

# January 2024: Active Monitoring Program

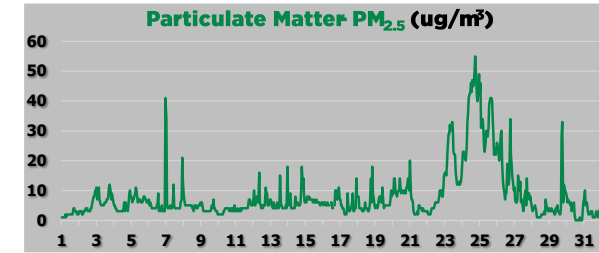
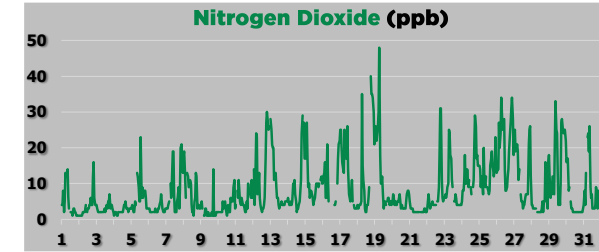
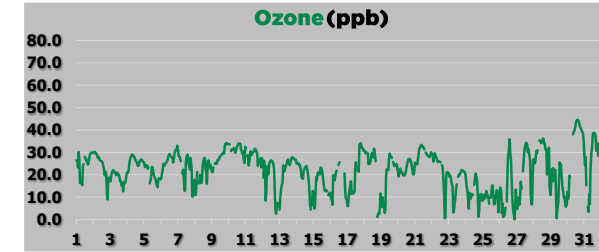
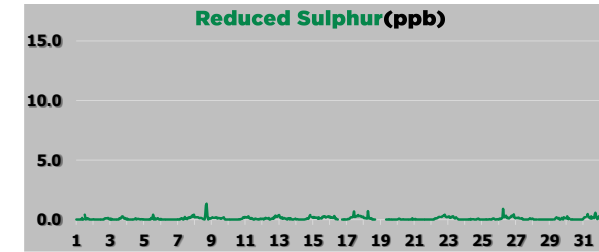
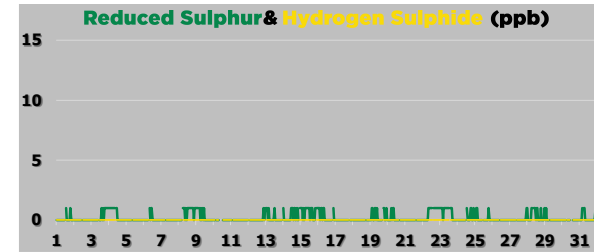
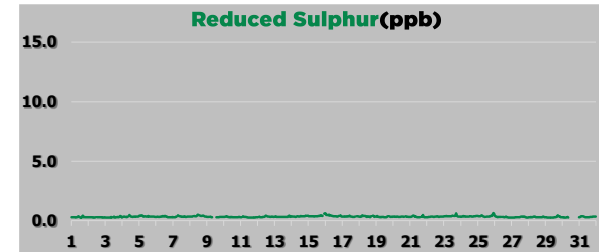
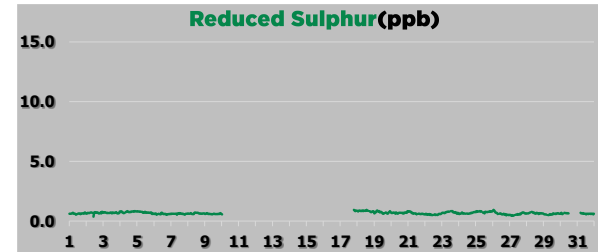
