

Meeting Support Slides

PRAMP Board of Directors

September 8, 2023

2.1 Data Reports

May 2023: Active Monitoring Program



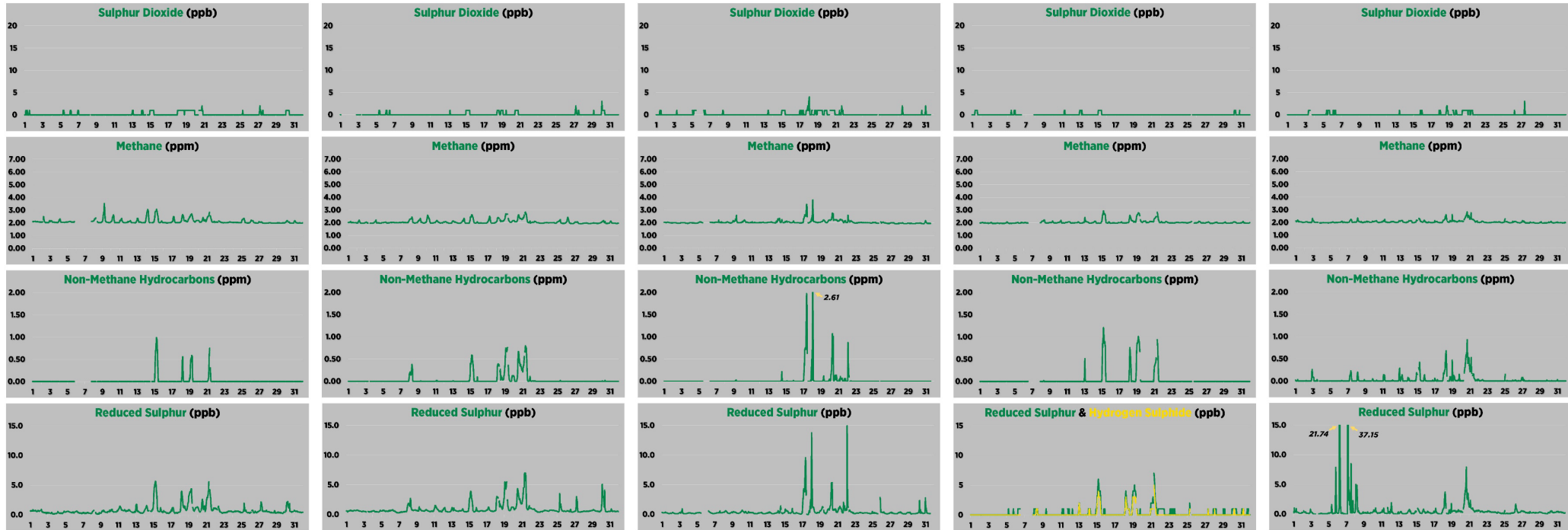
986-C Station

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. *THC/CH4/NMHC*: The PRAMP-owned Teledyne T701H failed on May 5 following a brief power outage. A contractor-supplied API T701 was installed on May 7. Forty-six hours of downtime were recorded due to this event.

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

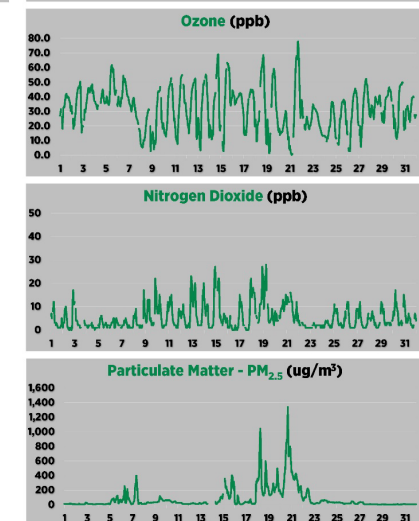
- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAQOs) where applicable.

