

# July 2023: Active Monitoring Program

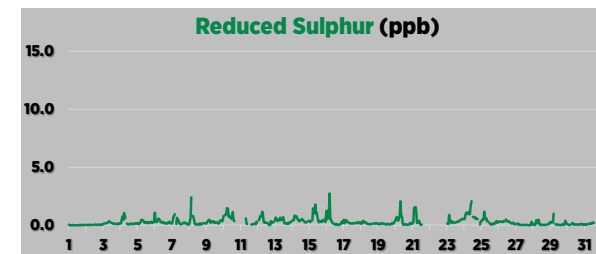
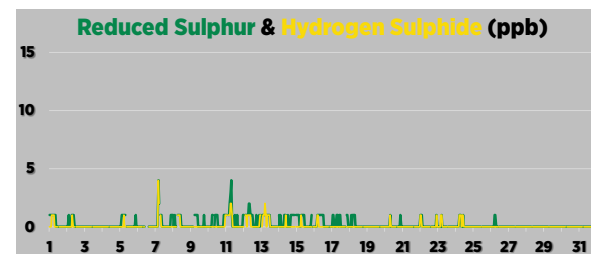
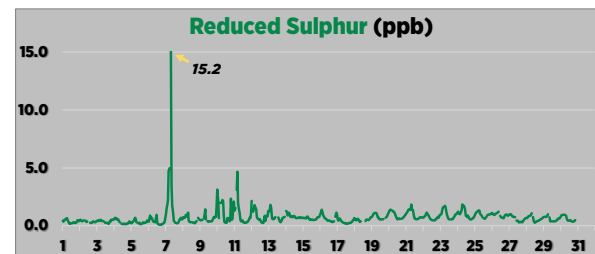
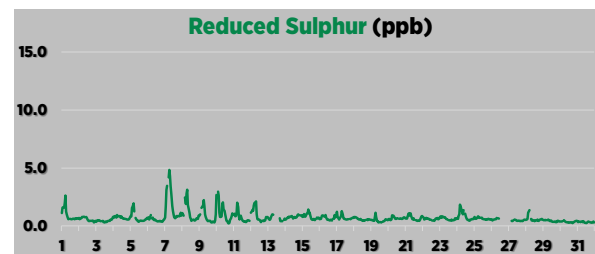
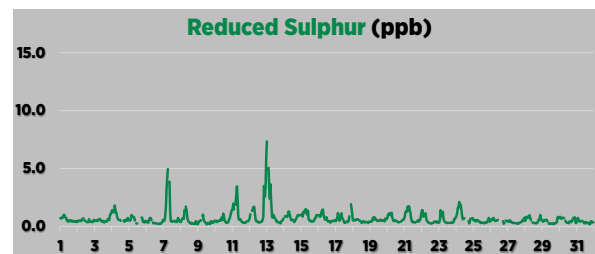
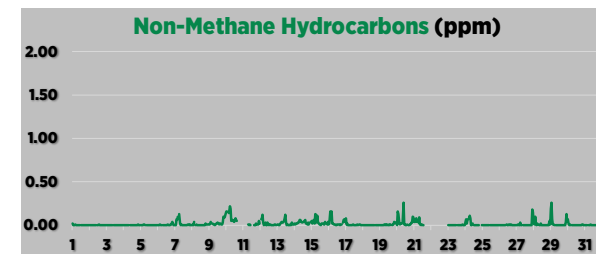