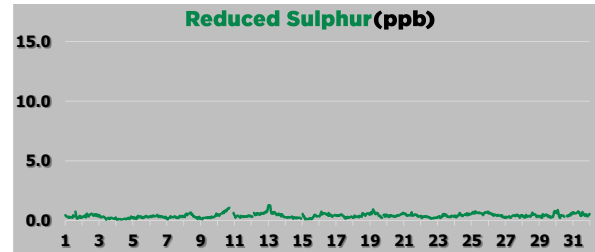
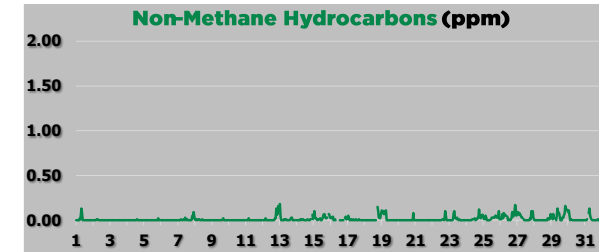
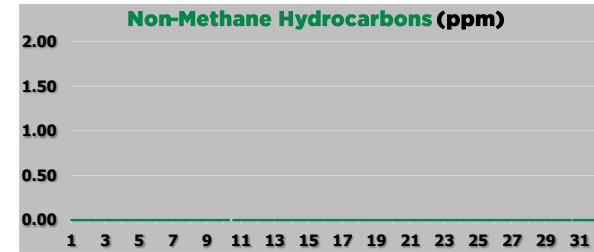
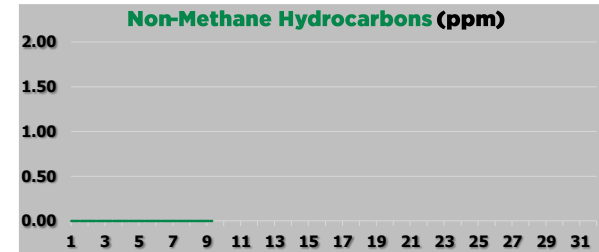
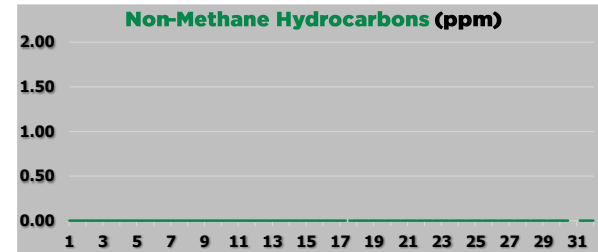
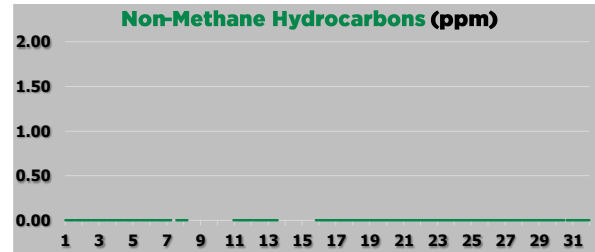
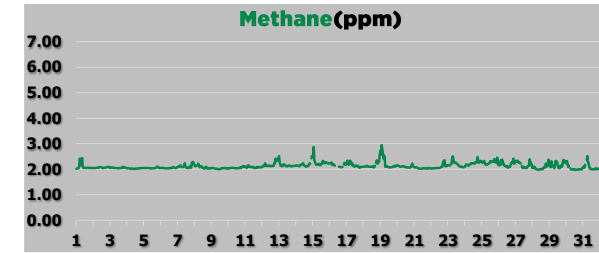
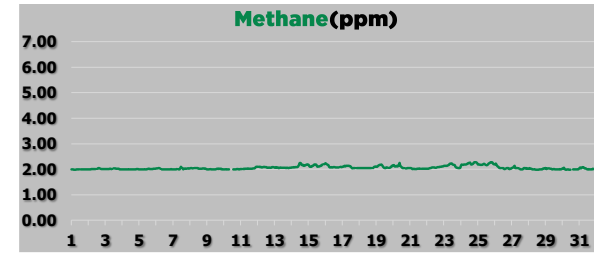
