

# Canister Event Summary

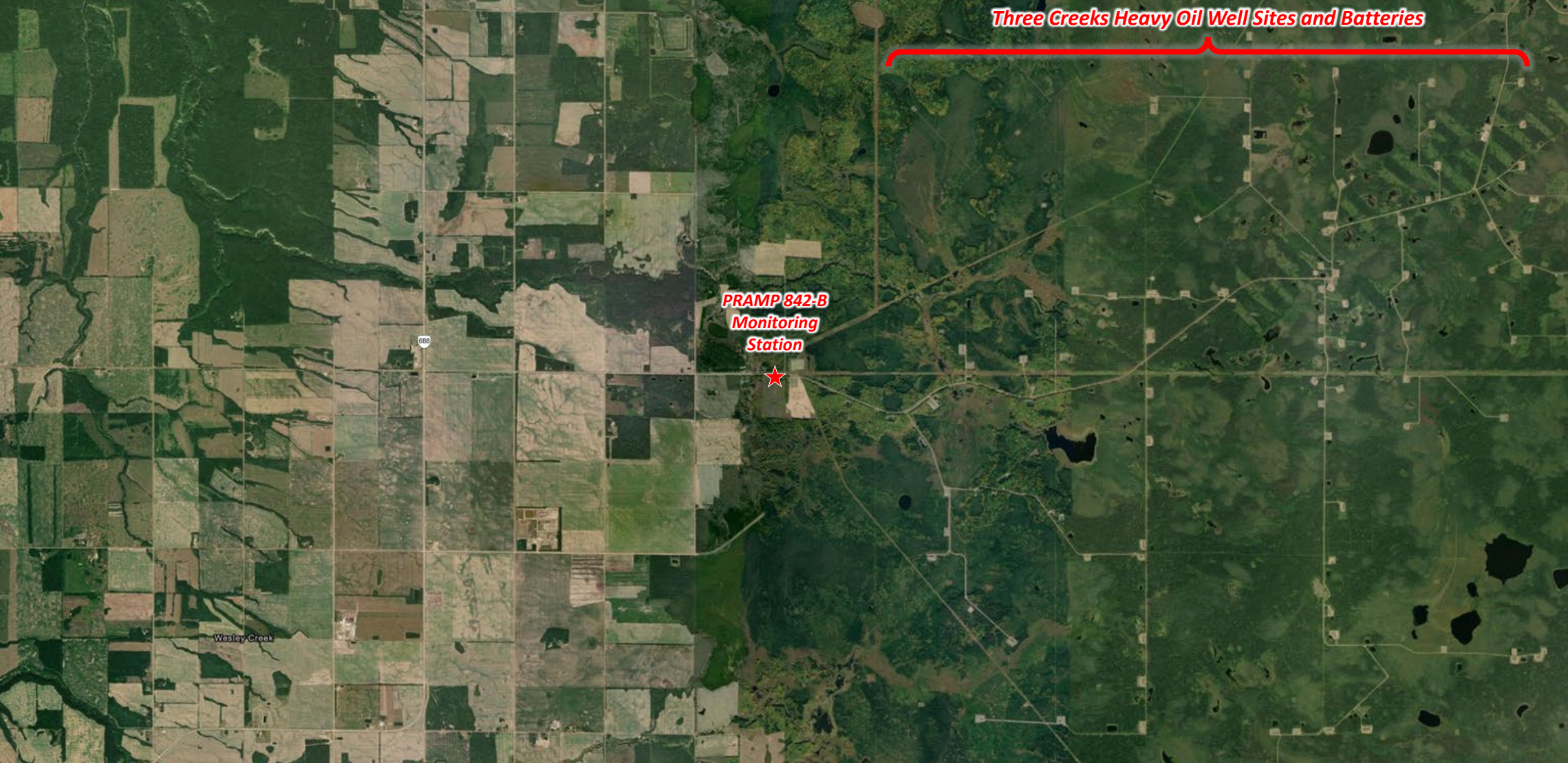
**PRAMP 842-B Monitoring Station**

**May 28, 2022, 14:15**

[pramptech@prampairshed.ca](mailto:pramptech@prampairshed.ca)