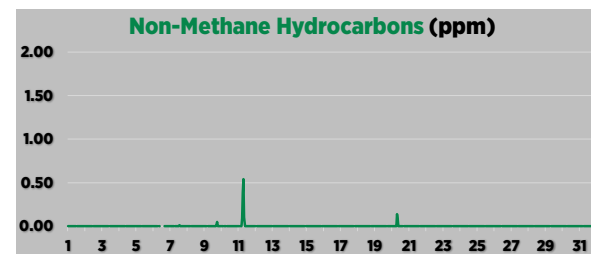
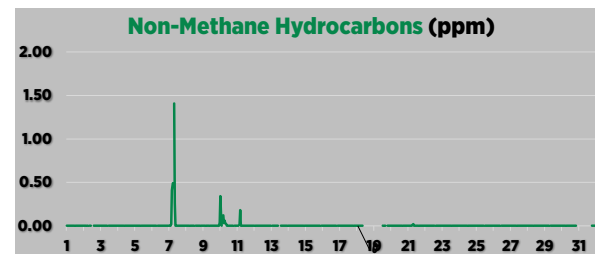
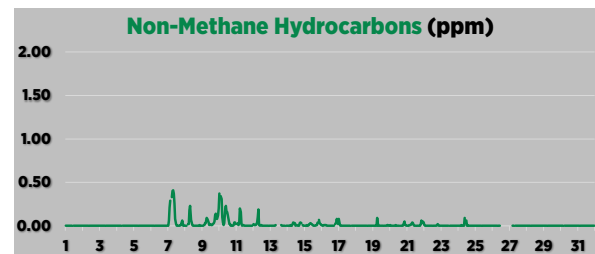
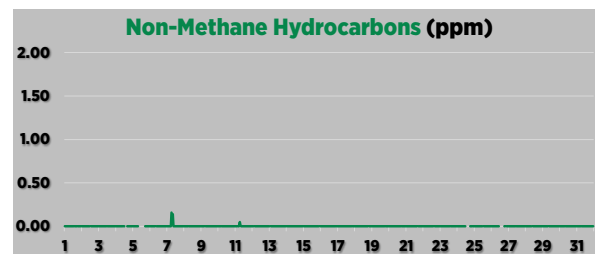
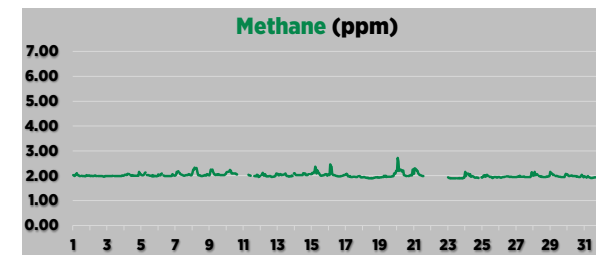
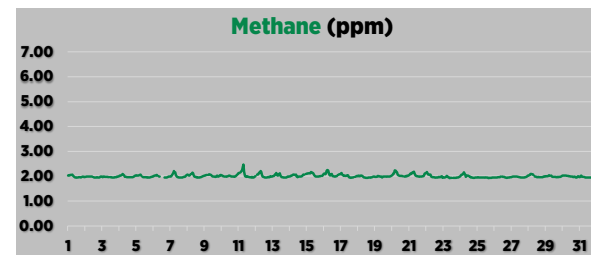
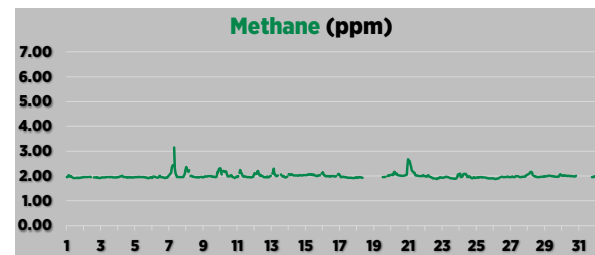
