

# September 2023: Active Monitoring Program

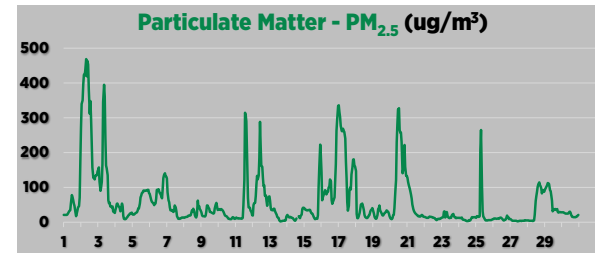
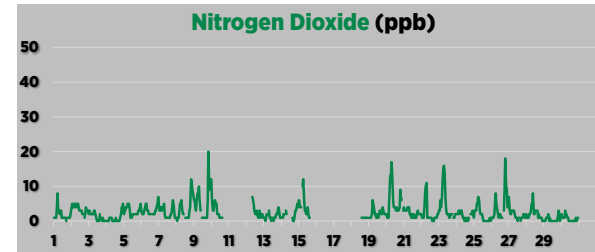
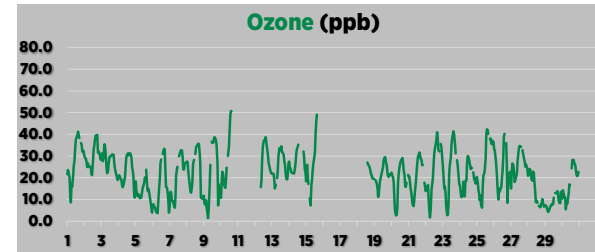
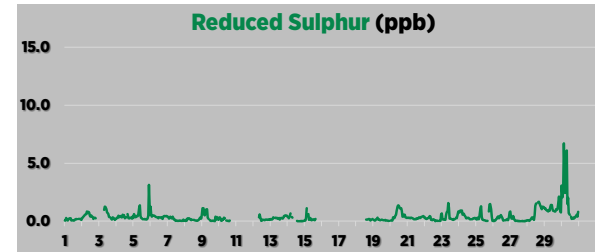
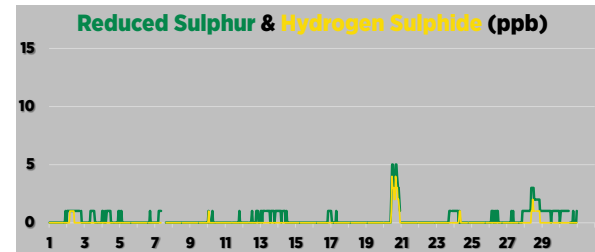
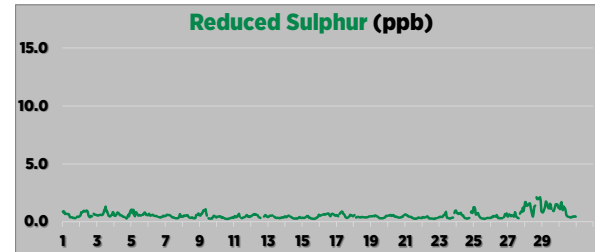
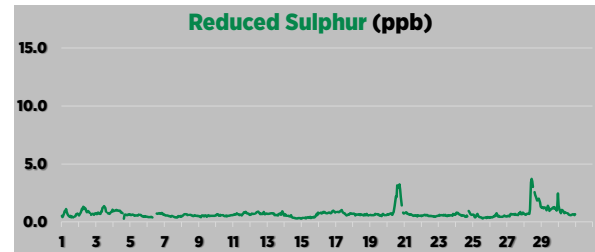