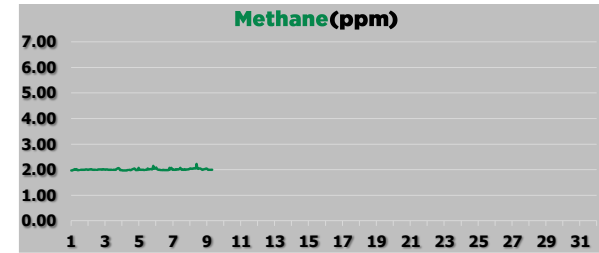
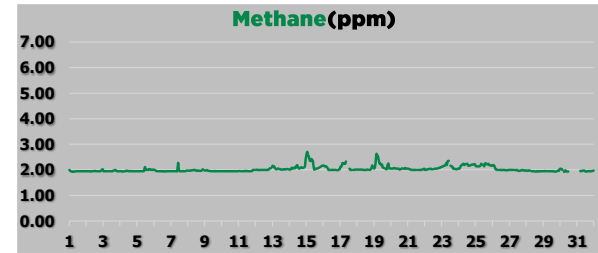
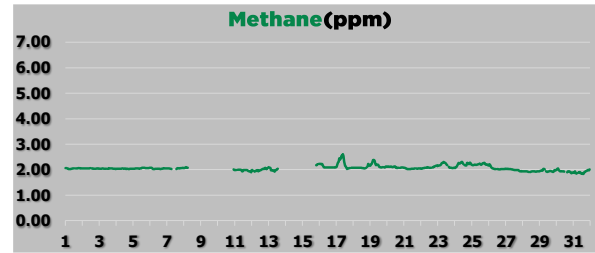
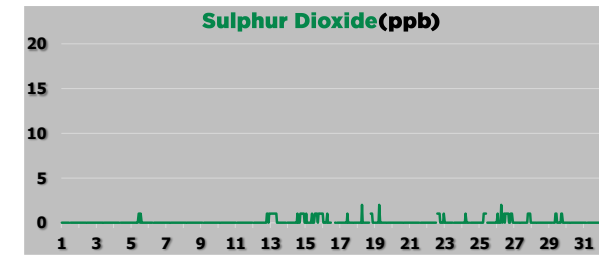
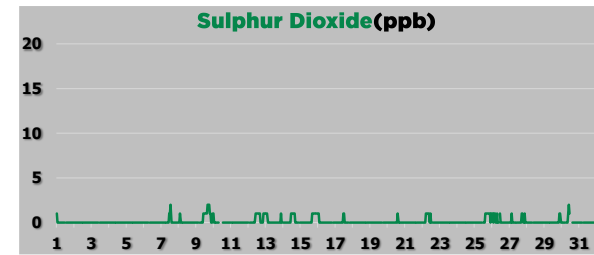
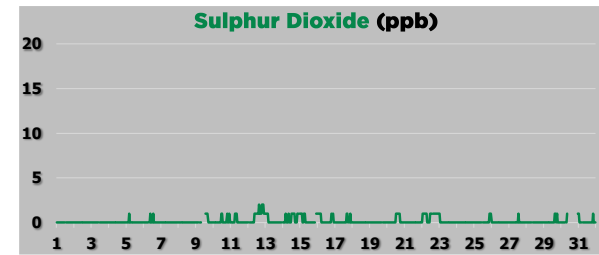
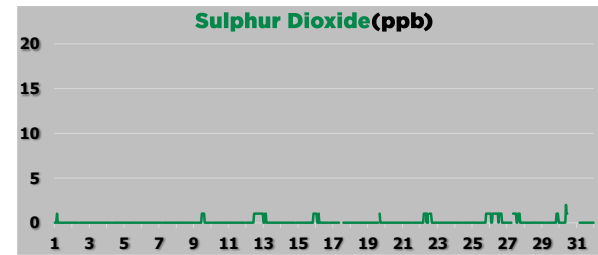
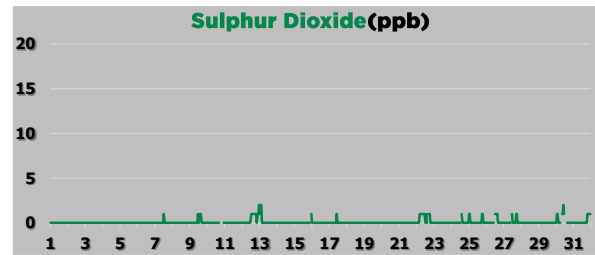
## 986-C Station