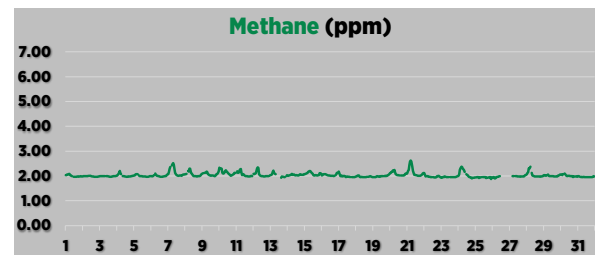
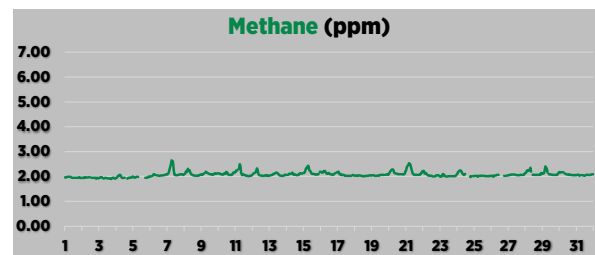
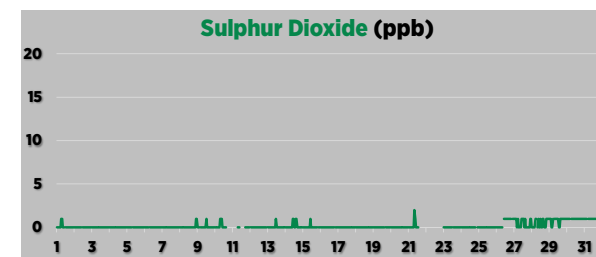
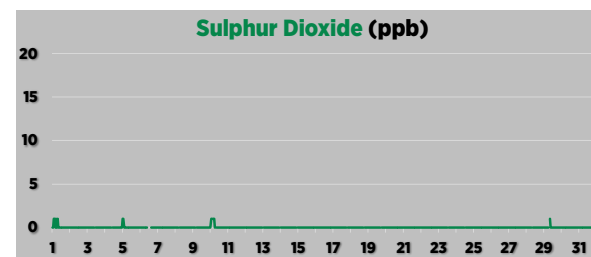
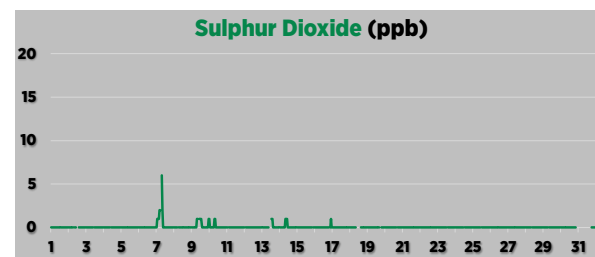
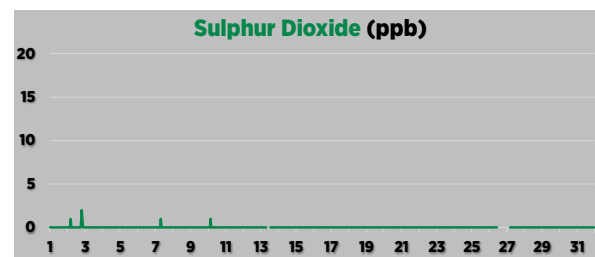
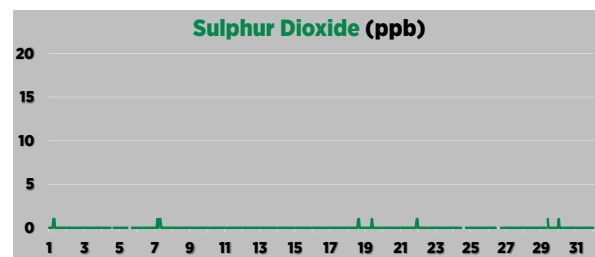
## 986-C Station