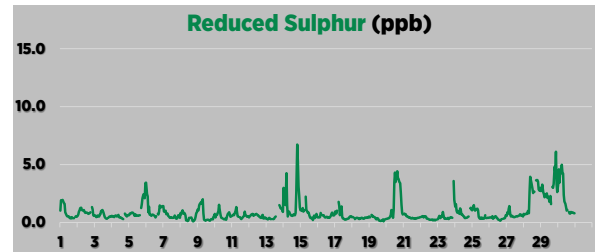
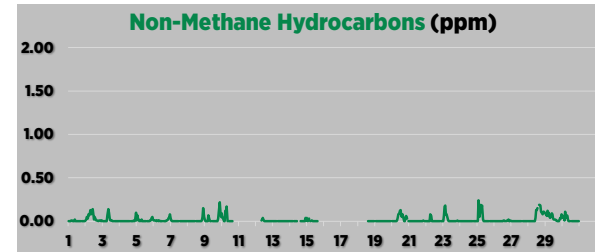
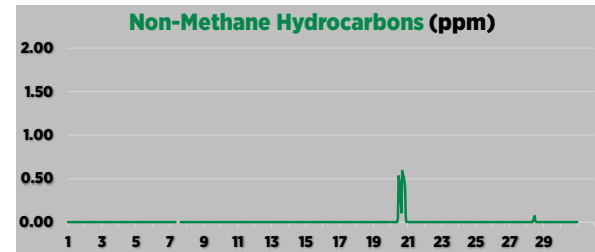
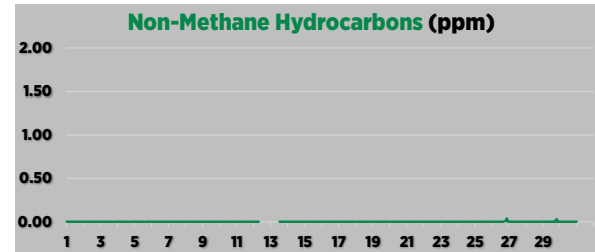
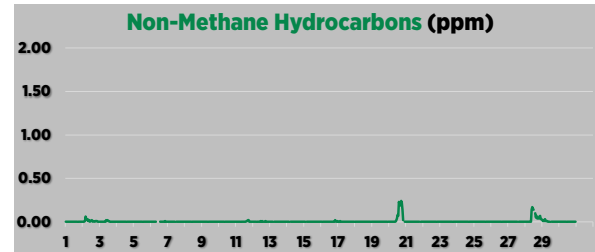
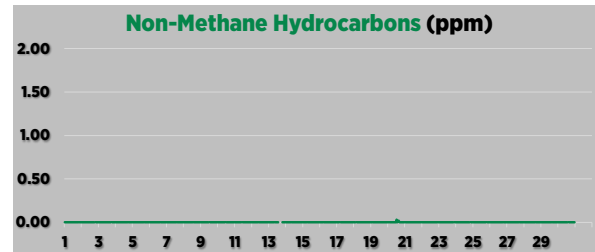
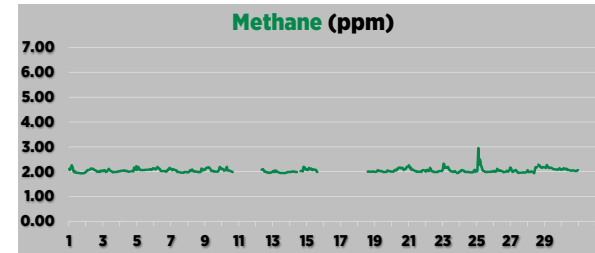
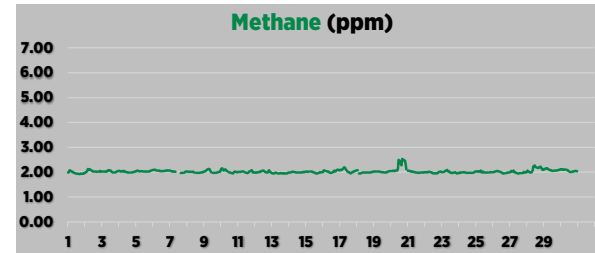