AQHI Station – Grimshaw

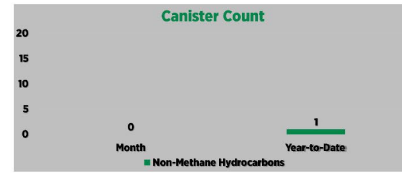
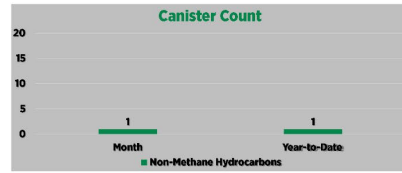
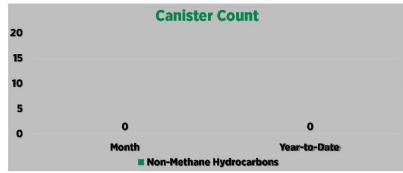
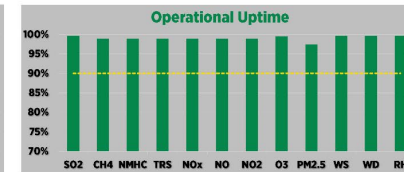
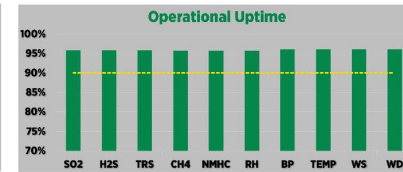
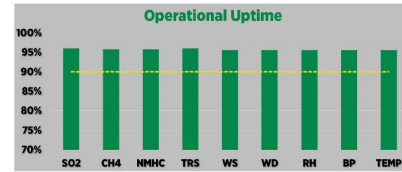
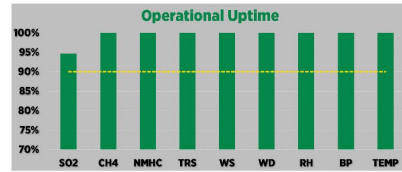
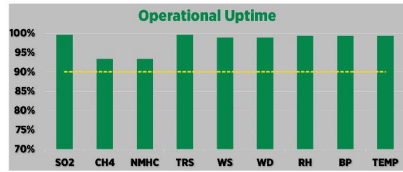
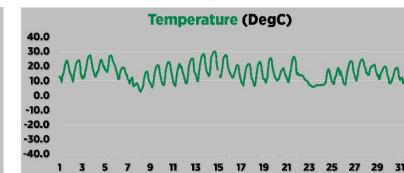
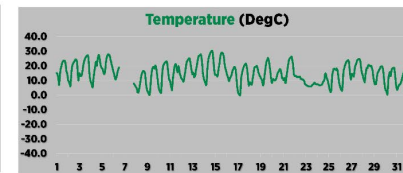
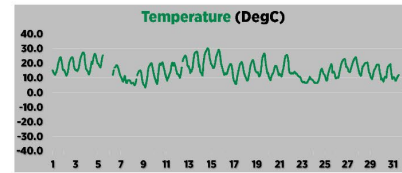
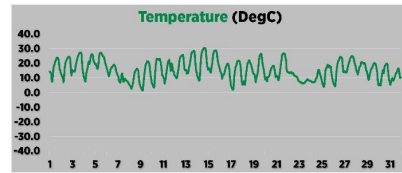
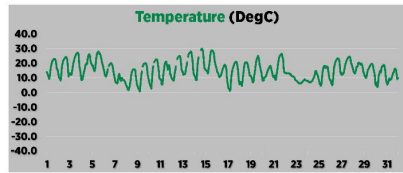
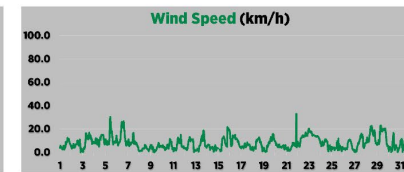
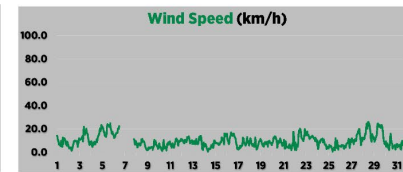
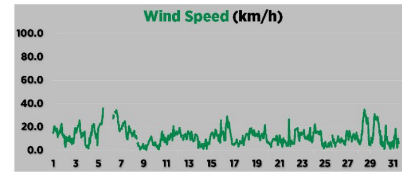
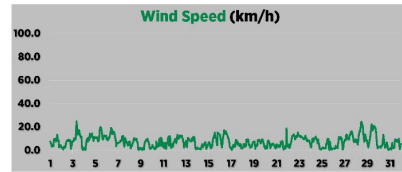
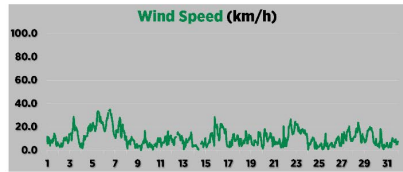
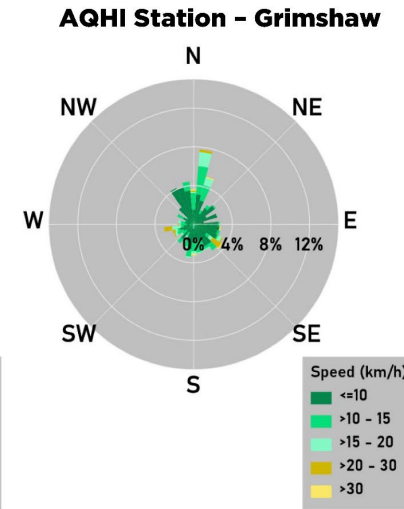
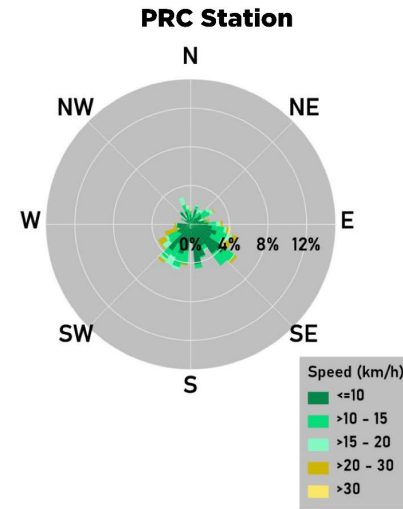
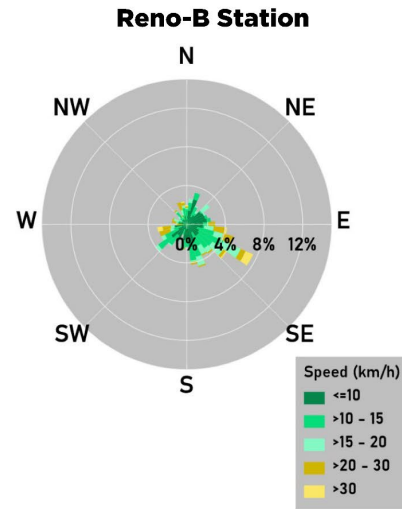
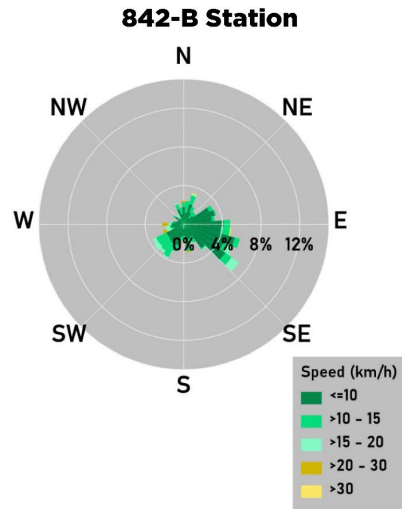
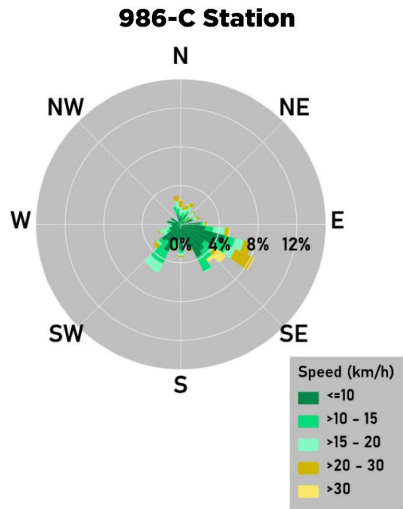
- No major operational issues this month that resulted in reportable downtime events. Measured parameters were below Alberta Ambient Air Quality Objectives (AAQOs) and/or Alberta Ambient Air Quality Guidelines (AAAGs) where applicable, except PM_{2.5} and O₃. One hundred sixty-four 1-hour PM_{2.5} exceedances, fourteen 24-hour PM_{2.5} exceedances and 2 1-hour O₃ exceedances were recorded this month. *TRS*: Following a successful shut-down calibration on May 3, the contractor-supplied Thermo 43i-TLE analyzer, was removed and the PRAMP-owned Teledyne T100U analyzer was installed.