## 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.
- THC/CH4/NMHC:** The Thermo 55i failed the shut-down calibration due to frequent injection issues on July 5. The analyzer was removed and a replacement was installed. One-minute data were reviewed and discarded if data quality was affected by injection issues. Two hours of data collected on July 1 were invalidated as a result. **SO<sub>2</sub>:** The expected zero value was entered incorrectly on July 7. The error was corrected on July 15. As a result, the value was not used for the baseline correction between July 7 and 15.

### 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.
- THC/CH4/NMHC:** After a shut-down calibration on July 18, the contractor-owned Thermo 55i analyzer was removed, and PRAMP's Thermo 55i analyzer, was installed. The analyzer was allowed time to stabilize overnight. A successful installation calibration was completed on July 19. Twenty hours of downtime were recorded due to this event.

### PRC Station

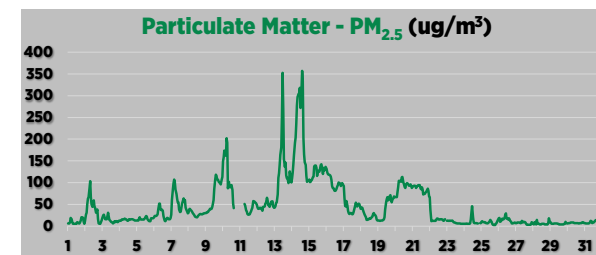
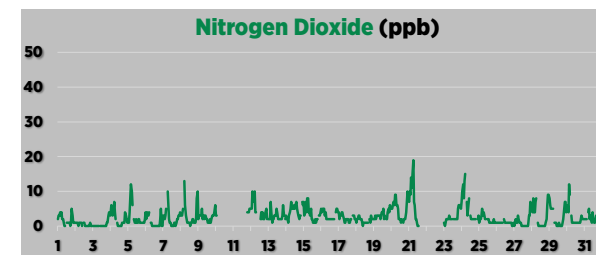
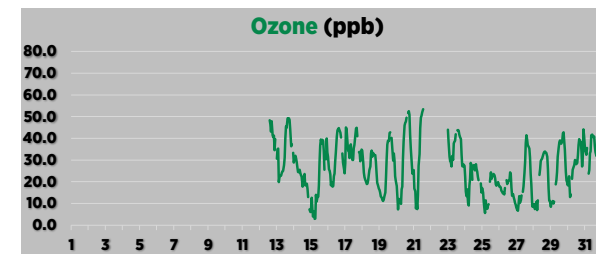
- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) where applicable.

### AQHI Station - Grimshaw

- All parameters met the 90% operational uptime requirement, except NO<sub>x</sub>/NO/NO<sub>2</sub> (89.9%) and O<sub>3</sub> (58.5% in July and 24.7% in June). AEPA reference #: 417906 and 417907, respectively.
- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) and /or Alberta Ambient Air Quality Guidelines (AAAQGs) where applicable, except PM<sub>2.5</sub>. One hundred sixty-three 1-hour PM<sub>2.5</sub> exceedances and thirteen 24-hour PM<sub>2.5</sub> exceedances were recorded this month. Both nearby and distant wildfires contributed to intense local wildfire smoke conditions.
- NO<sub>x</sub>/NO/NO<sub>2</sub>:** The analyzer failed both the daily zero-span check and the as-found points check on July 11. In the absence of a clear point of failure, data were discarded back to the last valid calibration, which was July 10. Thirty-five hours of downtime were recorded. With other events that led to an additional 30 hours of downtime, including the station HVAC failure and power outages, the 90% uptime requirement as not met.
- O<sub>3</sub>:** PRAMP's Teledyne T400 analyzer, failed the shut-down calibration on July 12 due to unstable/noisy readings. A contractor-owned Teledyne API 400A was installed and calibrated. In the absence of a clear point of failure, data were discarded back to the last valid multi-point calibration check, which was June 8. Two hundred seventy-two hours of data collected in July and five hundred forty-two hours of data collected in June were discarded.

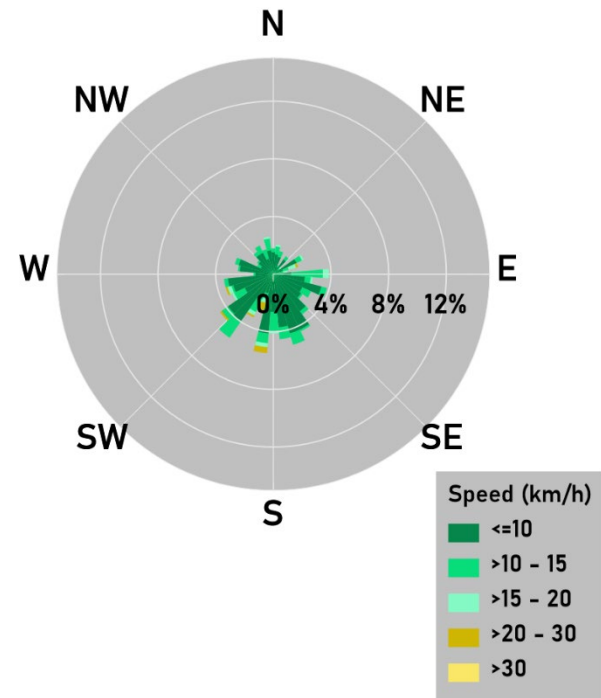
### NMHCs Canister Sampling Program

- Four canister events were collected in July 2023. The canister sampling program was temporarily paused between July 8 and July 31 due to wildfire smoke.