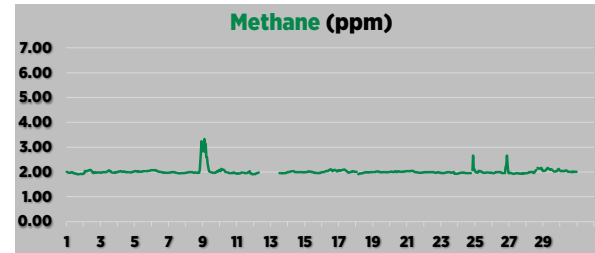
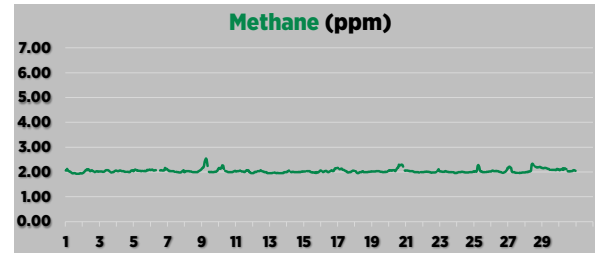
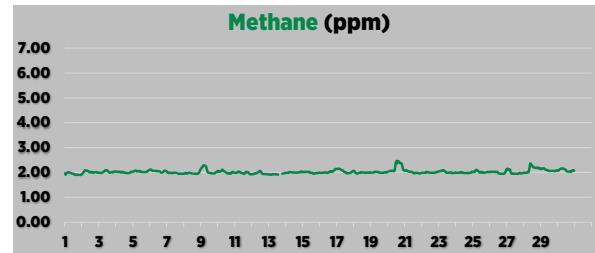
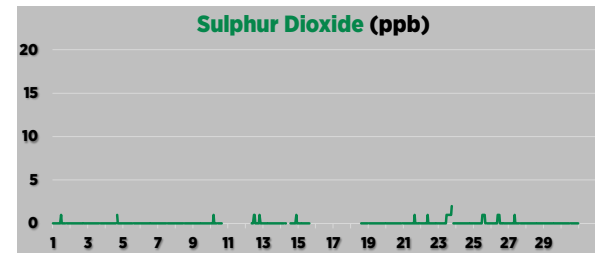
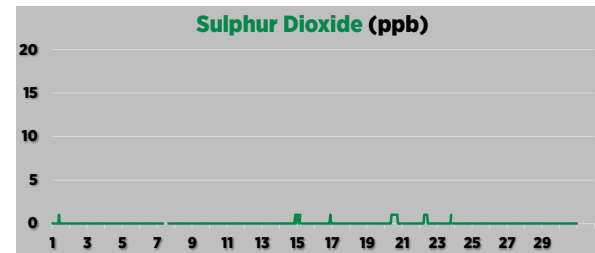
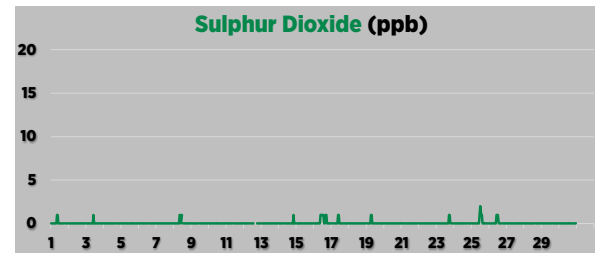
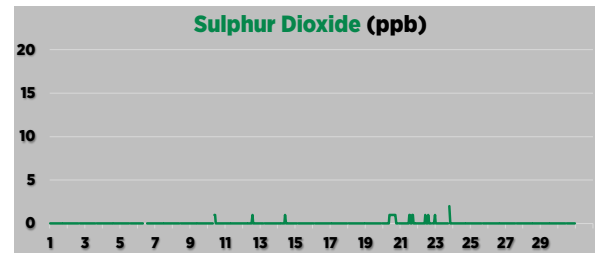
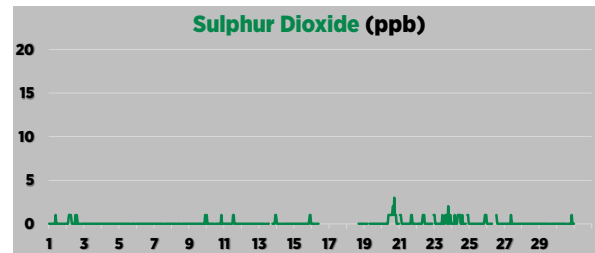
## 986-C Station

