

October 2023: Active Monitoring Program

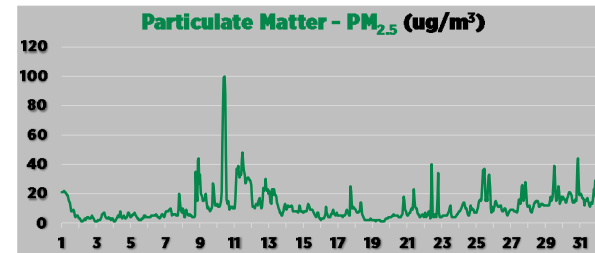
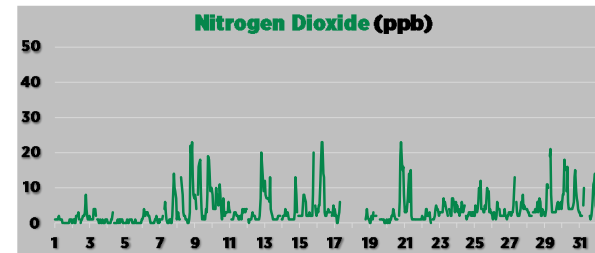
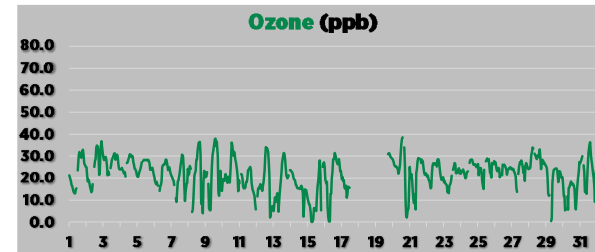
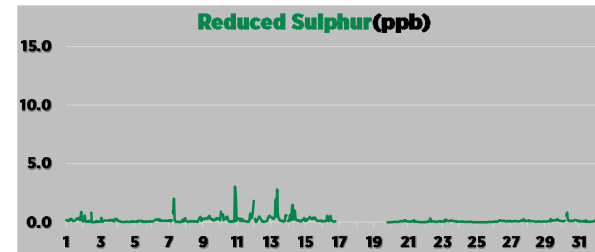
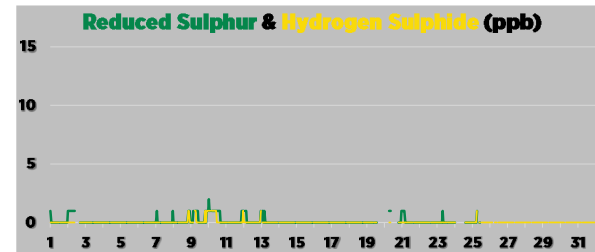
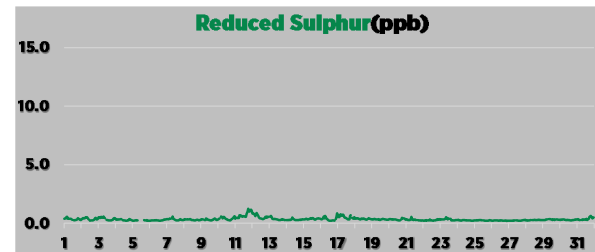
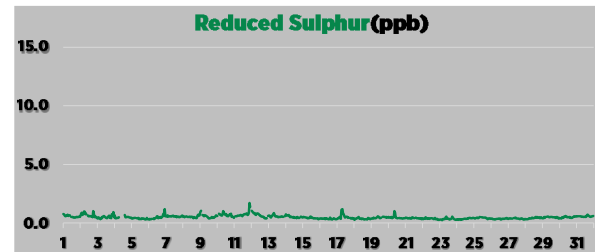