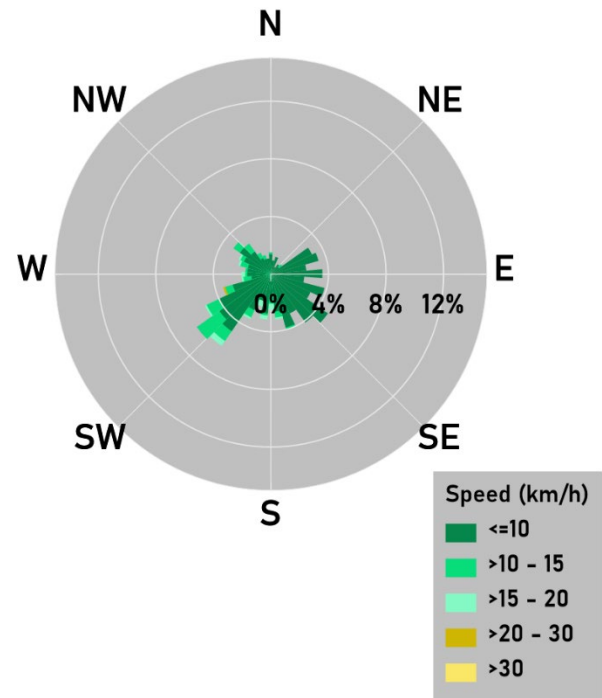


# July 2023: Active Monitoring Program

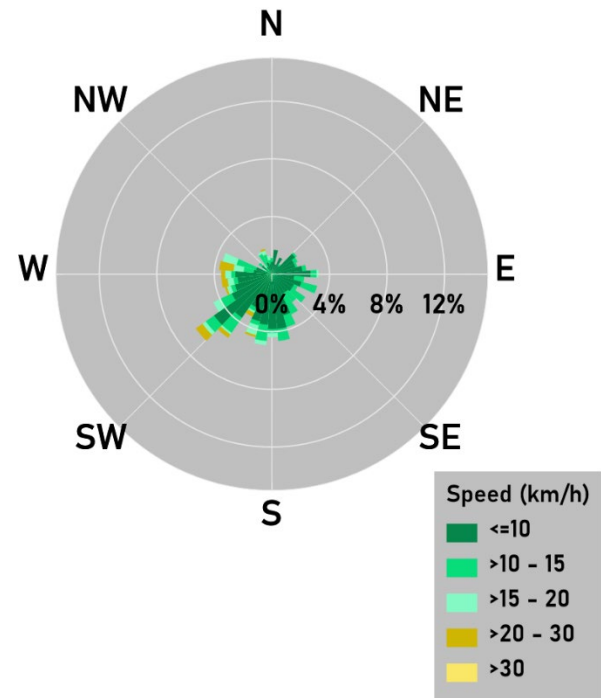
### 986-C Station



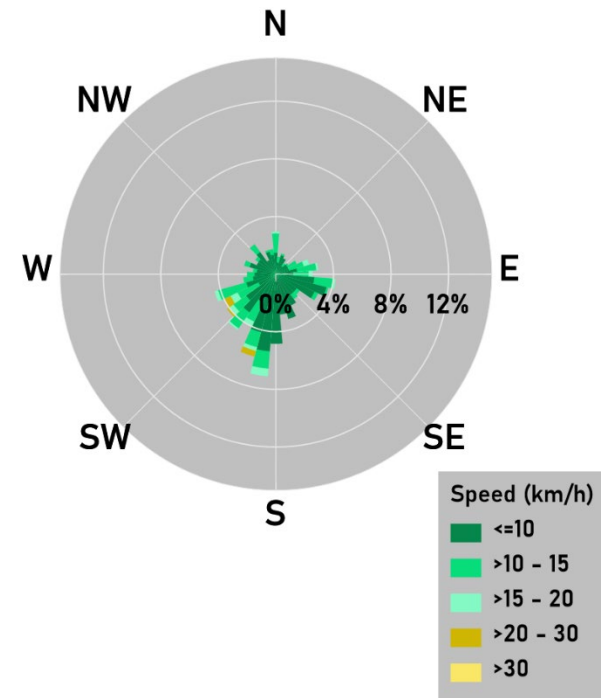
### 842-B Station



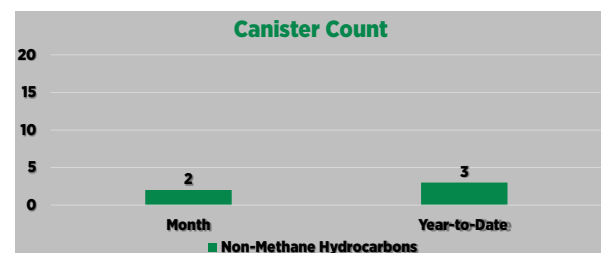