## 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 (AAQOs) 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 (AAQOs) 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 (AAQOs) where applicable.

### 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

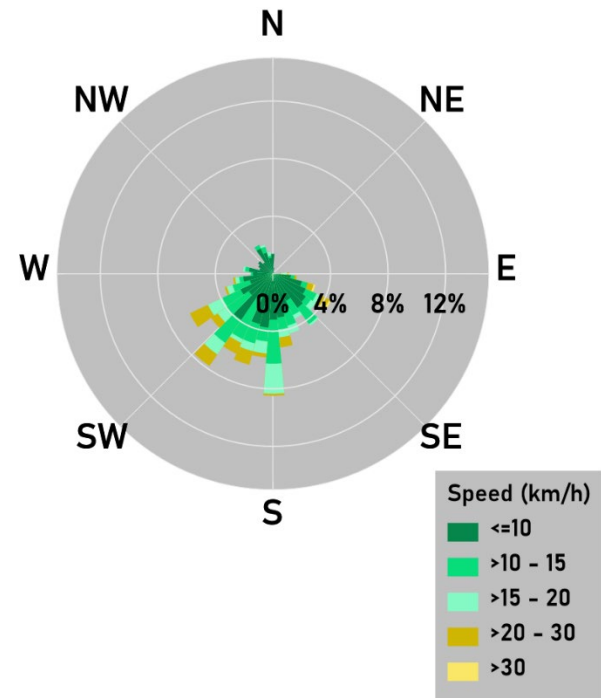
- Measured parameters were below Alberta Ambient Air Quality Objectives (AAQOs) and /or Alberta Ambient Air Quality Guidelines (AAQGs) where applicable, except PM2.5. One hundred sixty-eight 1-hour PM2.5 exceedances and eighteen 24-hour PM2.5 exceedances were recorded this month. Both nearby and distant wildfires contributed to intense local wildfire smoke conditions.
- Due to HVAC unit failure which affected station temperatures, most gas analyzers, including SO2, TRS, NOx/NO/NO2, O3 and THC/CH4/NMHC, did not meet the 90% operational uptime requirement in September. *AEPA reference #: 420864.*
- Station HVAC unit:** The compressor in the HVAC unit failed on September 10. The station temperatures subsequently rose above the manufacturer’s recommended/ EPA-designated operating temperature ranges for most gas analyzers (EPA designation for NOx/NO/NO2, H2S and THC/CH4/NMHC < 35°C and for SO2 and O3 < 30 °C) between September 10 and September 12 and between September 15 and September 18. Data quality collected during this period could have been affected by the issue and therefore were discarded. One hundred and ten hours of downtime were recorded in September as a result. Based on the manufacturer’s specification for PM2.5 (T640 analyzer), the acceptable operation temperature range is 4 °C - 50°C. Data quality was not affected by the high shelter temperatures. Data were considered valid.

### NMHCs Canister Sampling Program

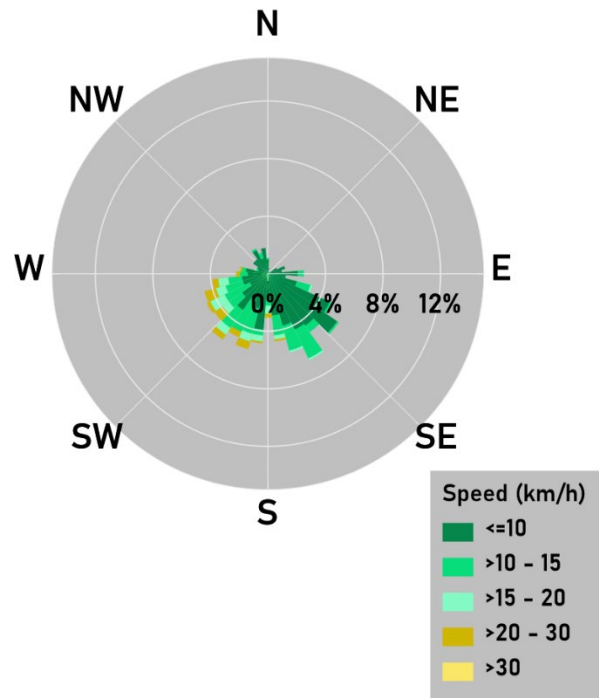
- Two canister events were recorded: NMHC concentration of 0.31 ppm on September 20 at 14:35 at the 842-B station, and NMHC concentration of 0.32 ppm on September 29 at 19:35 at the Reno-B station.