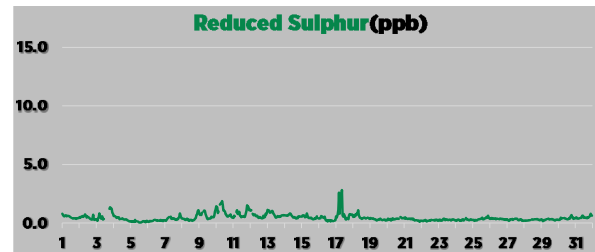
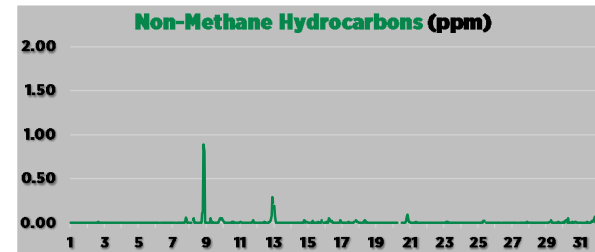
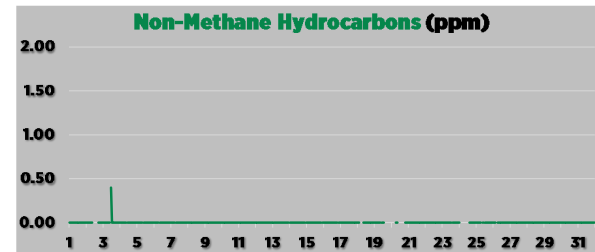
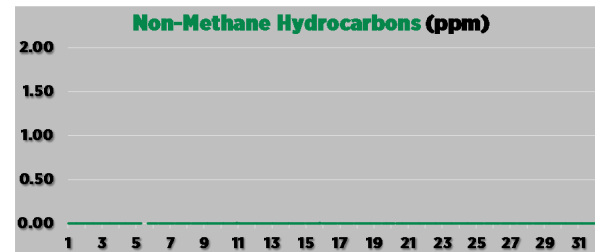
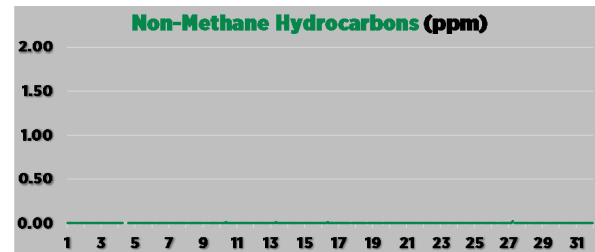
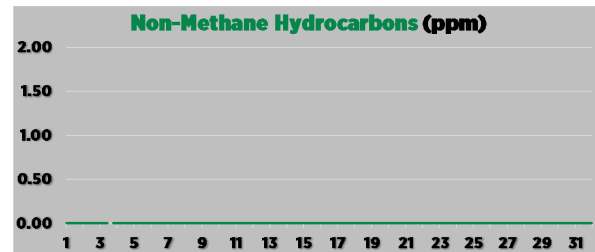
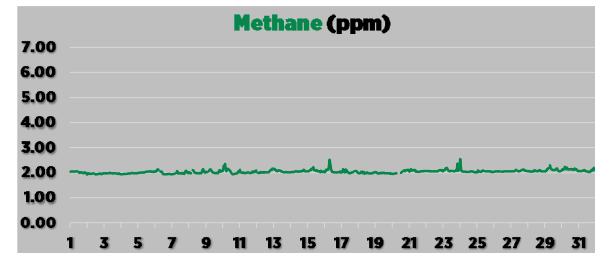
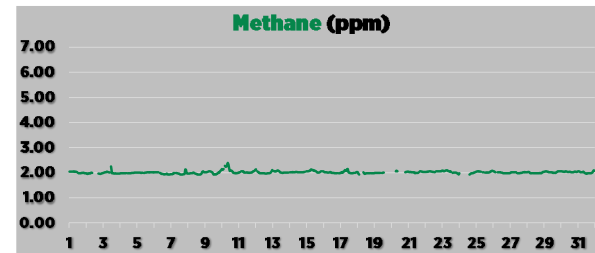