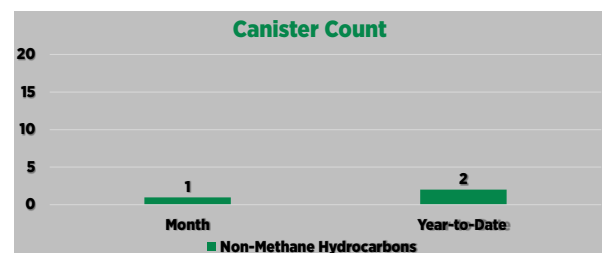
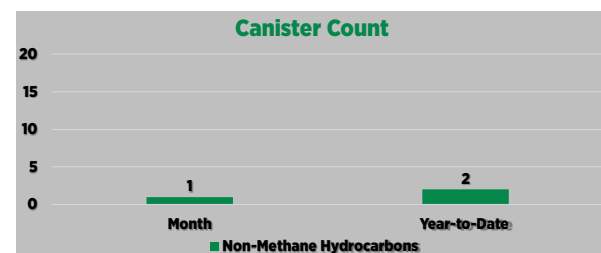
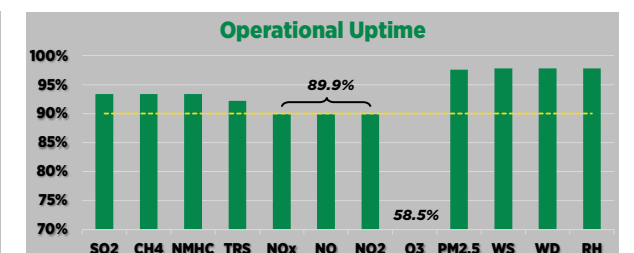
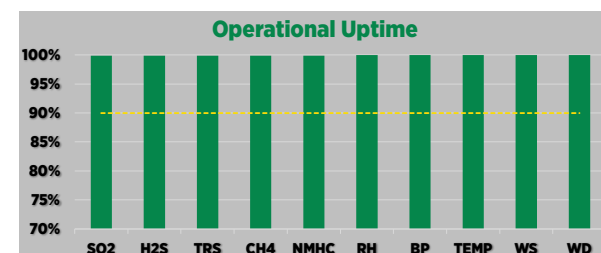
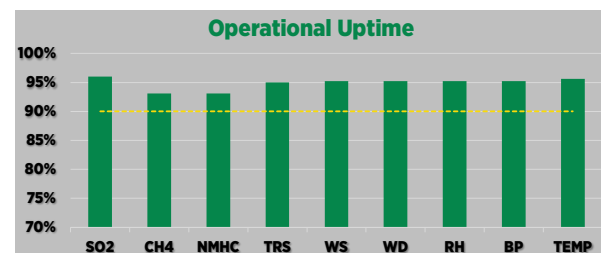
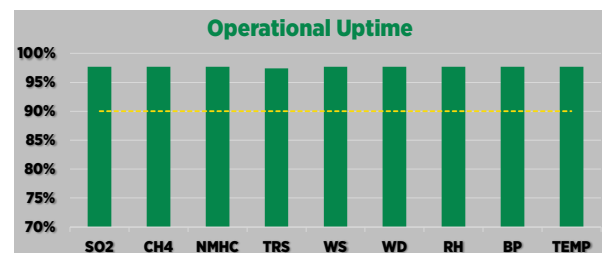
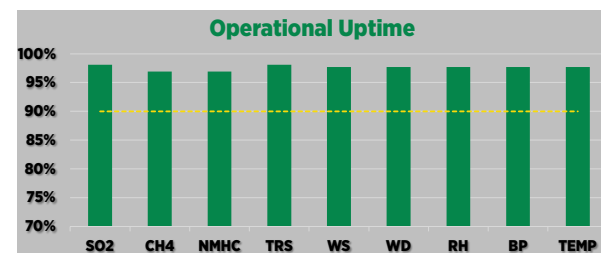