# 842-B Station Area Overview

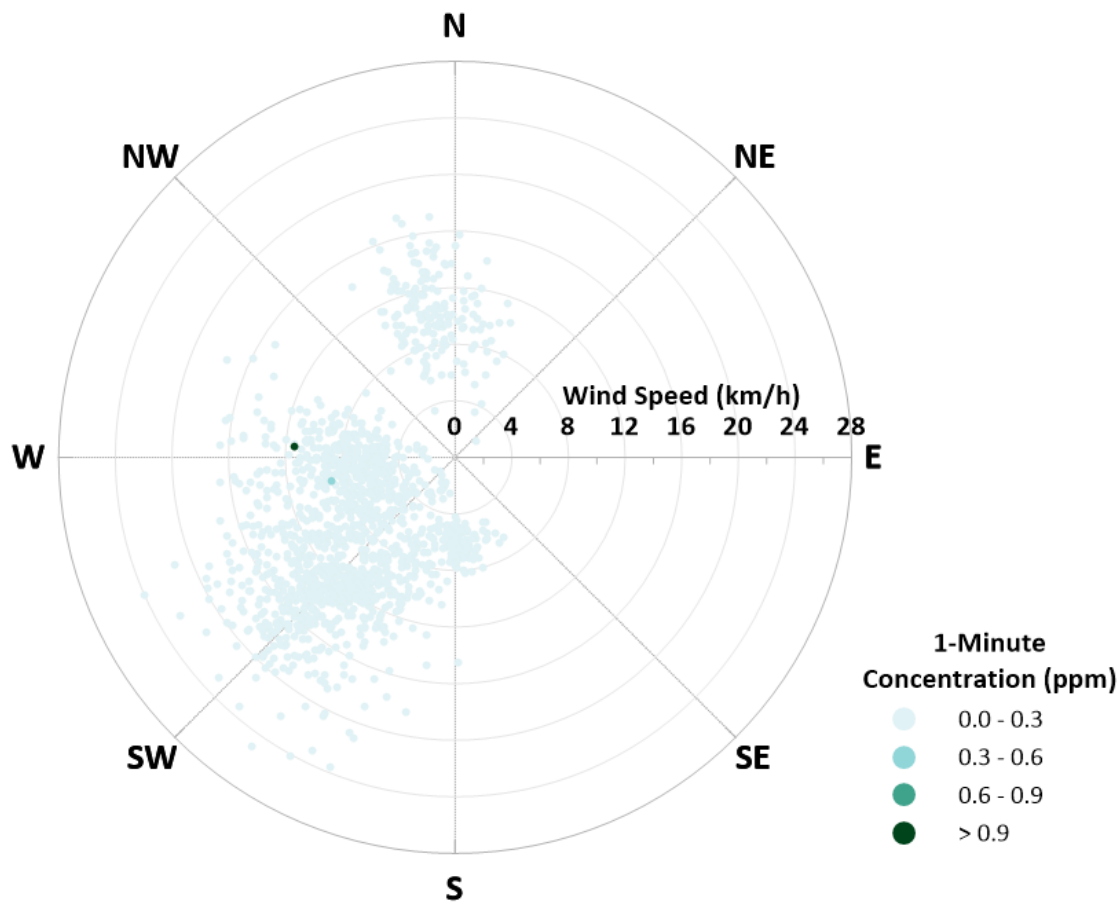


# 842-B Non-Methane Hydrocarbons Summary

## Non-Methane Hydrocarbon Concentration

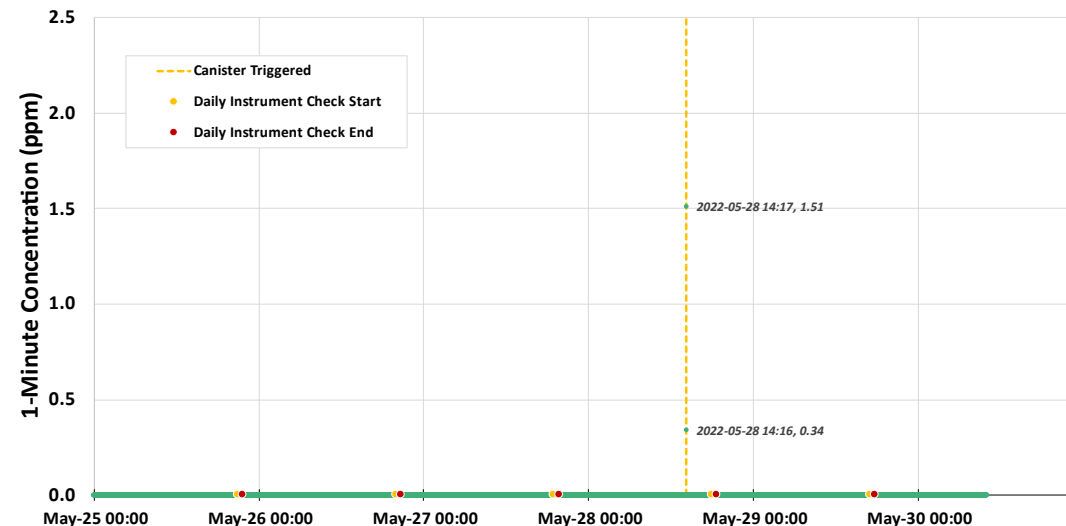
### Frequency Distribution

May 28, 2022 00:00 - 23:59



## Non-Methane Hydrocarbon Concentration Time Series

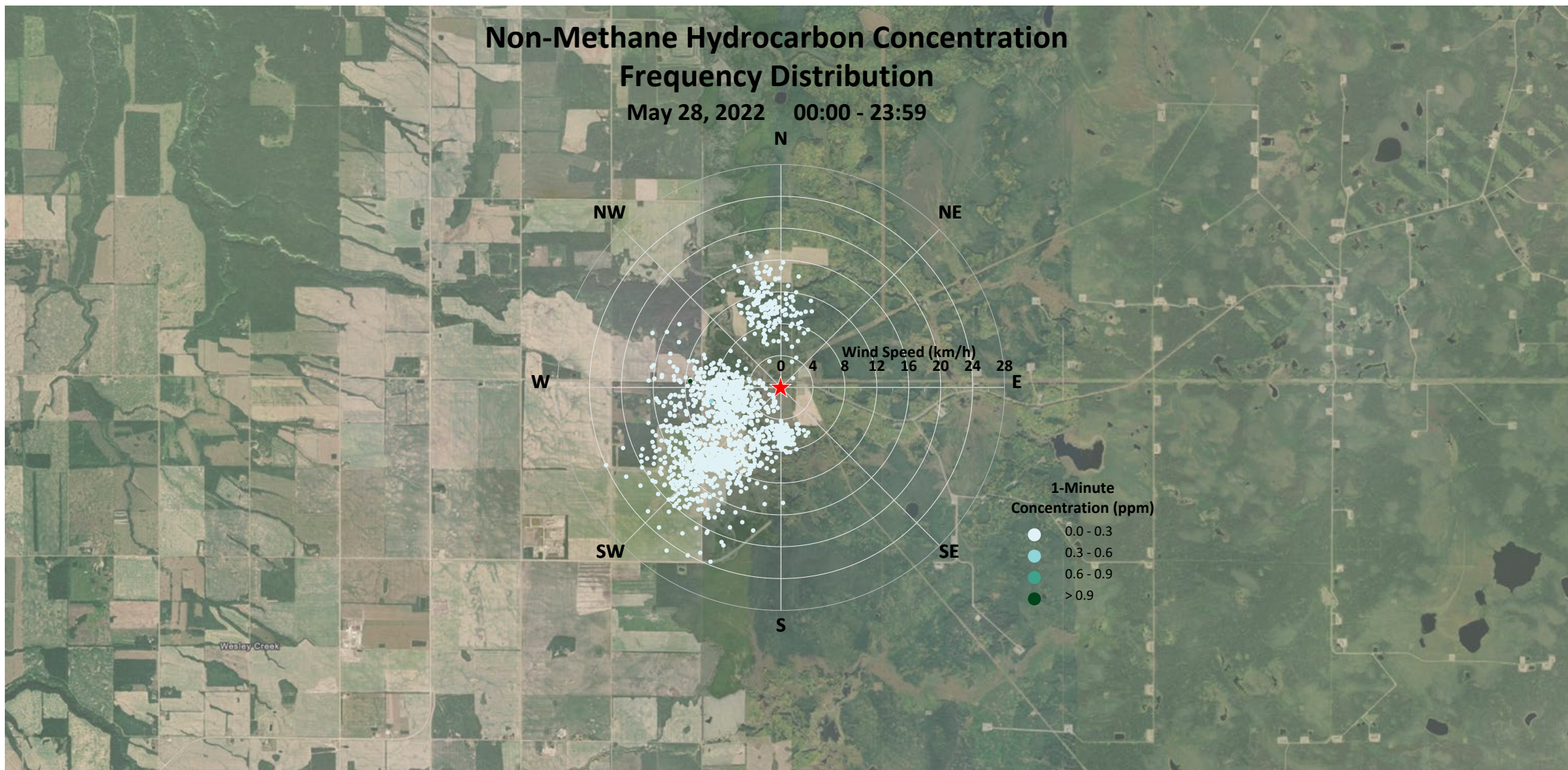
May 25-31, 2022



### NOTES

- A canister was triggered at PRAMP's 842-B Station on May 28 at 14:15. The canister was triggered by a continuously monitored non-methane hydrocarbon concentration of 0.37 ppm (expressed as a 5-minute average).
- Wind was from the west and the wind speed was 10 km/h.