# September 2023: Active Monitoring Program

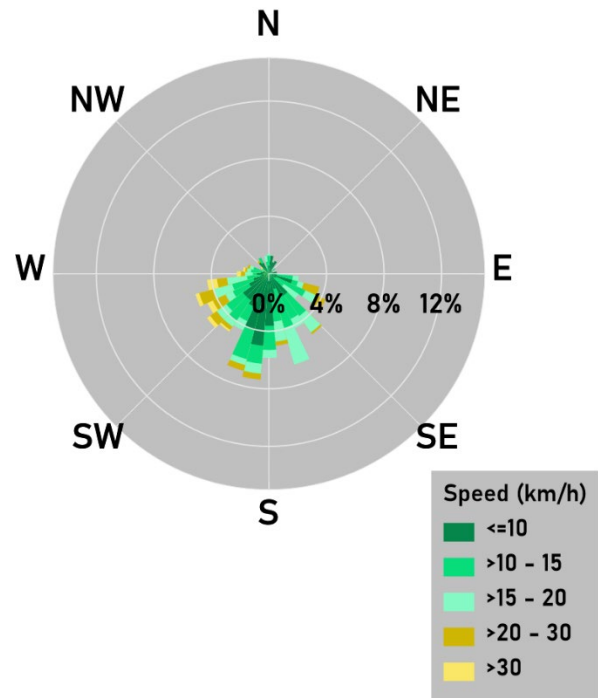
### 986-C Station



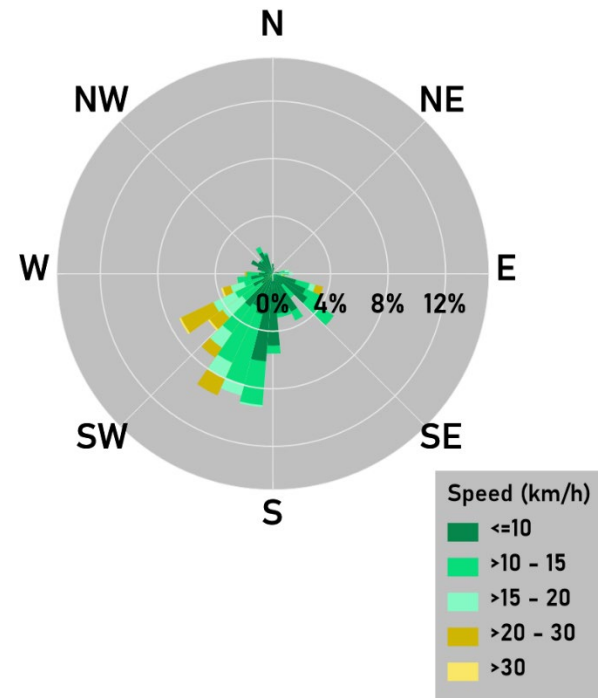
### 842-B Station



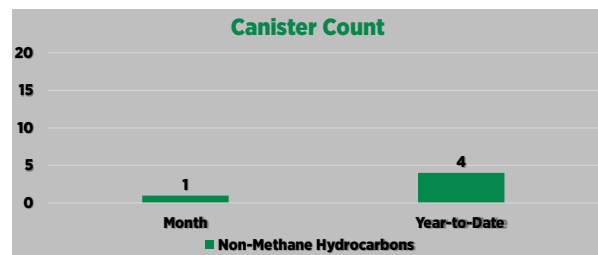
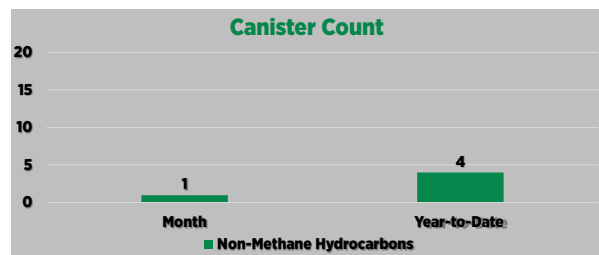
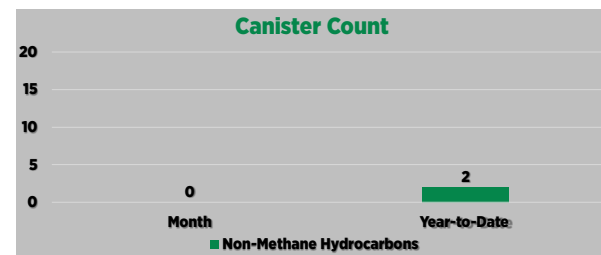
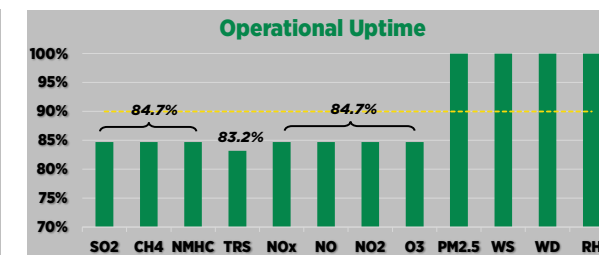