## 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](#))

### All Stations

- **TRS/H2S:** Low temperatures, notably mid-month, impacted TRS/H2S span results. Reduced moisture slowed analyzer response due to SO2 scrubber needing optimal humidity. While daily span checks often fell below requirements and zero check drift approached limits during low temperatures, analyzer performance met AMD criteria, ensuring data validity.
- Ambient temperatures were below the sensor recordable range (minimum= -40 °C) on January 14; actual ambient temperatures may be lower than the readings reported here.

### 986-C Station

- All parameters met the 90% operational uptime requirement, except THC/CH4/NMHC (83.6%).
- **THC/CH4/NMHC:** January 10: Monthly calibration failed due to unstable station temperatures causing bad injections. Sixty-six hours downtime. January 13: Analyzer failure due to H2 generator issue. Fifty-three hours downtime.

### 842-B Station

- All parameters met the 90% operational uptime requirement, except TRS (74.6%).
- **TRS:** January 17 shut-down calibration failed; SO2 scrubber beads replaced. Successful post-repair calibration completed. Data discarded back to January 10. 175 hours total downtime recorded.

### Reno-B Station

- All parameters met the 90% operational uptime requirement, except THC/CH4/NMHC (27.6%).
- **THC/CH4/NMHC:** A successful monthly calibration was completed on January 9. However, the analyzer failed February's monthly calibration. In the absence of a clear point of failure, data were discarded back to the January's calibration. Five hundred thirty-nine hours of downtime were recorded due to this event.

### PRC Station

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

### AQHI Station - Grimshaw

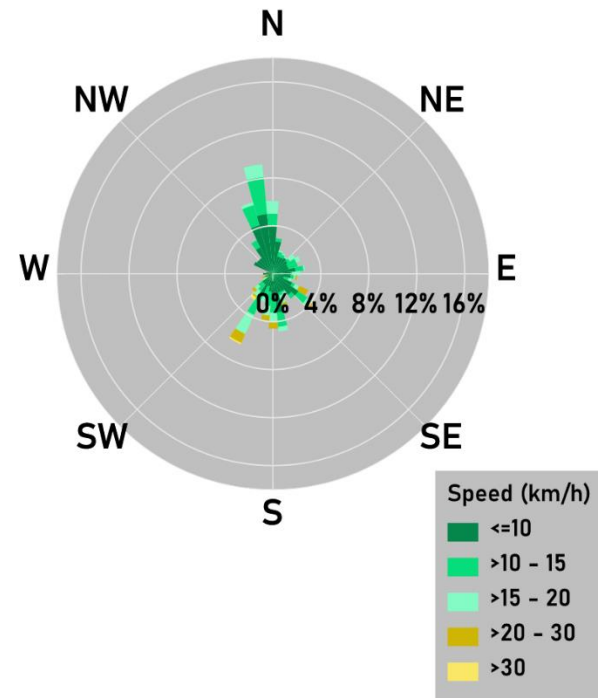
- All parameters met the 90% operational uptime requirement.
- Measured parameters were below Alberta Ambient Air Quality Objectives (AAQOs) and /or Alberta Ambient Air Quality Guidelines (AAQGs) where applicable, except PM<sub>2.5</sub>.
- On January 24, the 24-hour average PM<sub>2.5</sub> concentration was 38 ug/m<sup>3</sup> (Reference #424674), and on January 25, it was 32 ug/m<sup>3</sup> (Reference #424675). 24-hour AAQO is 29 ug/m<sup>3</sup>