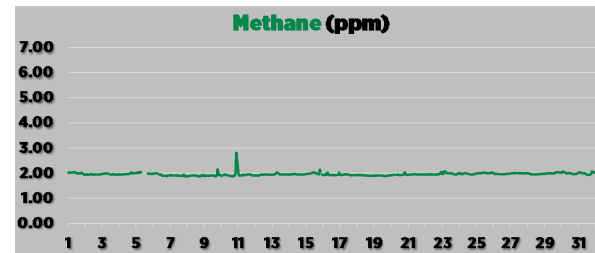
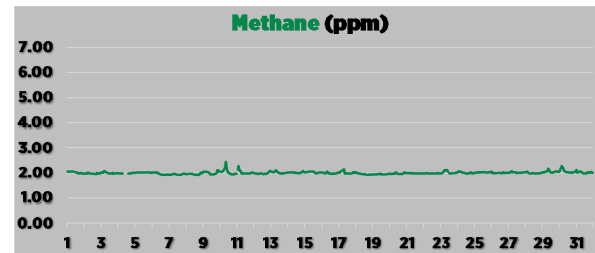
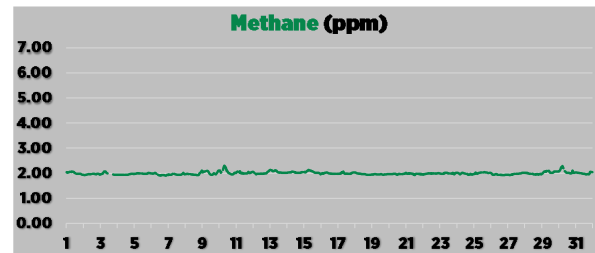
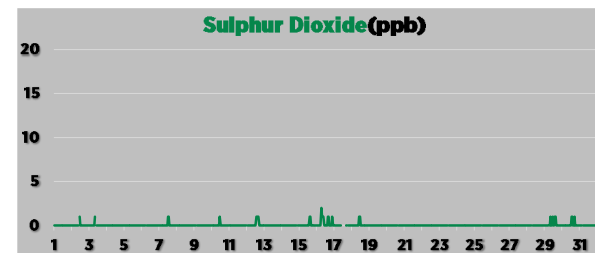
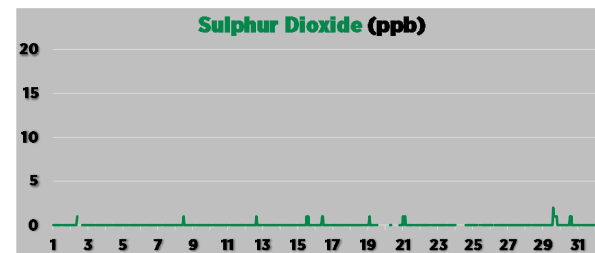
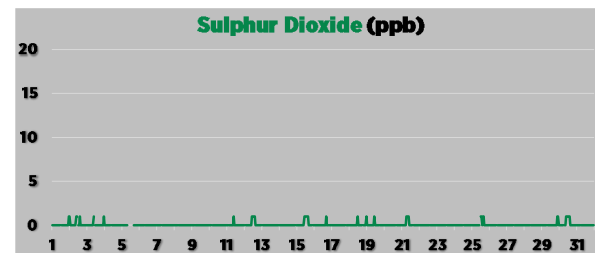
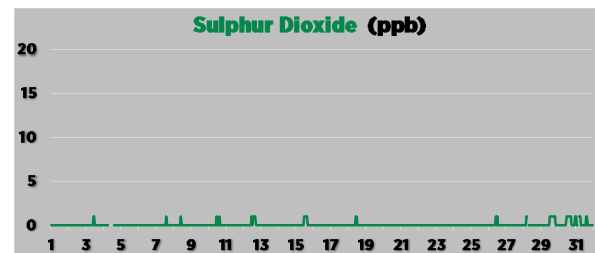
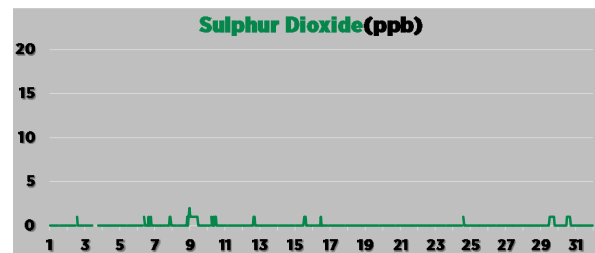
986-C Station