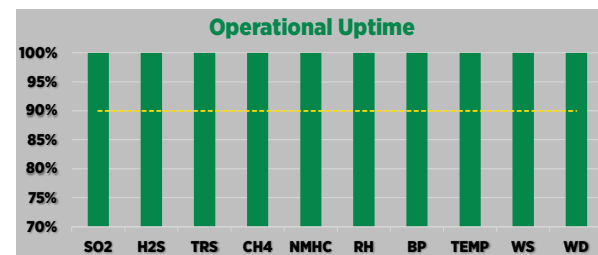
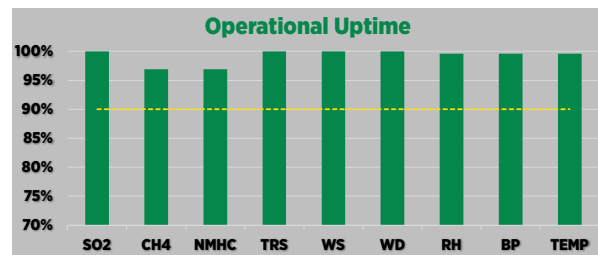
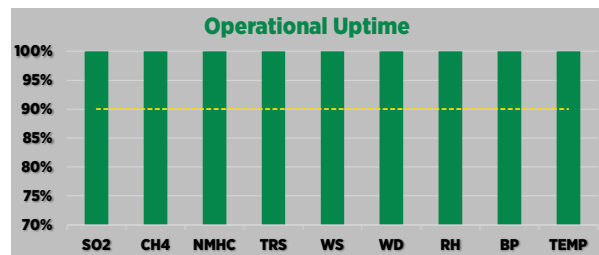
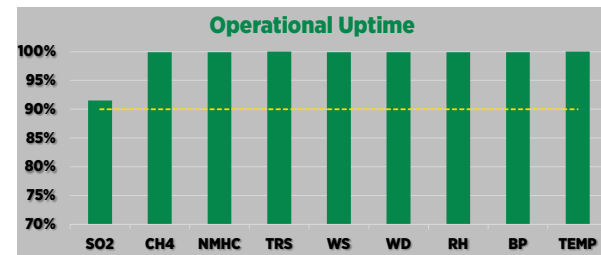
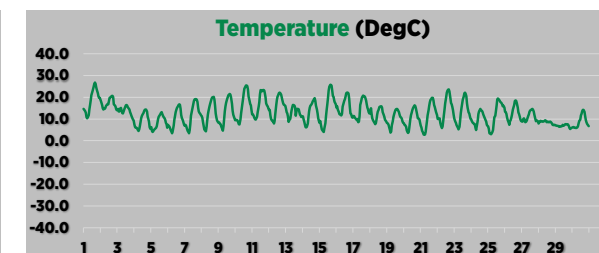
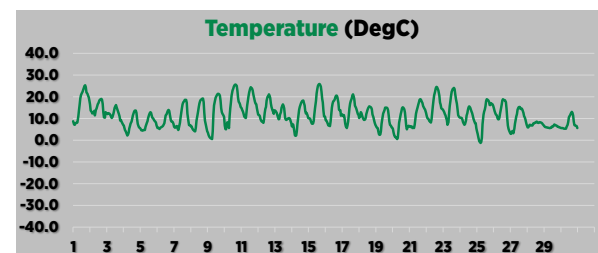
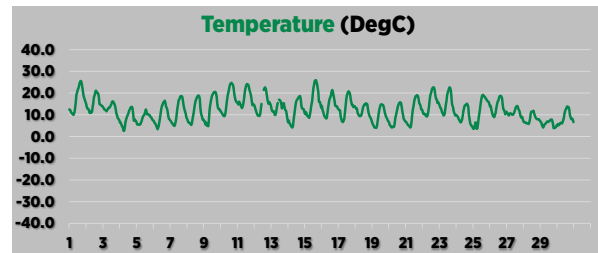
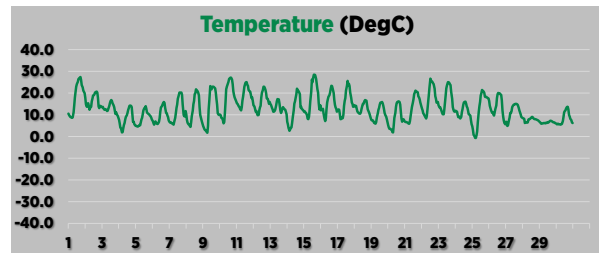