### NMHCs Canister Sampling Program

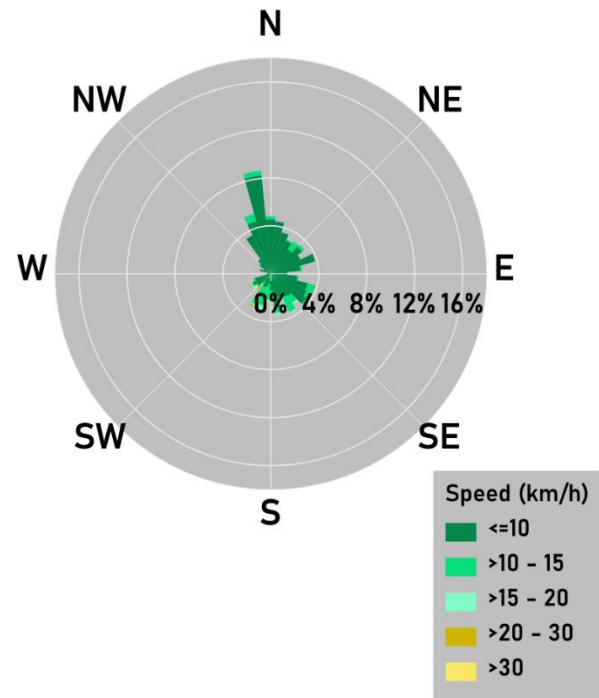
- One canister event was recorded in January. The canister system was triggered at the Reno-B station on January 14 at 08:05, at concentration of 0.45ppm.

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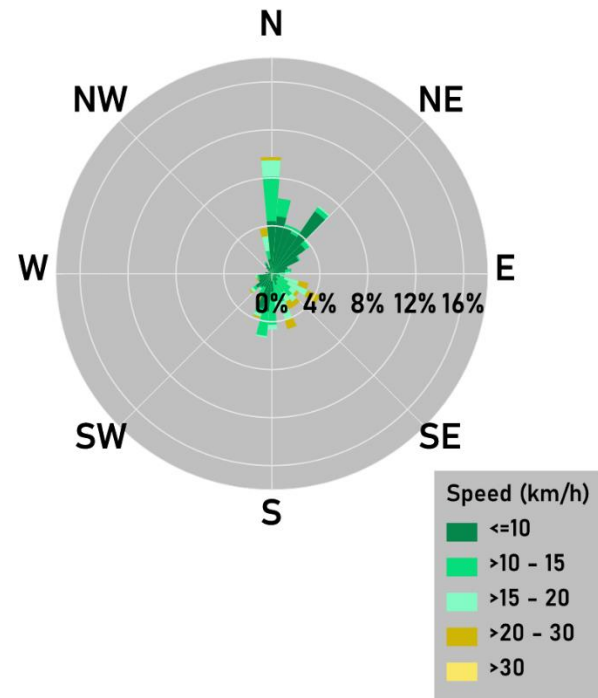
### 986-C Station