842-B Station

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](#))

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.

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

- Measured parameters were below Alberta Ambient Air Quality Objectives where applicable. All parameters met the 90% operational uptime requirement, except TRS (73.4%). DINC 0002366.
- TRS analyzer malfunctioned due to a converter failure on October 26. It was repaired by replacing the failed CD Nova CDN-101 converter (s/n: 506) with BV's converter (s/n: 516) on October 31. After a successful calibration on November 2, operations resumed. Data were invalidated back to the last valid calibration check, which was October 25 hour 11.
- HVAC issues between October 19-26 caused station temperatures to exceed the recommended limits for analyzers, affecting data integrity. Data from this period were discarded resulting in 43 hours of downtime.

AQHI Station - Grimshaw

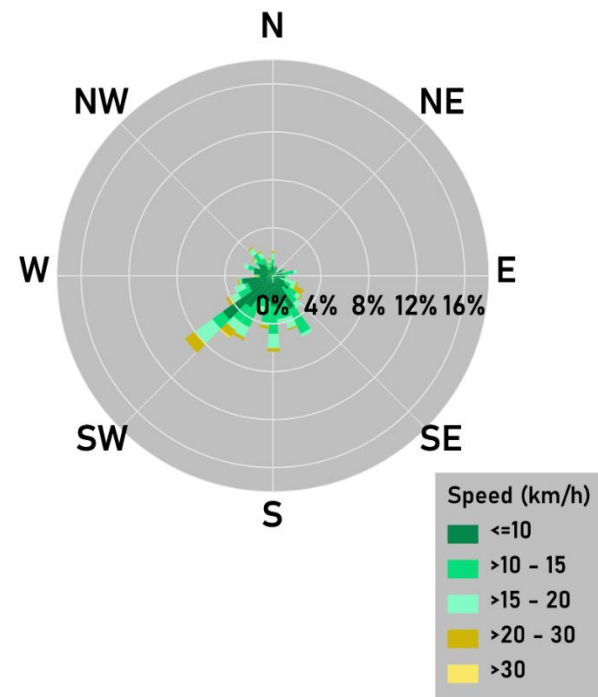
- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) and /or Alberta Ambient Air Quality Guidelines (AAAGs) where applicable, except PM_{2.5}. On October 10, PM_{2.5} concentrations exceeded the 1-hour guideline with values of 99 ug/m³ at 9:00, 100 ug/m³ at 10:00, and 88 ug/m³ at 11:00. The 24-hour objective was exceeded on October 11 at 32 ug/m³. All events were caused by wildfire smoke.
- NO_x/NO/NO₂: The BV API 200E analyzer (s/n: 594) was replaced with PRAMP's Teledyne T200 (s/n: 837) on October 17th, following a shutdown calibration. After overnight stabilization, a successful installation calibration was completed on October 18, resulting in 21 hours of downtime.
- O₃: The BV API 400A analyzer (s/n: 445) was swapped for PRAMP's Teledyne T400 (s/n: 824) on October 17th. Following a period for stabilization, a successful installation calibration was completed on October 19th. These events resulted in 46 hours of downtime.