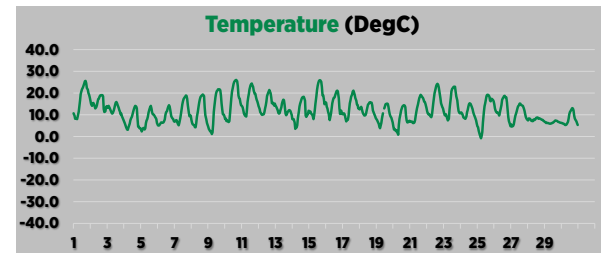
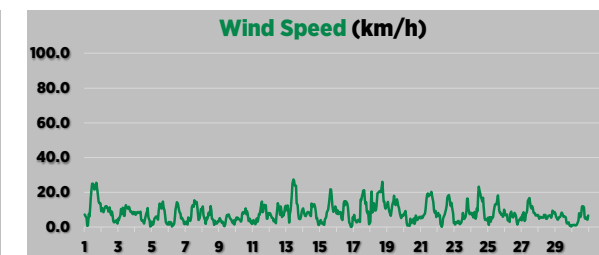
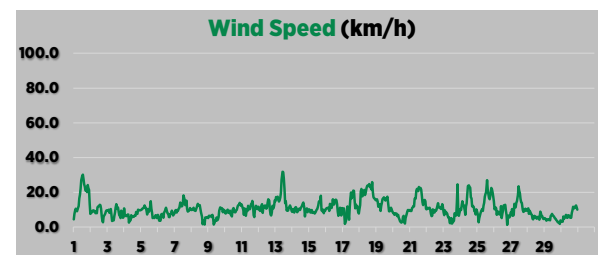
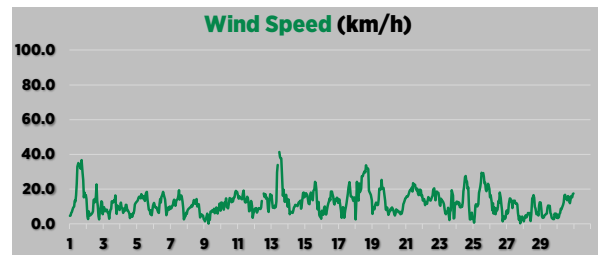
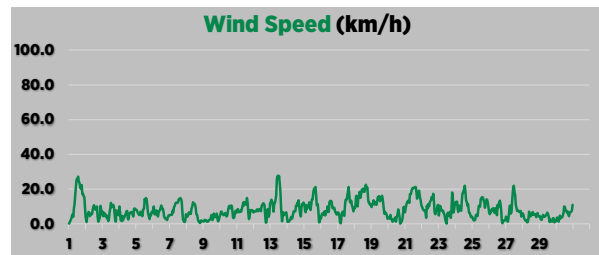
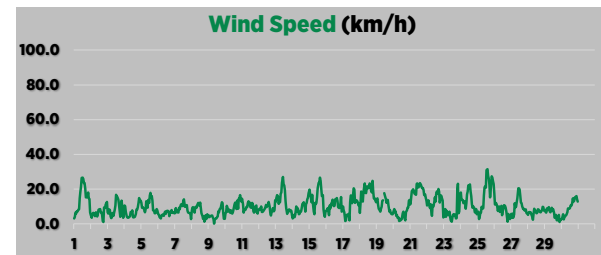
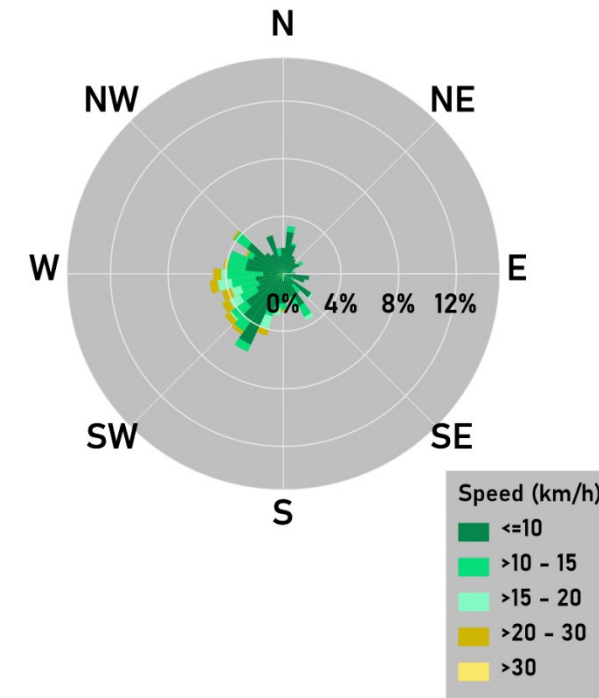
### Reno-B Station



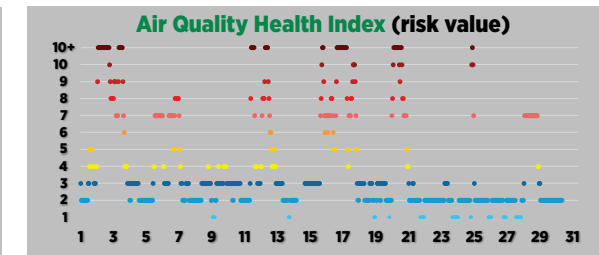
### PRC Station



### AQHI Station - Grimshaw



**Targets, Guidelines, and Objectives**  
 Sulphur Dioxide 1h AAAQO = 172 ppb  
 Ozone 1h AAAQO = 76 ppb  
 Particulate Matter (PM<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



1 2 3 4 5 6 7 8 9 10 >10  
 LOW RISK MODERATE RISK HIGH RISK VERY HIGH RISK