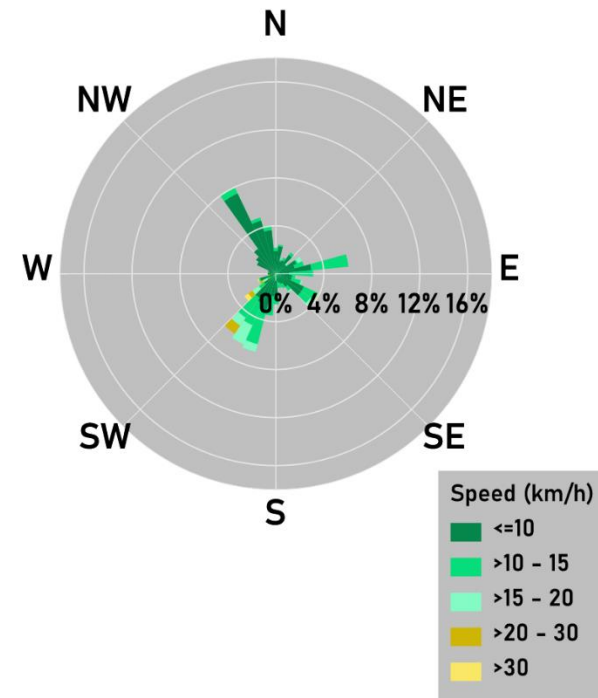
### 842-B Station



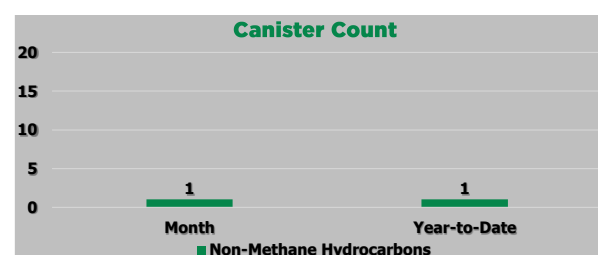
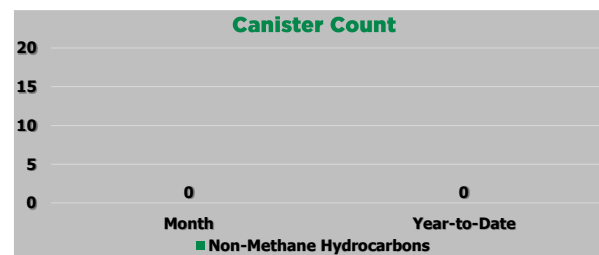
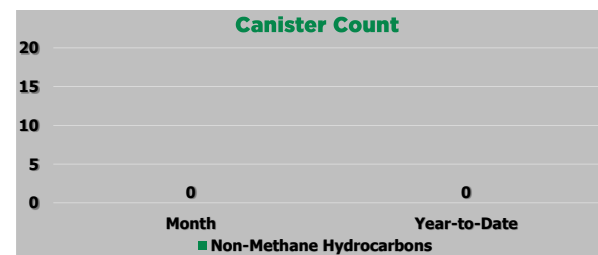
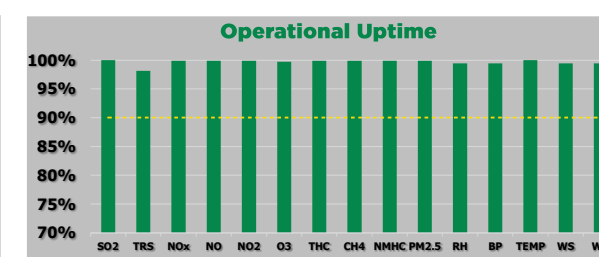
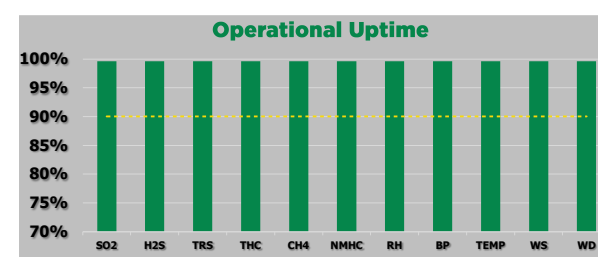
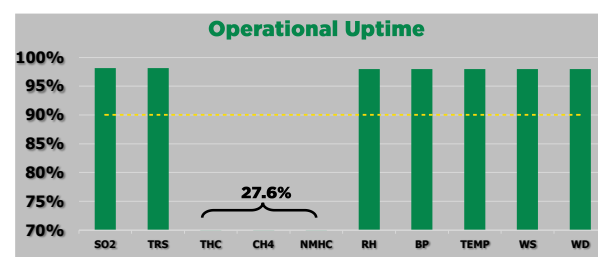
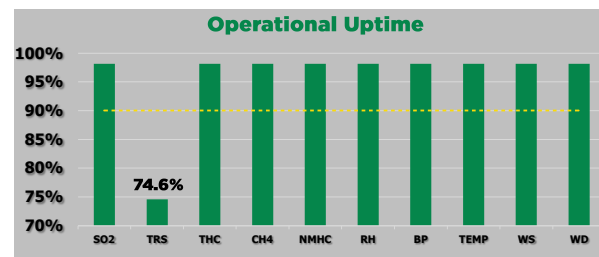
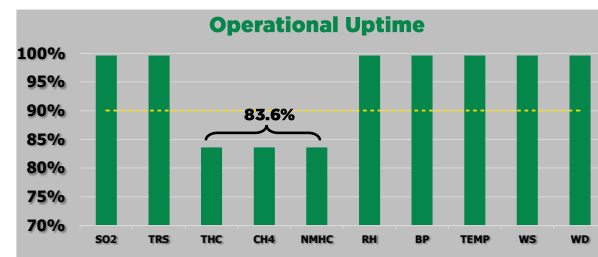