NMHCs Canister Sampling Program

- One canister event was recorded at the 842-B station at 06:35 on May 8, at concentration of 0.30ppm. The canister sampling program was temporarily paused between May 8-30 due to wildfire smoke.

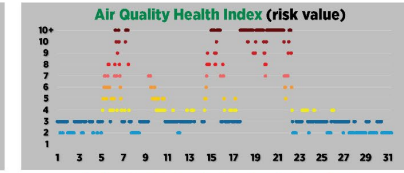


May 2023: Active Monitoring Program



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



June 2023: Active Monitoring Program



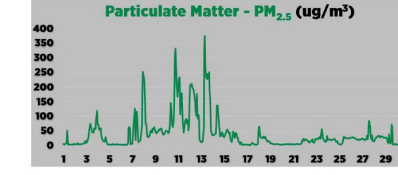
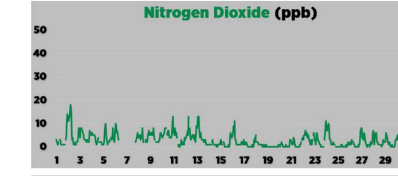
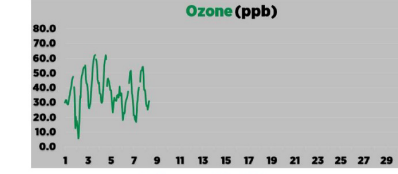
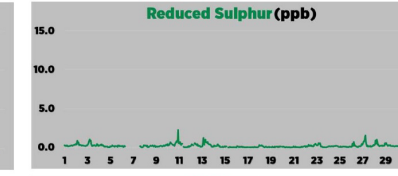
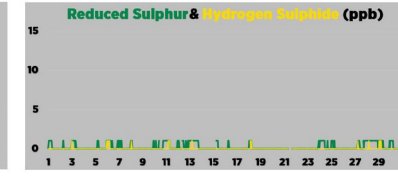
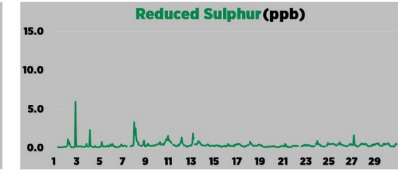
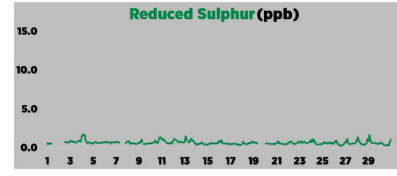
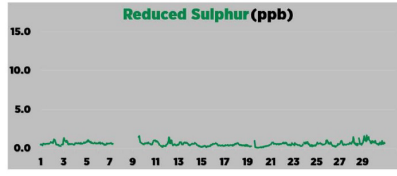
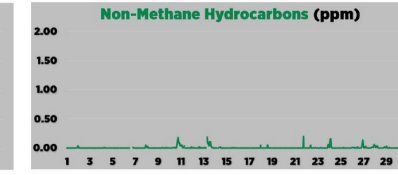
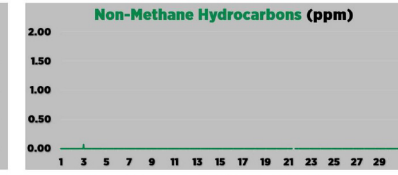
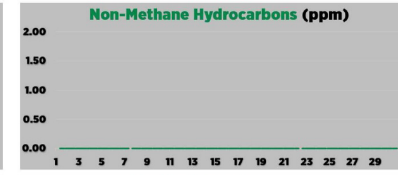
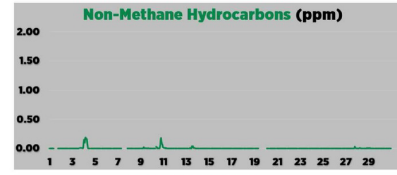
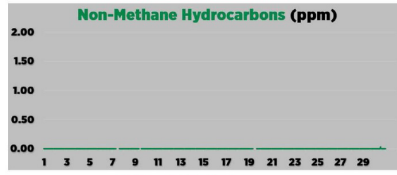
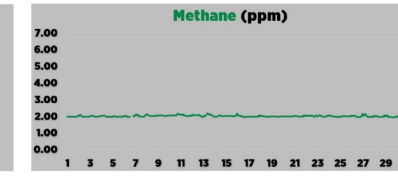
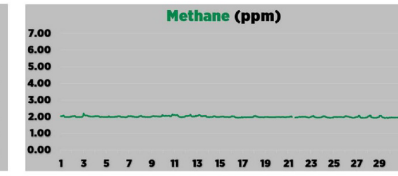
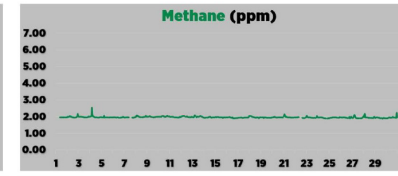
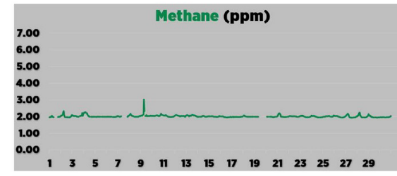
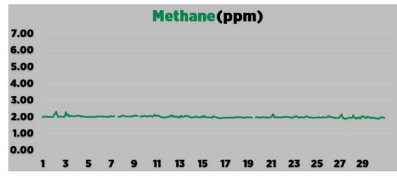
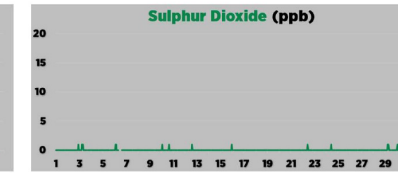
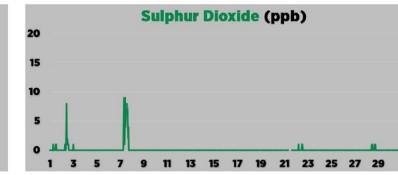
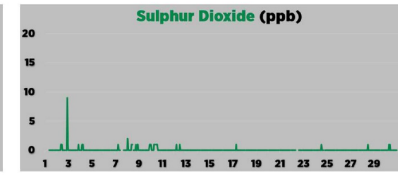
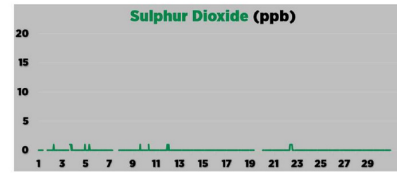
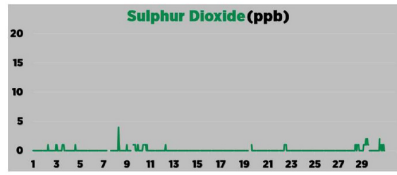
986-C Station

