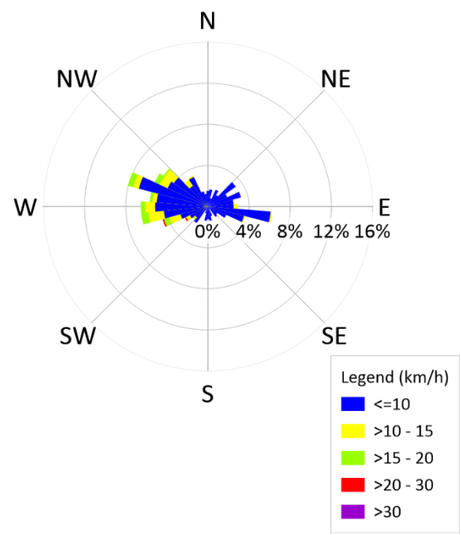
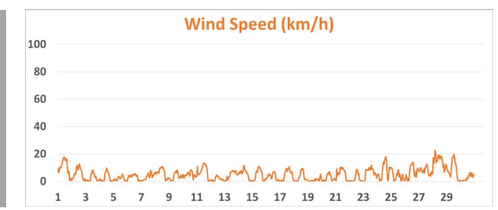
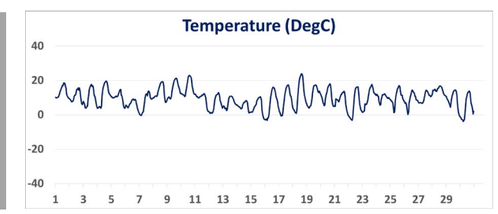
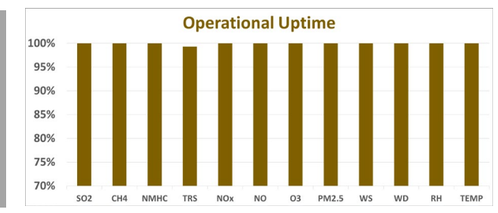
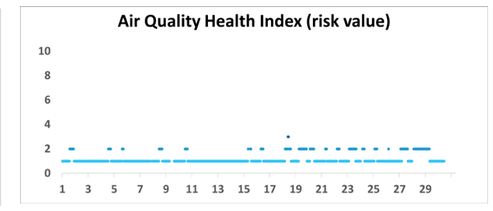
Wind Rose Diagram

Wind Speed

Temperature

Operational Time

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

AQHI Station – Cadotte Lake