- The visualizations presented in this summary plot 1-minute data. Air quality data are not typically presented as 1-minute averages (1-hour averages are more commonly used for regulatory reporting) however this shorter integration time is useful for assessing ephemeral events such as odour issues, fugitive emissions, and for understanding triggered canister events in the PRAMP network.
- Time Series Chart (above)
  - Each dot on the time series chart represents a 1-minute average concentration.
  - The time series presents 1-minute data from May 25, 2022 00:00 to May 30, 2022 23:59 (5-day period).
- Frequency Distribution Chart (left)
  - The frequency distribution chart presents 1-minute data for May 28, 2022 from 00:00 – 23:59 (24-hour period).
  - Each dot on the frequency distribution chart represents a 1-minute average concentration.
  - Each dot's placement on the polar plot indicates the direction the wind was coming from at the time the concentration was measured.
  - The closer a dot is to the centre of the polar plot, the lower the wind speed was at the time the concentration was measured.
  - Darker dots represent higher concentrations (as described in the legend).
  - The event was very short in duration with only 2 minutes of non-zero concentrations being recorded. Heavy oil operations were downwind from the station *during* and for several hours *before and after* the canister was triggered (next page).

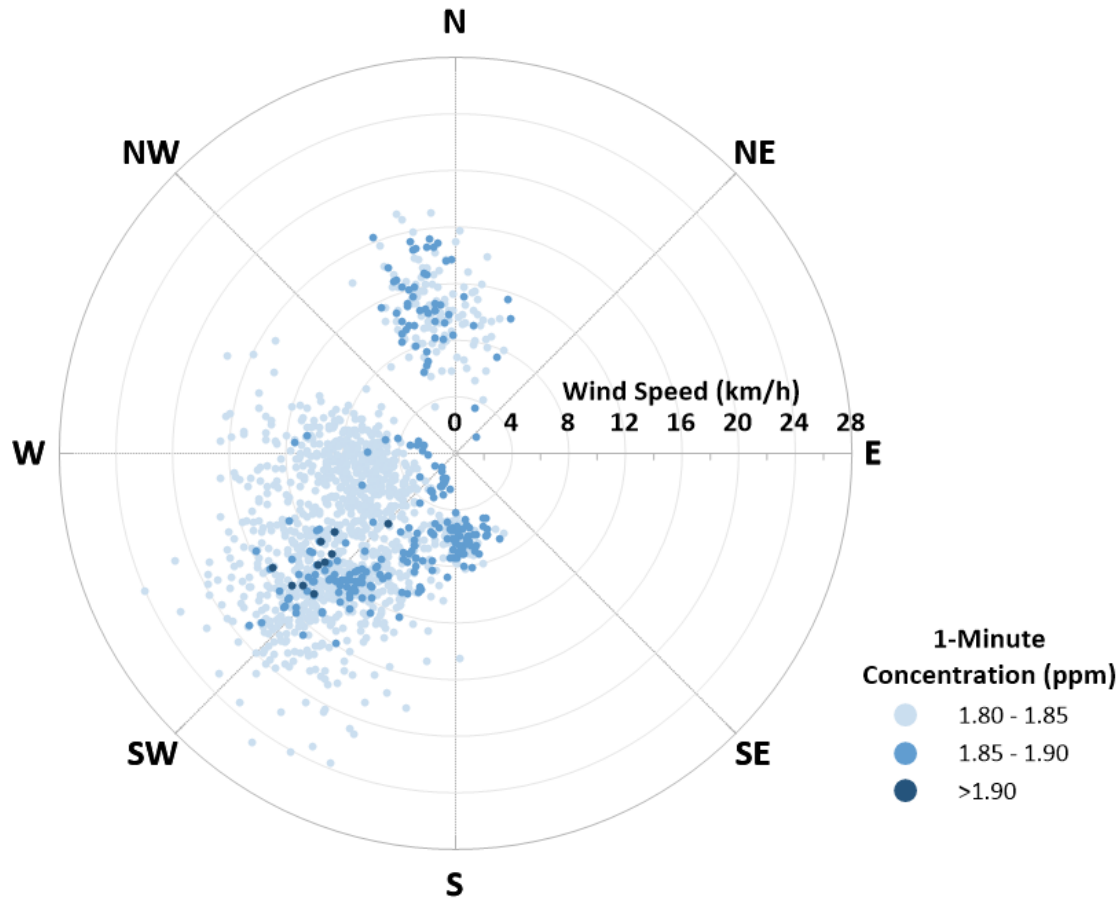
# 842-B Non-Methane Hydrocarbons Summary