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. *TRS:* The TRS convertor failed to recover after June 7's power outage. On June 9, contractor supplied CD Nova CDNI01 convertor was removed and the PRAMP's CD Nova CDNI01 convertor was installed. Forty-five hours of downtime were recorded due to this event. *All parameters:* Eleven hours of downtime were recorded due to power outages on June 7 and June 19.

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. *All parameters:* Twenty-eight hours of downtime were recorded due to power outages on June 7, 19, and 20. *TRS:* A monthly calibration was attempted on June 1, but the calibration results were determined invalid due to a technician error. The calibration was repeated on June 2. Data collected between the two calibrations were considered invalid and were discarded. Twenty-two hours of downtime were recorded.

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. *All gas parameters:* Due to the failure of the Envidas poll manager program on June 7, the scheduled daily zero-span checks results were lost. The datalogger was remotely reset on June 7 hour 16. June 8's zero-span checks ran as scheduled. All analyzers passed the check requirements. *All parameters:* Due to datalogger errors, no data were collected from May 31 hour 14 to June 1 hour 8. The datalogger was remotely reset to correct the issue. Nine hours of downtime were recorded.

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.

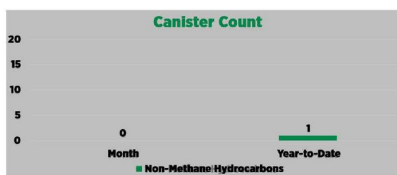
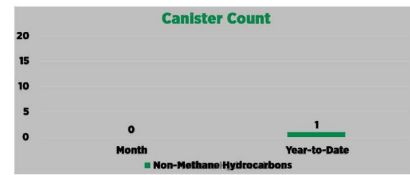
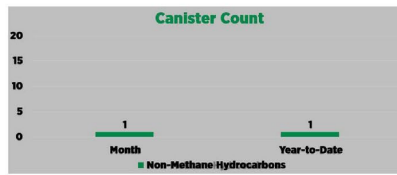
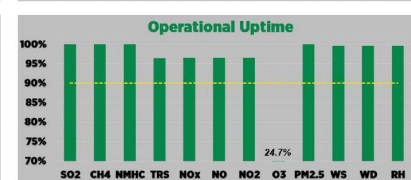
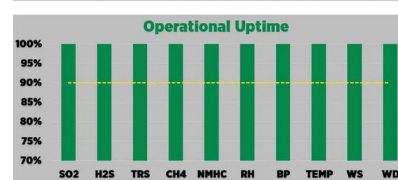
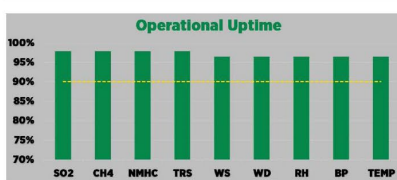
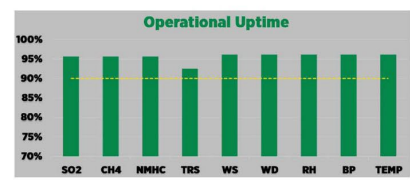
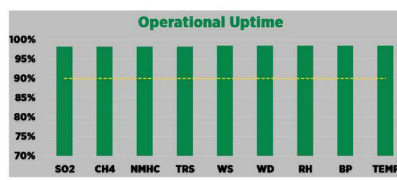
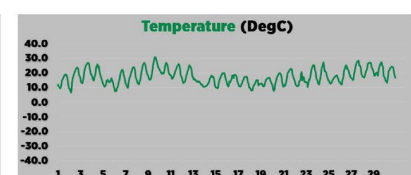
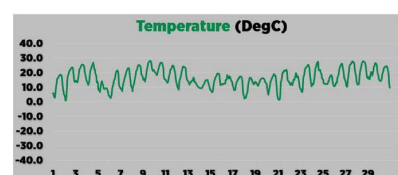
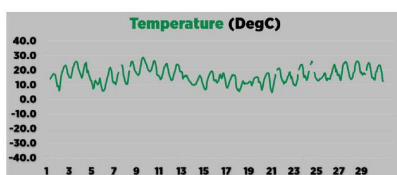
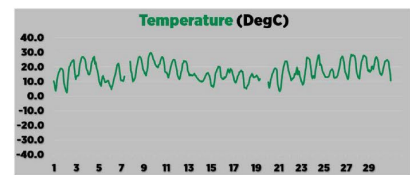
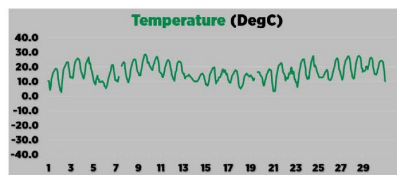
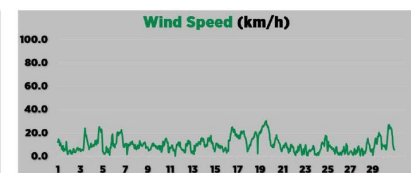
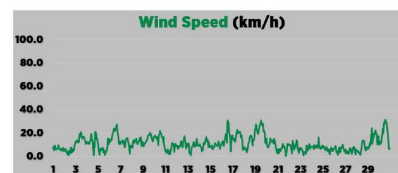
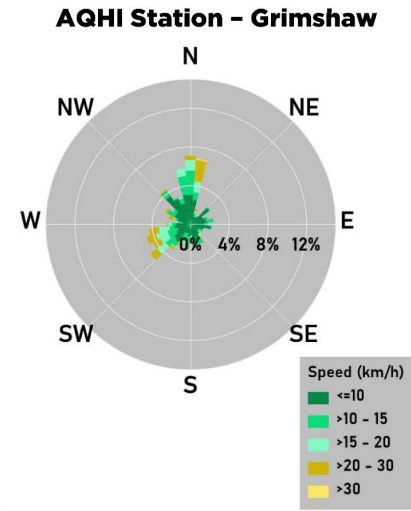
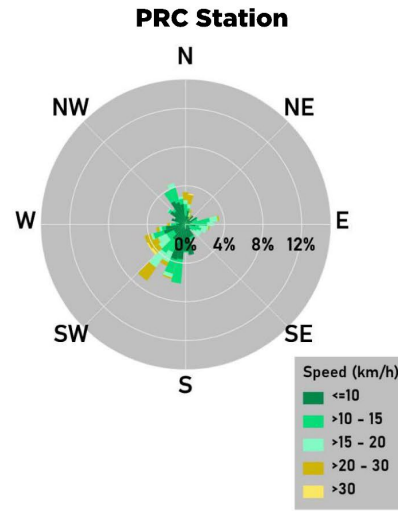
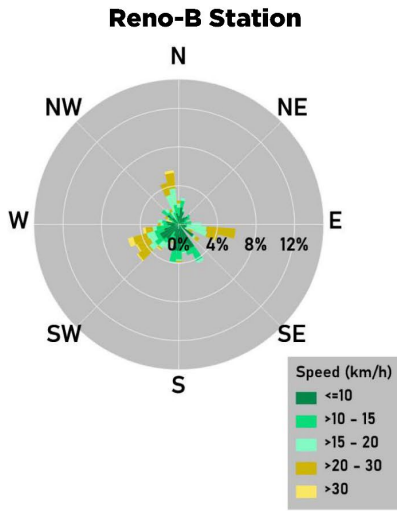
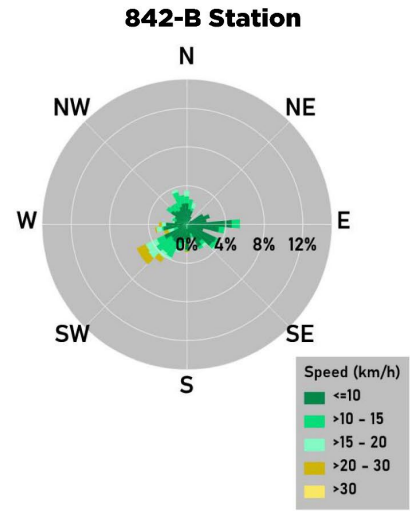
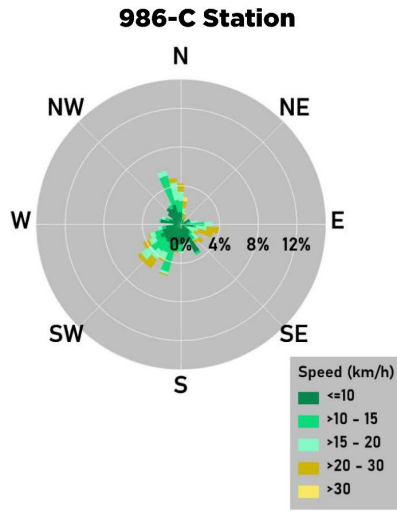
AQHI Station – Grimshaw