NMHCs Canister Sampling Program

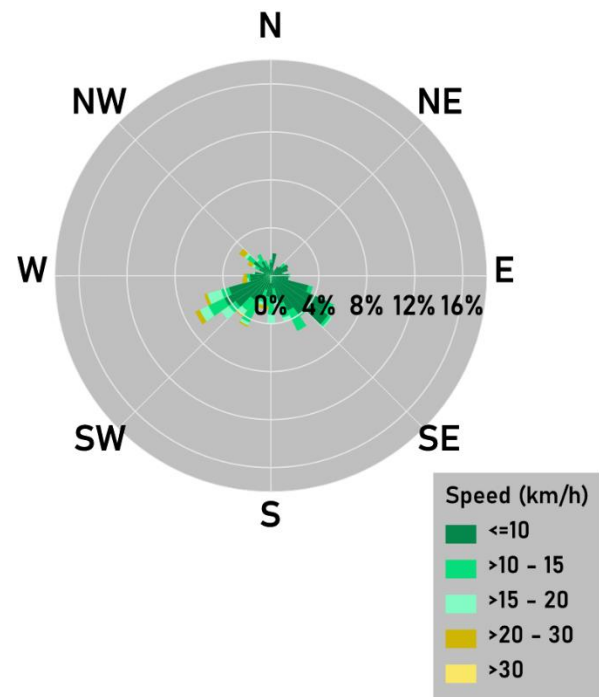
- There were no canister events recorded this month.