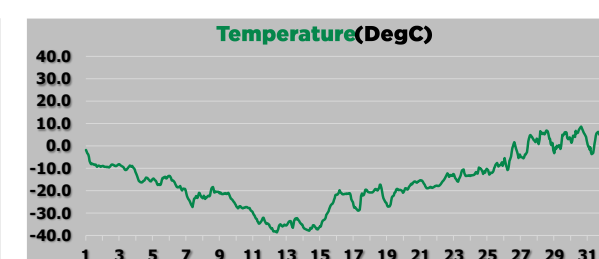
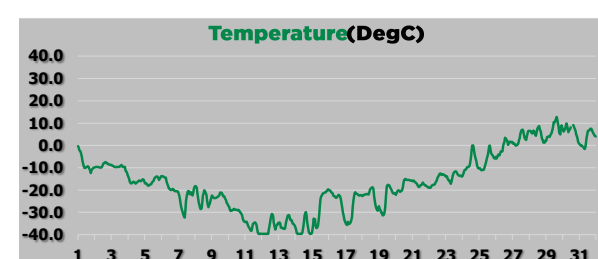
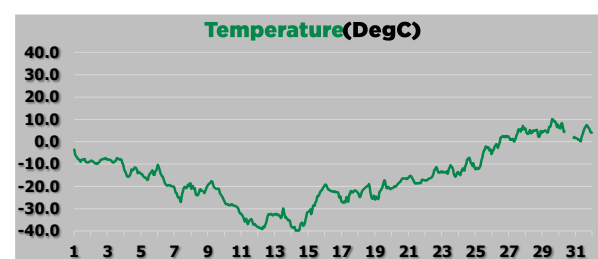
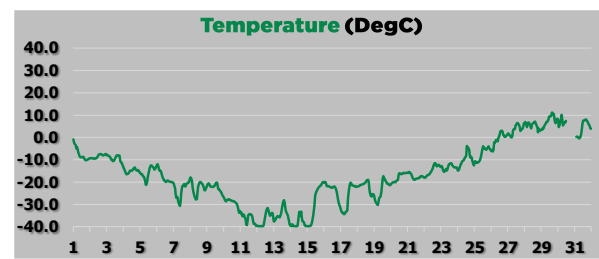
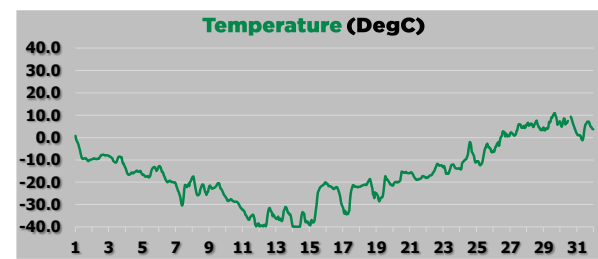
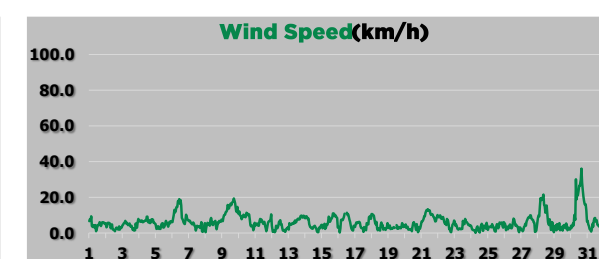
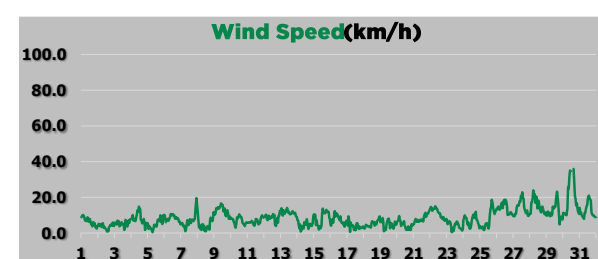
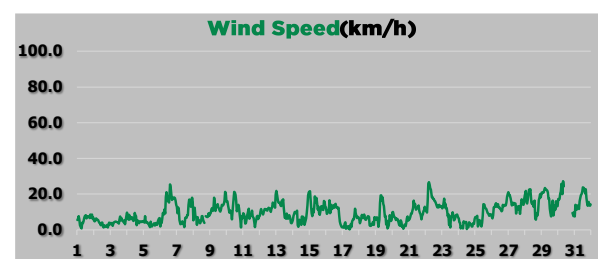
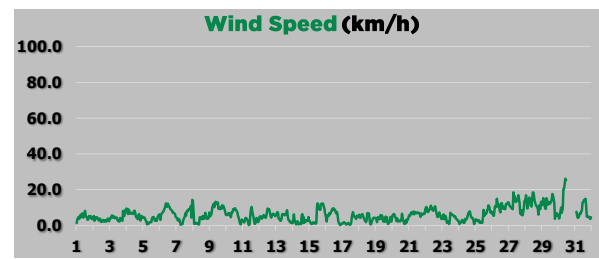
