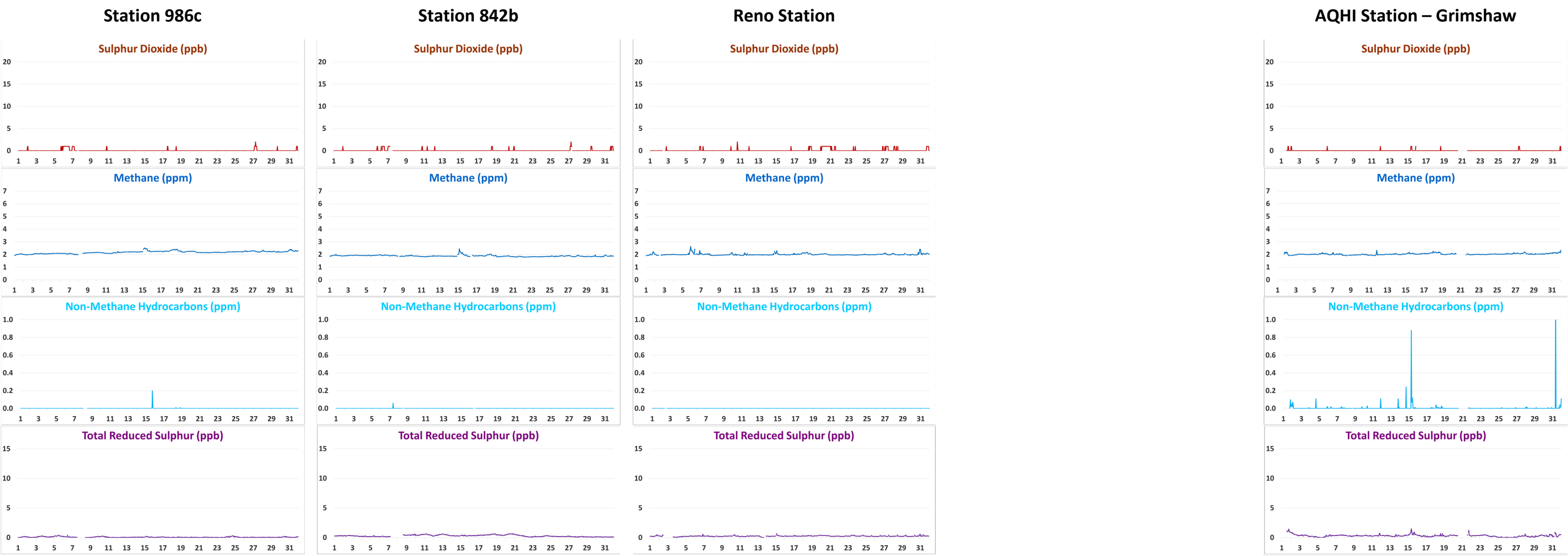


December 2021: Continuous Monitoring Program



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

All Stations:

- Low ambient temperatures, particularly in the latter half of the month, had a marked effect on TRS span results. This is a perennial problem when the moisture levels in sample air drop very low, causing TRS analyzer to respond more slowly due to the SO2 scrubber requiring a certain humidity to function correctly. Although daily span check results are often below the requirements, and the daily zero check results occasionally close to or in excess of the allowable drift range (while low temperatures are occurring), experience indicates the analyzer’s performance remains in compliance with AMD performance criteria, and collected data remain valid.

986c Station

- THC/CH4/NMHC:** The analyzer failed due to repeat flame outs on December 8 hour 0. Troubleshooting was completed and a successful post-repair calibration was completed on December 8. Eight hours of downtime were recorded due to this event.

842b Station

- THC/CH4/NMHC:** The analyzer failed due to low carrier (N2) supply pressure on December 16 hour 8. The gas pressure was adjusted by PRAMP field operational assistant, and a successful repeat zero-span check was completed at hour 13. Six hours of downtime were recorded due to this event.

Reno Station

- No major operational issues to report.