October 2023: Active Monitoring Program

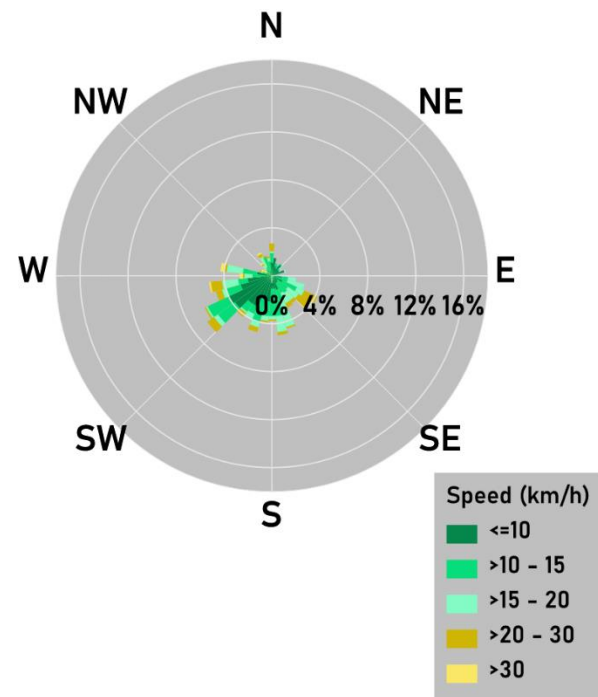
986-C Station



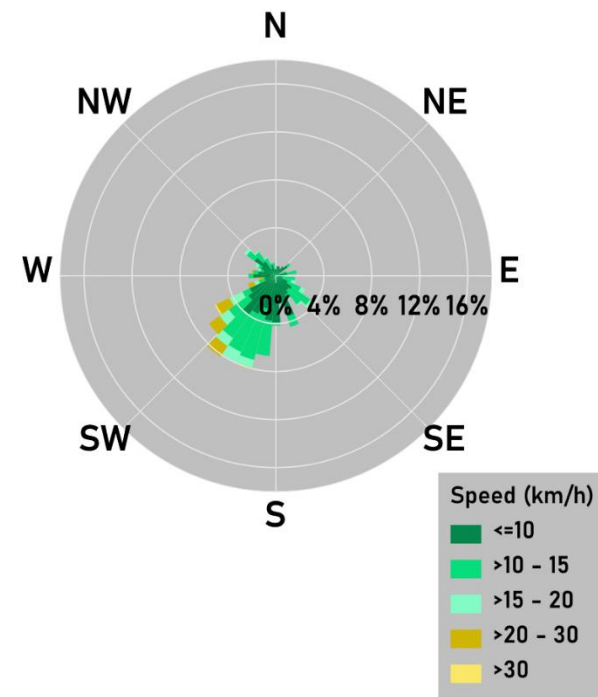
842-B Station



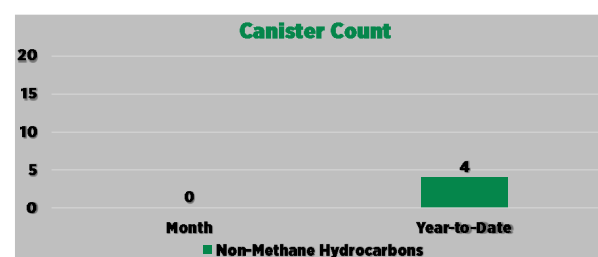
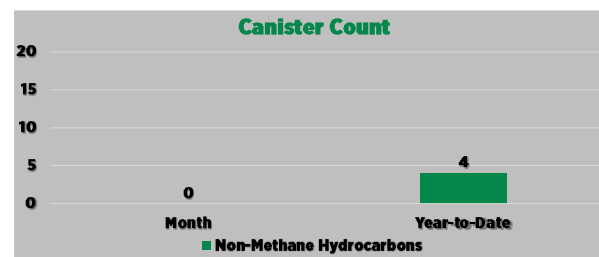
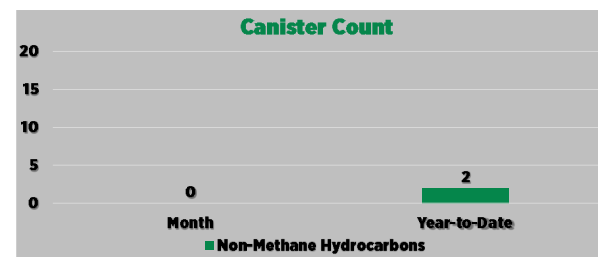
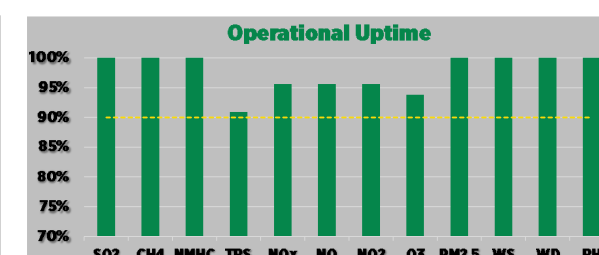
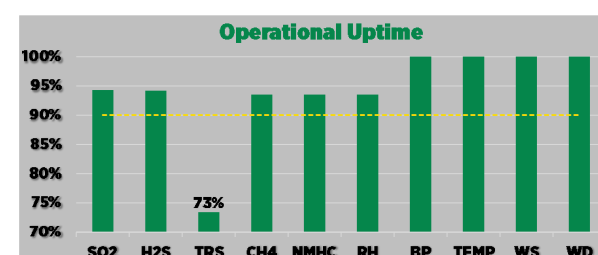
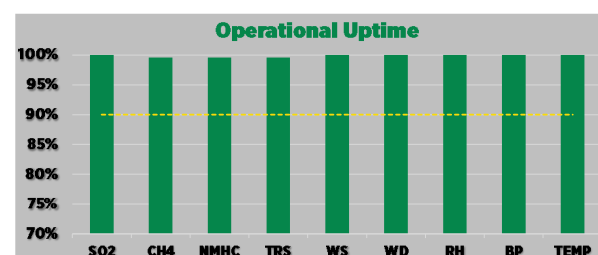