- Measured parameters were below Alberta Ambient Air Quality Objectives (AAAQOs) and /or Alberta Ambient Air Quality Guidelines (AAAQGs) where applicable, except PM_{2.5}. Eighty-seven 1-hour PM_{2.5} exceedances and eleven 24-hour PM_{2.5} exceedances were recorded this month. *O3:* PRAMP's Teledyne T400 analyzer failed the shut-down calibration on July 12 due to unstable/noisy readings. The analyzer was removed, and the contractor supplied Teledyne API 400A analyzer 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

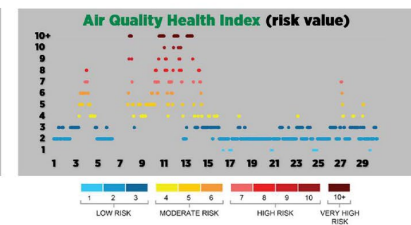
- One canister event was recorded at the 986-C station at 13:45 on June 30, at concentration of 0.34ppm.

June 2023: Active Monitoring Program



Targets, Guidelines, and Objectives

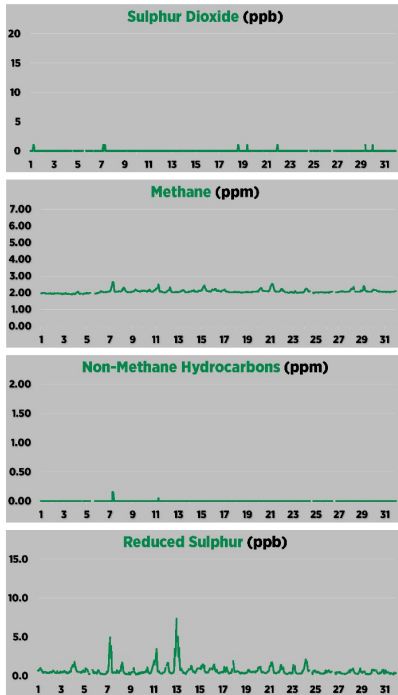
- Sulphur Dioxide 1h AAAQO = 172 ppb
- Ozone 1h AAAQO = 76 ppb
- Particulate Matter (PM_{2.5}) 1h AAAQO = 80 ug/m³
- Nitrogen Dioxide 1h AAAQO = 159 ppb
- Operational Uptime Requirement = 90%
- AQHI Risk Value = 1-3 Low, 4-6 Moderate, 7-10 High, >10 Very High