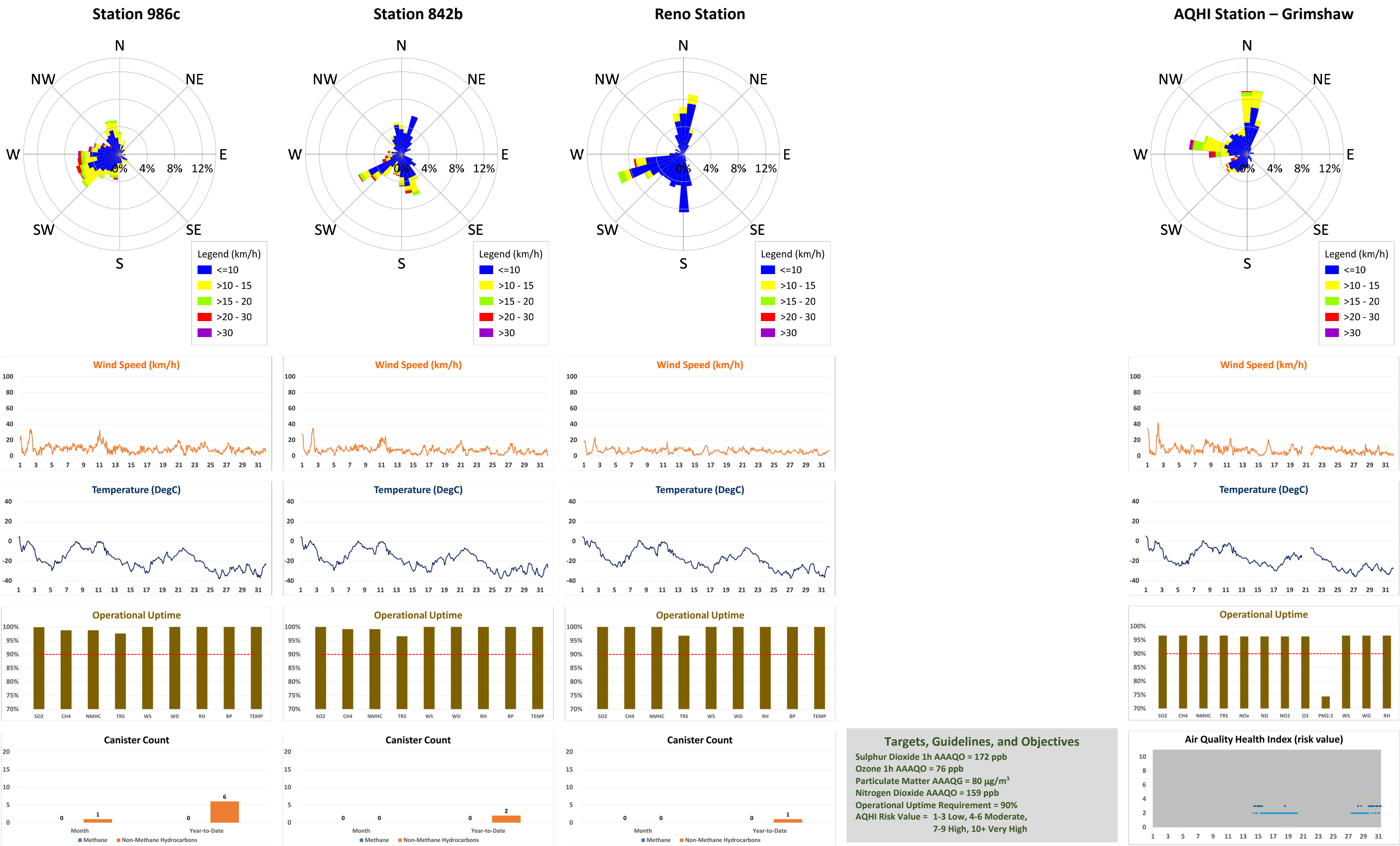
AQHI – Grimshaw Station

- The station was moved from Cadotte Lake, to the town of Grimshaw on November 24. All equipment were allowed time to stabilize. The station was back online on December 1.
- All parameters:** Due to a datalogger error, no data were collected between December 20 hour 13 and December 21 hour 13. Twenty-five hours of downtime were recorded.
- PM2.5:** Abnormal data were identified during the December 28’s data review. The PM unit was reset on December 28 hour 7. Subsequent data review suggests data to be invalidated back to the time the datalogger reset, which was December 21 One hundred sixty-two hours of downtime were recorded due to this event.

VOCs Canister Sampling program

- There was one NMHC canister triggered at Station 986c on December 15, 2021 at 17:00.

December 2021: Continuous Monitoring Program



Targets, Guidelines, and Objectives

Sulphur Dioxide 1h AAAQO = 172 ppb
Ozone 1h AAAQO = 76 ppb
Particulate Matter AAAQG = 80 µg/m³
Nitrogen Dioxide AAAQO = 159 ppb
Operational Uptime Requirement = 90%
AQHI Risk Value = 1-3 Low, 4-6 Moderate, 7-9 High, 10+ Very High