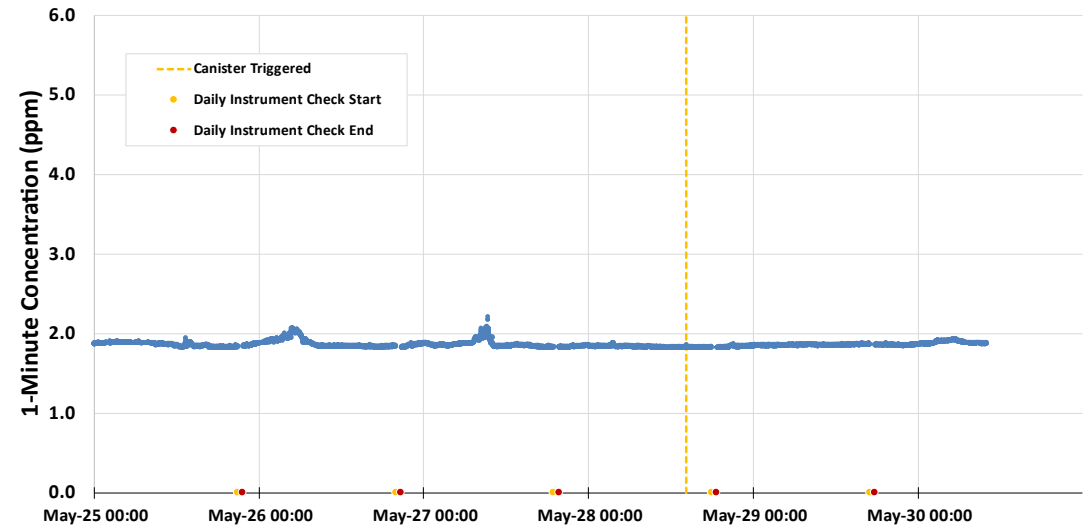
# 842-B Methane Summary

## Methane Concentration Frequency Distribution

May 28, 2022 00:00 - 23:59



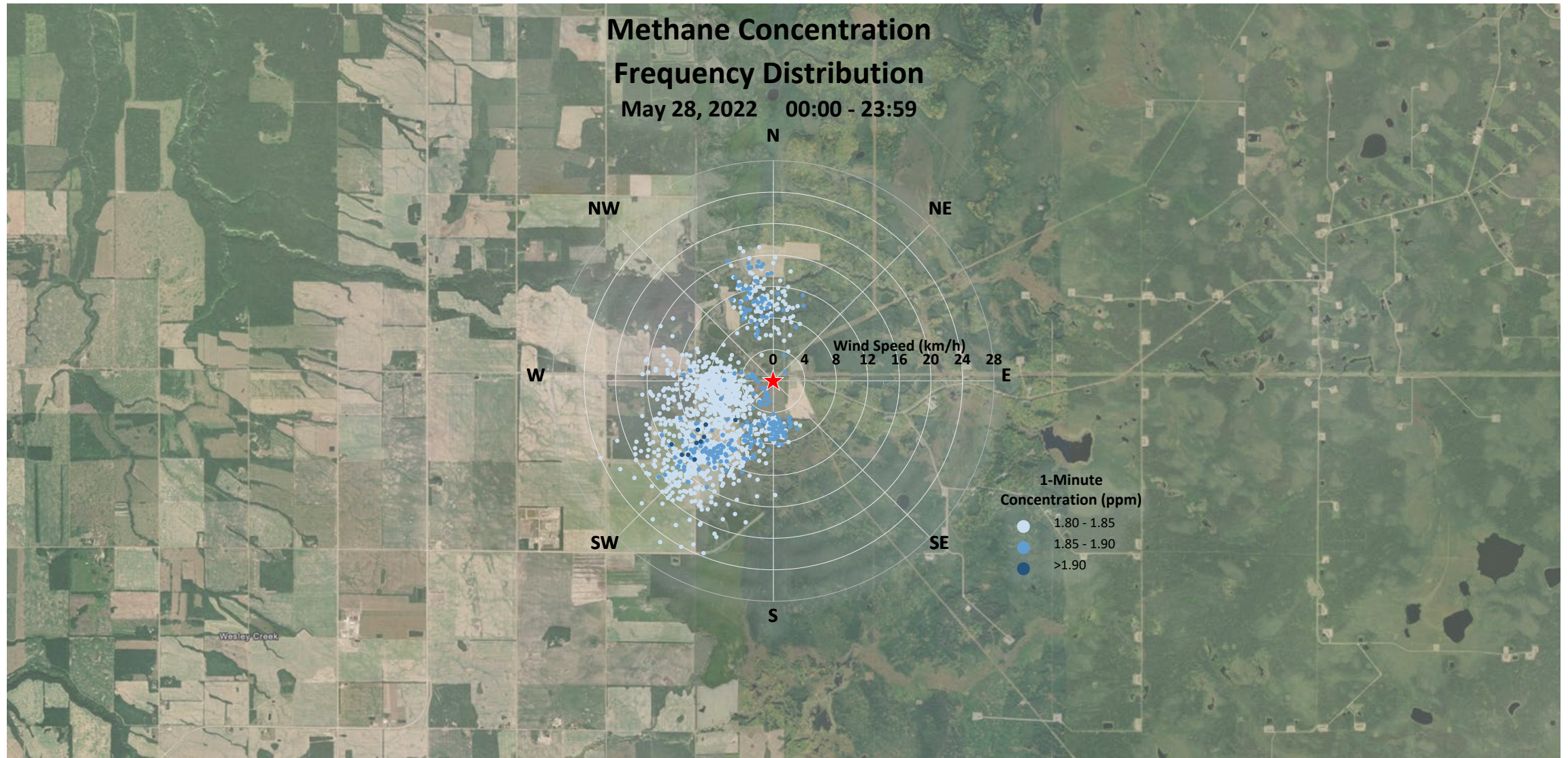
## Methane Concentration Time Series May 25-31, 2022



### NOTES

- Methane is included in this summary for comparison purposes (no canisters were triggered for collection by elevated methane concentrations).
- Methane is often released with non-methane hydrocarbons in fugitive emissions from upstream oil and gas activity.
- Monitoring data indicates that methane was at or near background concentrations (1.80ppm) at the time the canister was triggered.