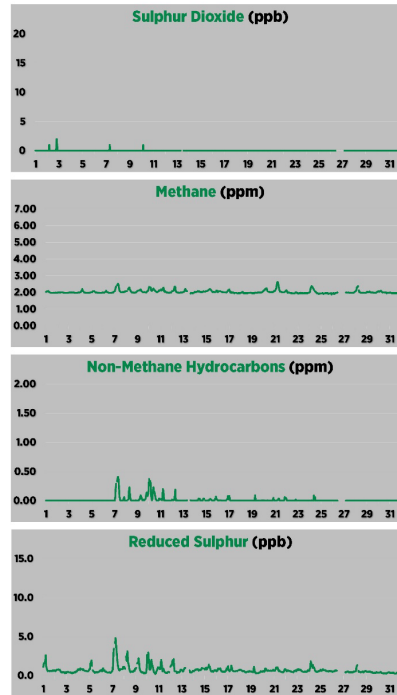
July 2023: Active Monitoring Program



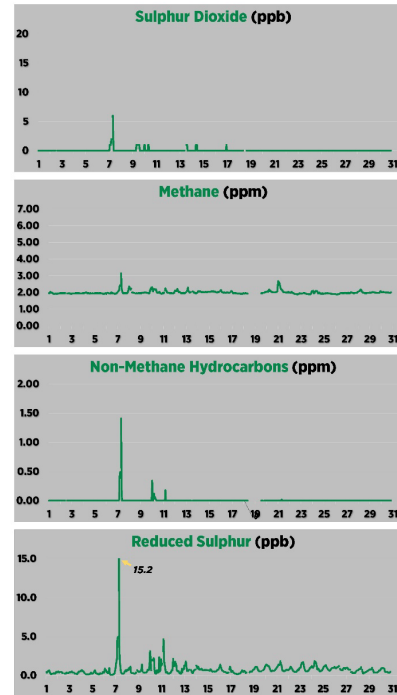
986-C Station



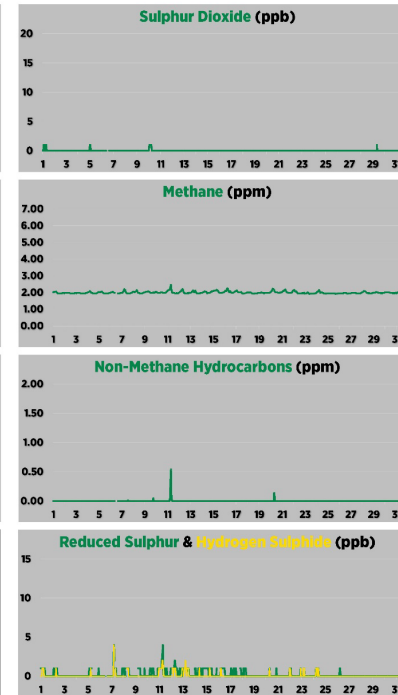
842-B Station



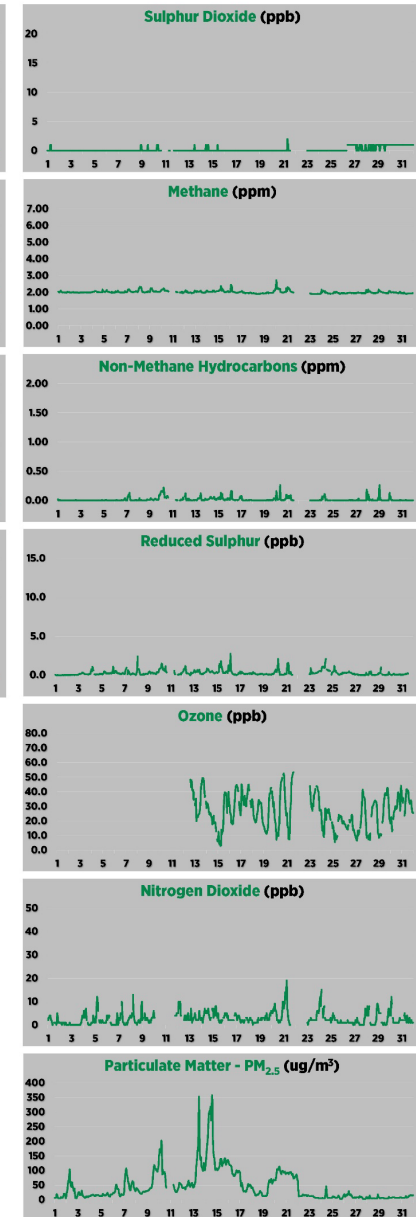
Reno-B Station



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 (AAQOs) 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. *SO2*: 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 (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.
- *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 (AAQOs) where applicable.