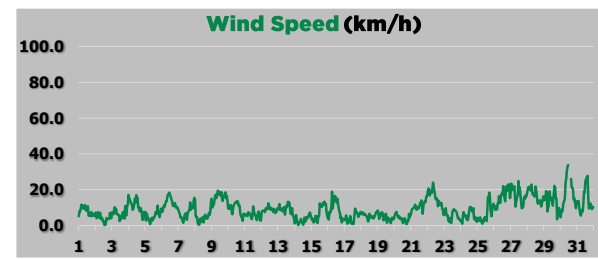
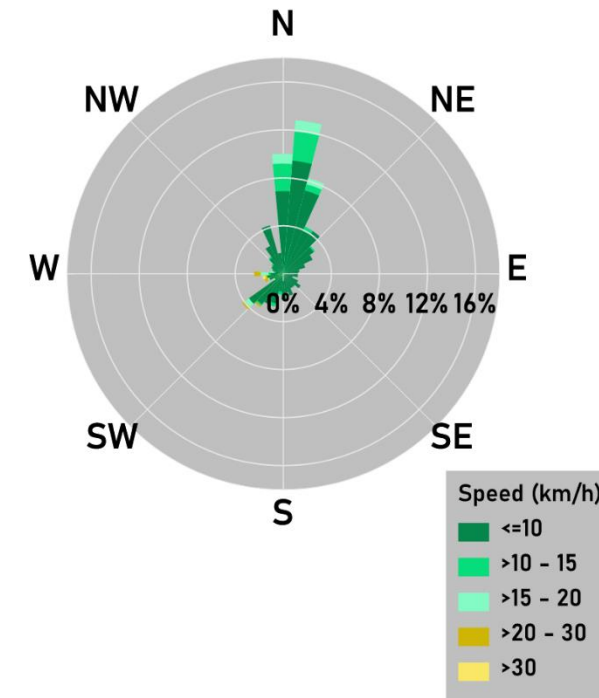
### Reno-B Station



### PRC Station



### AQHI Station - Grimshaw



**Targets, Guidelines, and Objectives**  
 Sulphur Dioxide 1h AAAQO = 172 ppb  
 Ozone 1h AAAQO = 76 ppb  
 Particulate Matter (PM<sub>2.5</sub>) 1h AAAQO = 80 ug/m<sup>3</sup>  
 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