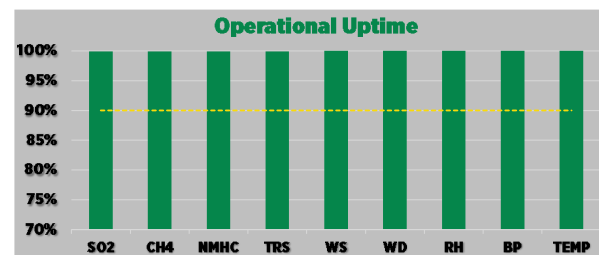
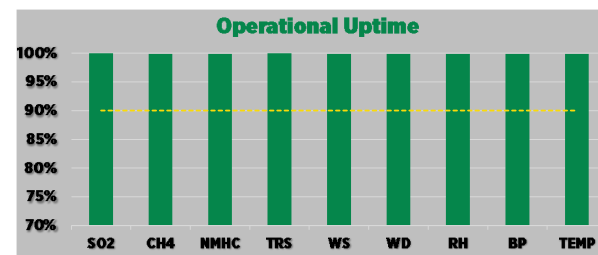
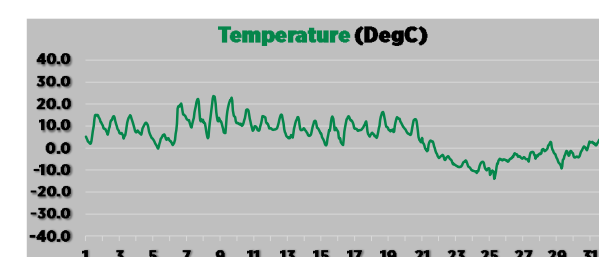
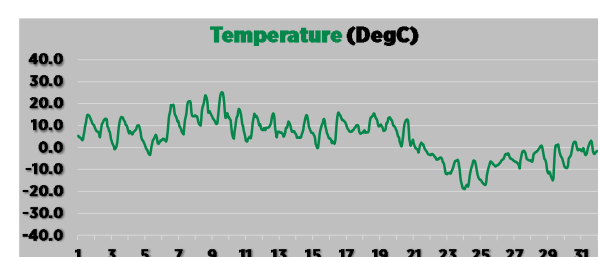
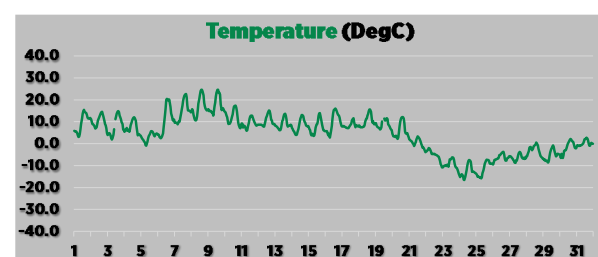
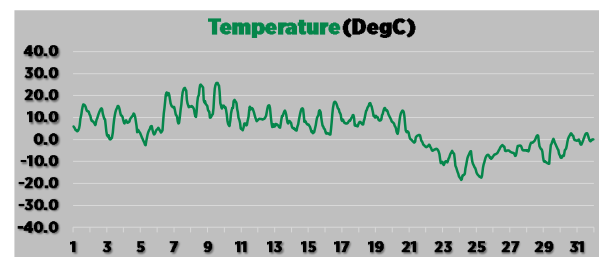
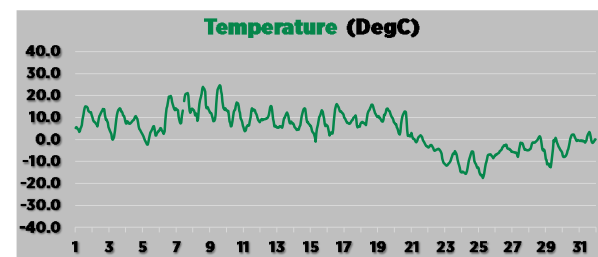
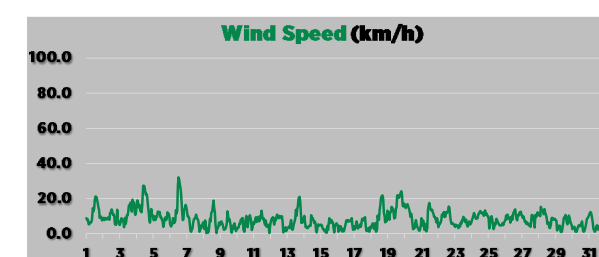
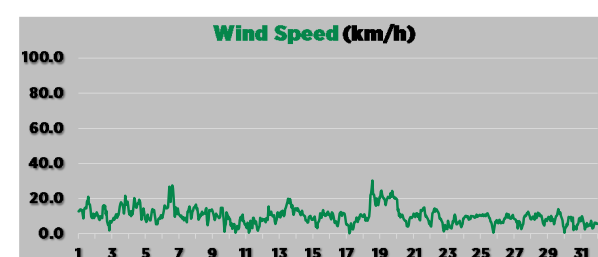
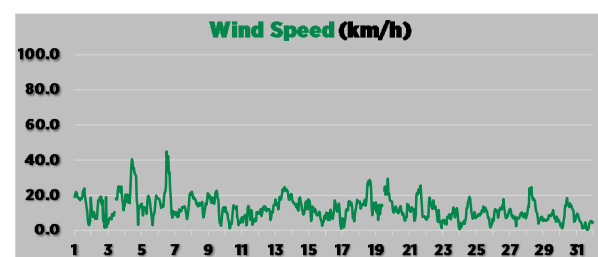