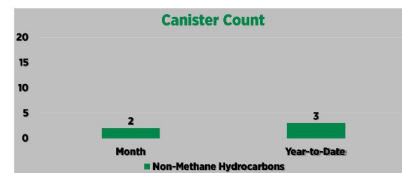
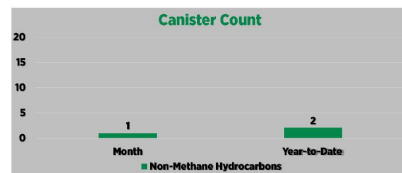
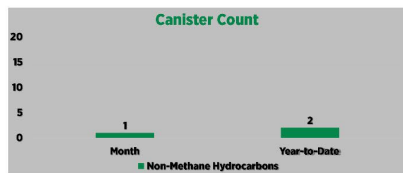
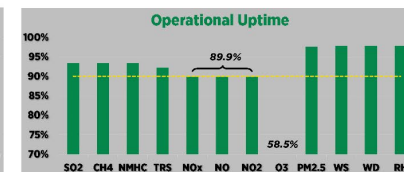
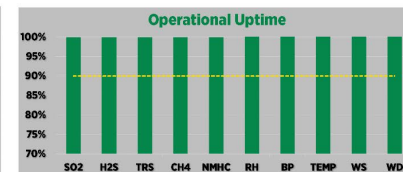
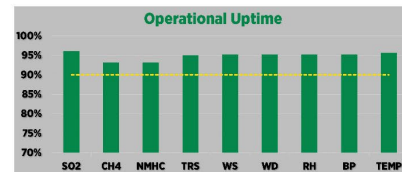
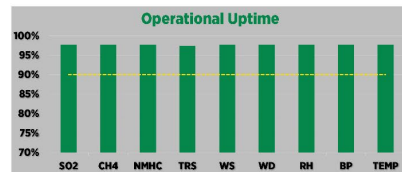
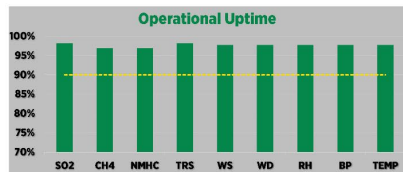
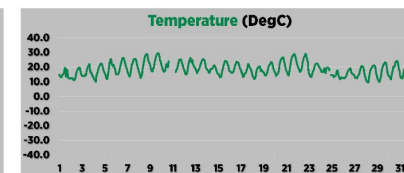
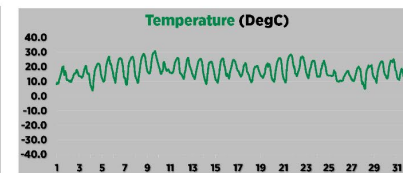
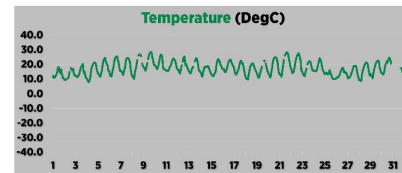
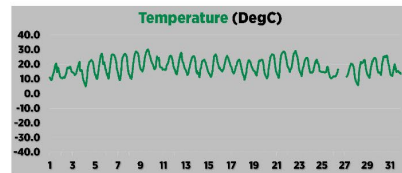
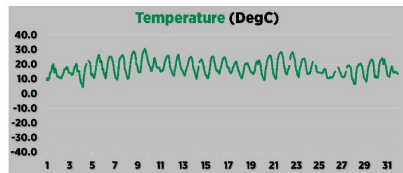
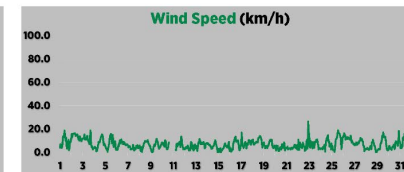
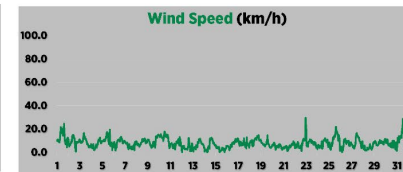
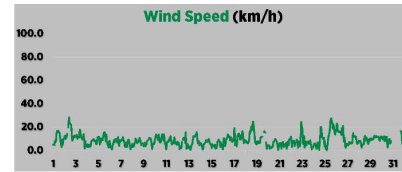
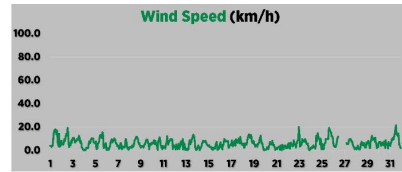
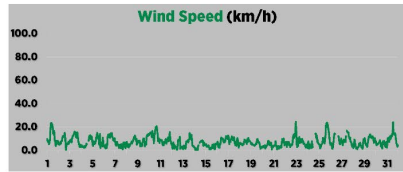
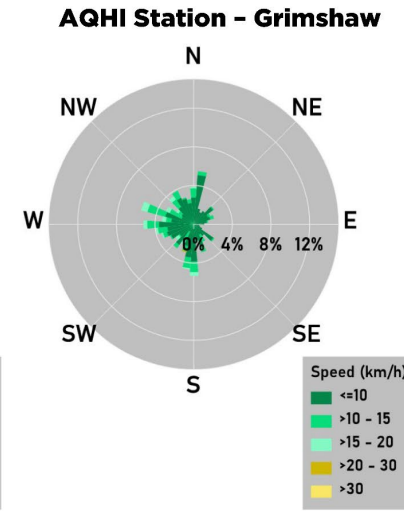
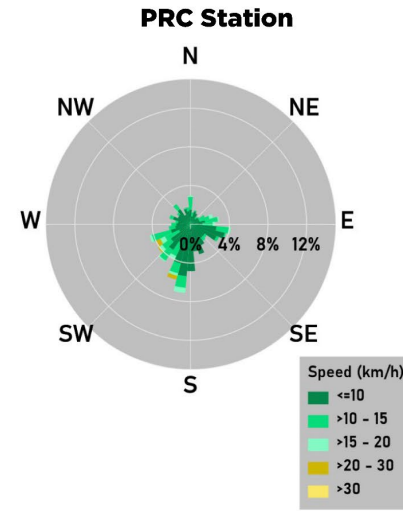
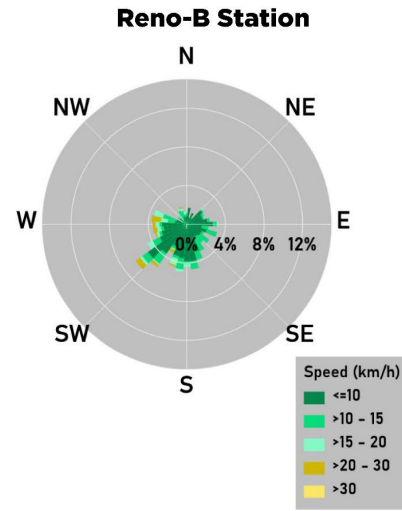
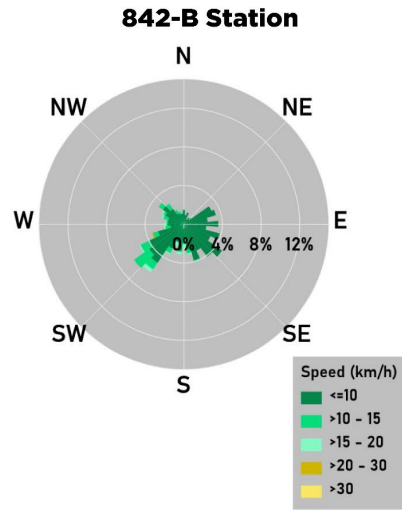
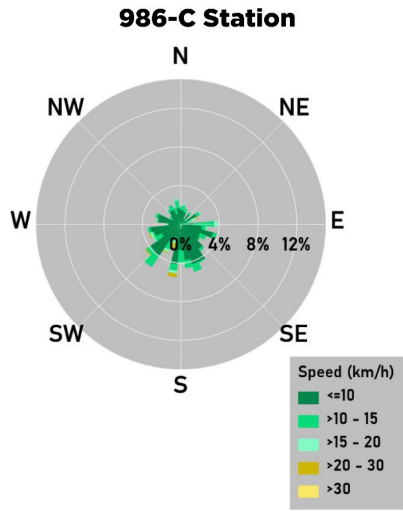
AQHI Station – Grimshaw