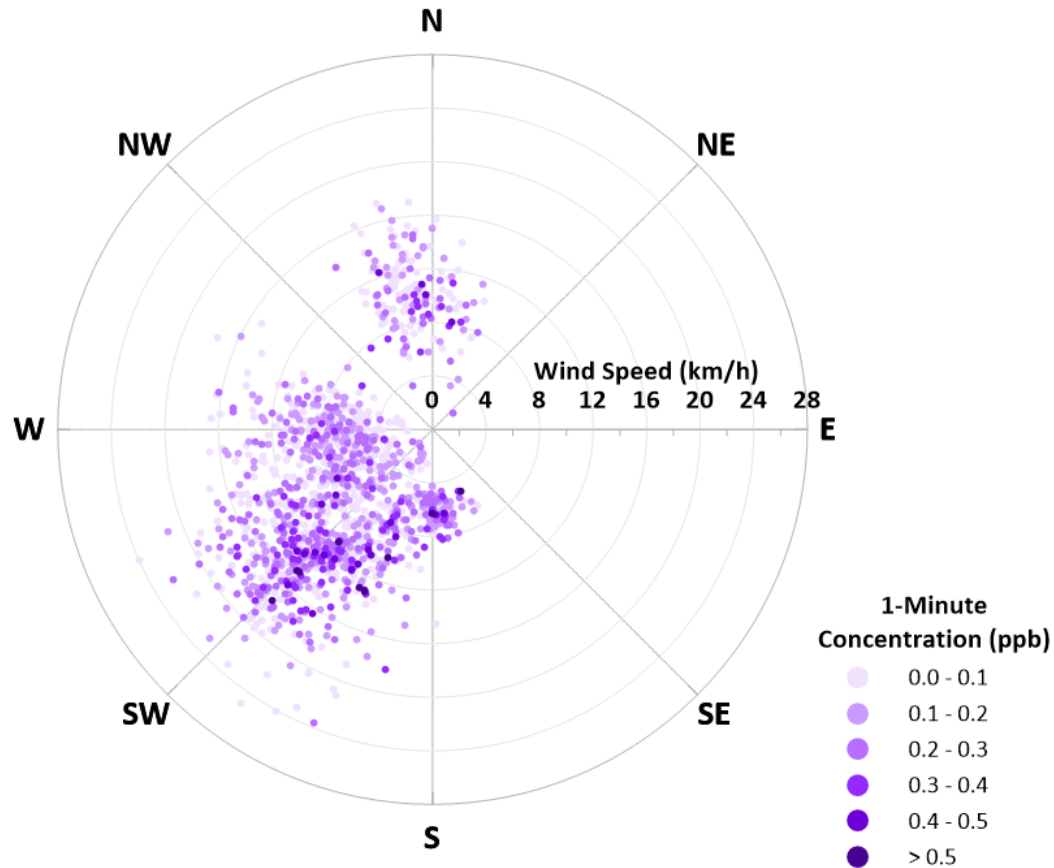
# 842-B Methane Summary



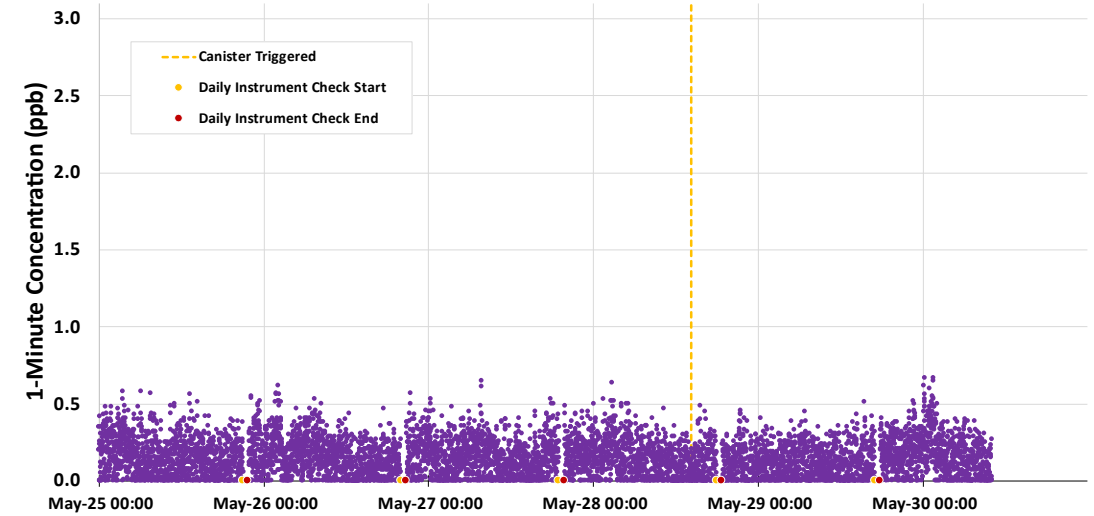
# 842-B Total Reduced Sulphur Summary

## Total Reduced Sulphur Concentration Frequency Distribution

May 28, 2022 00:00 - 23:59



## Total Reduced Sulphur Concentration Time Series May 25-31, 2022



### NOTES

- Total reduced sulphur is included in this summary for comparison purposes (no canisters were triggered for collection by elevated reduced sulphur compounds).
- Sulphur compounds *may* be released with non-methane hydrocarbons in fugitive emissions from upstream oil and gas activity.
- Monitoring data indicates that there is no correlation between elevated non-methane hydrocarbons and total reduced sulphur compounds. Reduced sulphur compounds were generally very low.

# 842-B Total Reduced Sulphur Summary