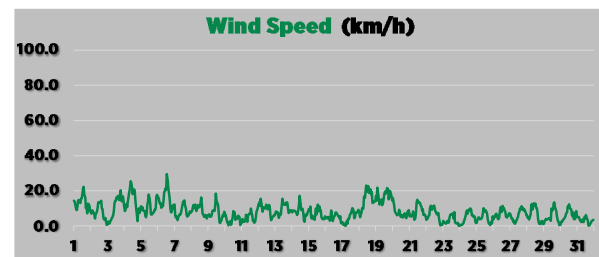
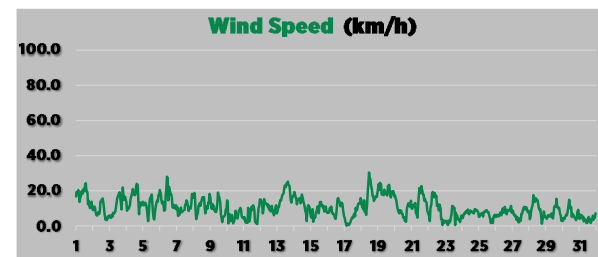
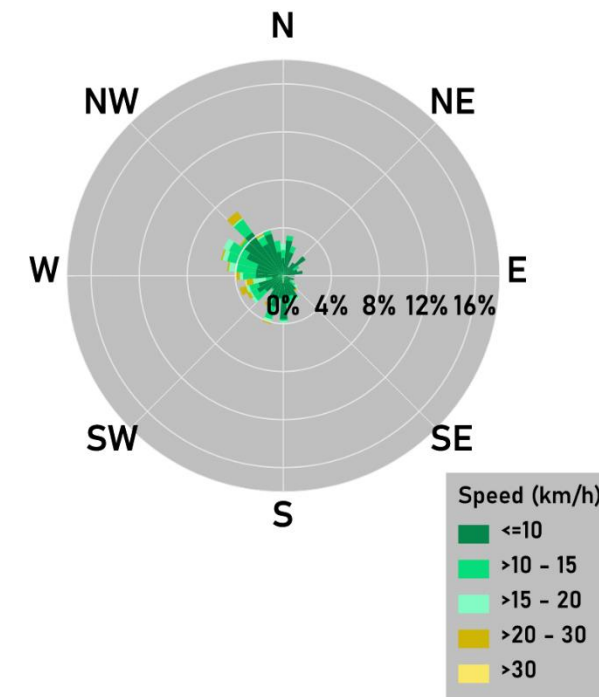
Reno-B Station



PRC Station



AQHI Station - Grimshaw



Targets, Guidelines, and Objectives
 Sulphur Dioxide 1h AAAQO = 172 ppb
 Ozone 1h AAAQO = 76 ppb
 Particulate Matter (PM_{2.5}) 1h AAAQO = 80 ug/m³
 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