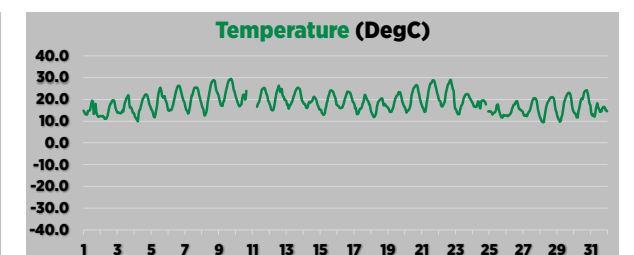
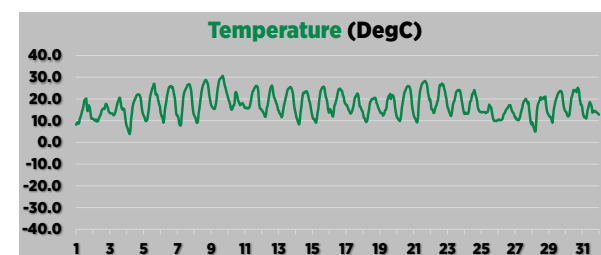
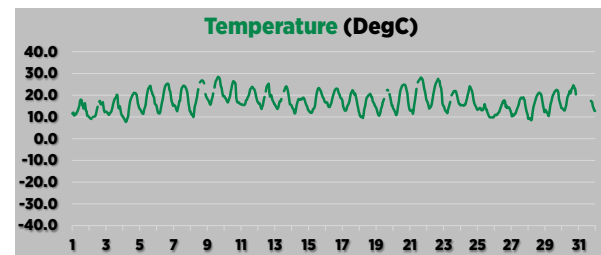
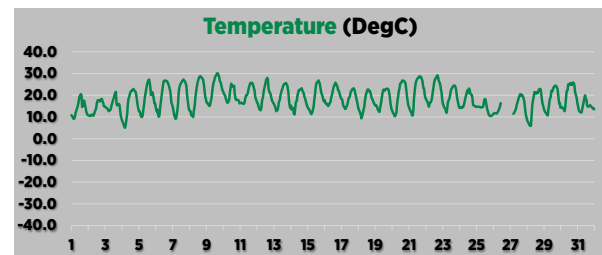
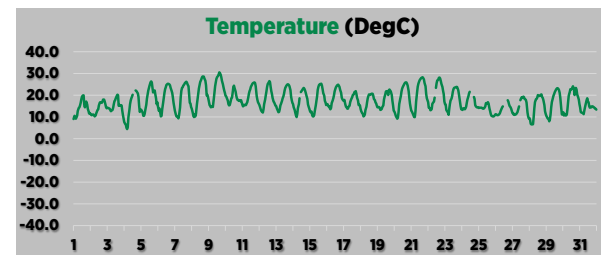
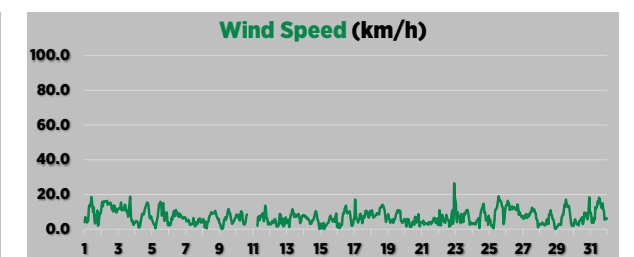
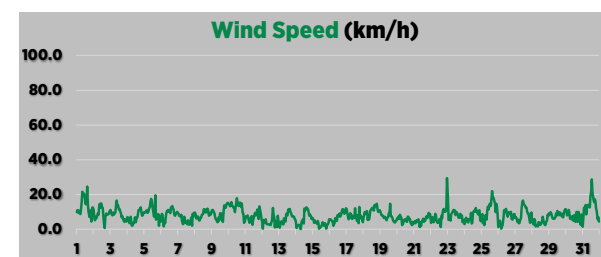
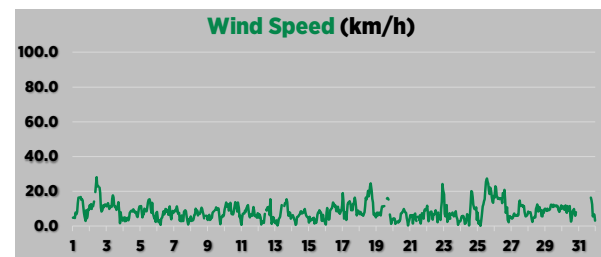
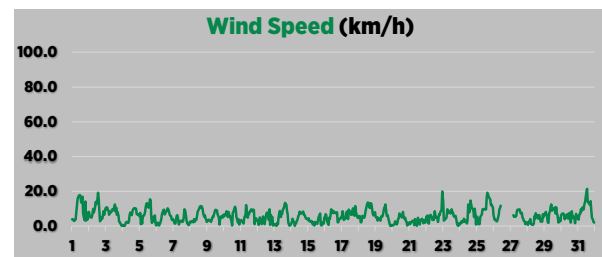
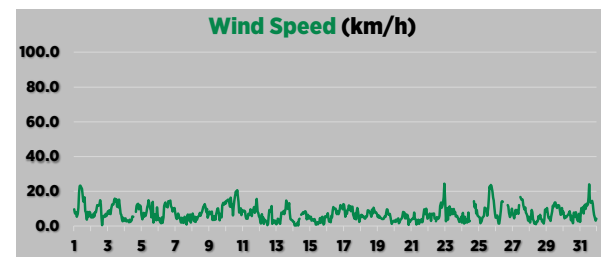
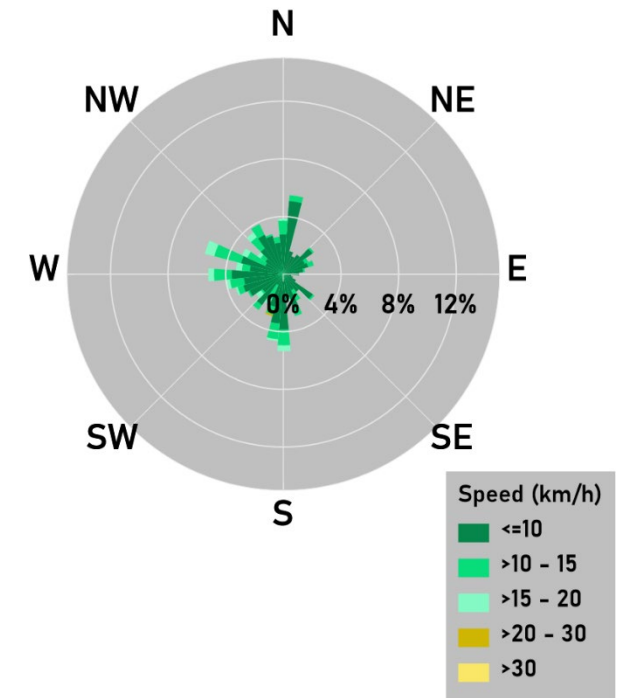
### Reno-B Station



### 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