- All parameters met the 90% operational uptime requirement, except $NO_x/NO/NO_2$ (89.9%) and O_3 (58.5% in July and 24.7% in June). A EPA reference #: 417906 and 417907, respectively.
- Measured parameters were below Alberta Ambient Air Quality Objectives (AAQOs) and /or Alberta Ambient Air Quality Guidelines (AAAGs) where applicable, except $PM_{2.5}$. One hundred sixty-three 1-hour $PM_{2.5}$ exceedances and thirteen 24-hour $PM_{2.5}$ exceedances were recorded this month. Both nearby and distant wildfires contributed to intense local wildfire smoke conditions.
- $NO_x/NO/NO_2$: 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_3 : 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

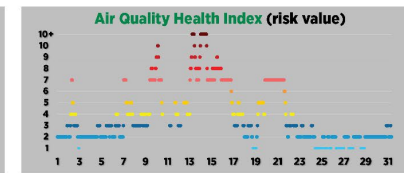
- Four canister events were collected in July 2023. The canister sampling program was temporarily paused between July 8 and July 31 due to wildfire smoke.

July 2023: Active Monitoring Program



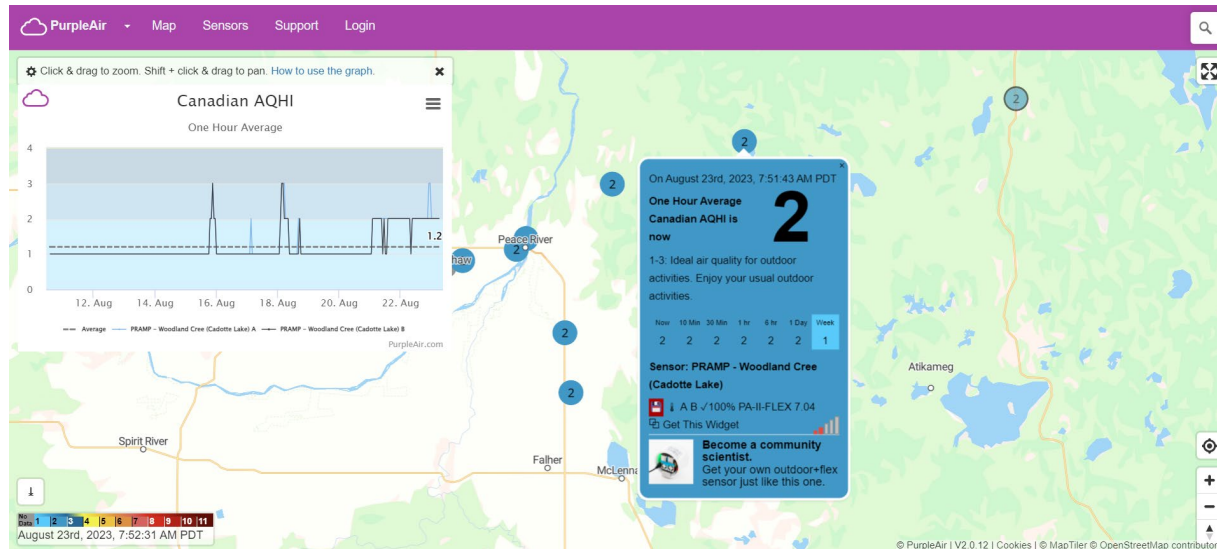
Targets, Guidelines, and Objectives

- 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



Other Updates

- Reno landowner change
- Purple Air deployments



<https://map.purpleair.com/1/mAQHI/>

2.2 Annual Data Review

1.3. Non-Methane Hydrocarbons

Non-methane hydrocarbons (NMHCs) are a set of organic compounds that are typically photochemically reactive in the atmosphere; this group of hydrocarbons – as the name implies – is marked by the exclusion of methane. NMHCs are generally formed by a wide range of natural (e.g., vegetation, forest fires) and anthropogenic sources, including traffic, industrial complexes, and manufacturing.

In the PRAMP network, there were two distinct network wide elevated NMHC events in 2021 associated with forest fire smoke episodes; these events occurred in late June and late July. For the first half of 2021, the Cadotte Lake Station also recorded frequent elevated NMHC concentrations due to the use of heavy construction equipment on land adjacent to the monitoring station. Generally, Stations 986-C, 842-B, and Reno saw a decrease in the magnitude and frequency of elevated NMHC since monitoring began in the PRAMP area.

Since non-methane hydrocarbons are not detected very often, most concentrations throughout the year are found to be zero parts per million at nearly all monitoring locations across Alberta. The summary statistics figure for NMHC in Alberta therefore only shows a 95th percentile indicator while all other metrics are zero ppm when Provincial monitoring data are plotted and presented in this way (See Figure 11).

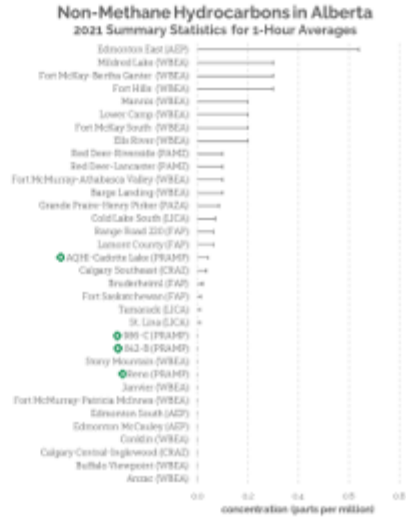


Figure 11: 2021 Non-Methane Hydrocarbons in Alberta

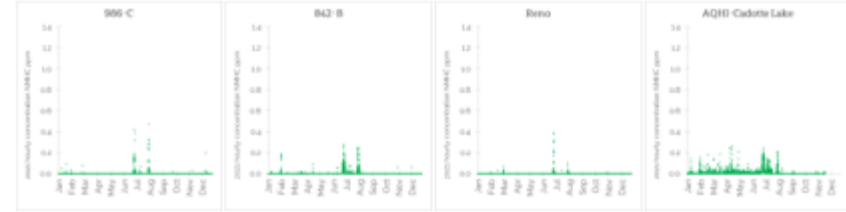


Figure 12: 2021 hourly non-methane hydrocarbons concentrations



Figure 13: 2021 hourly non-methane hydrocarbons concentration wind roses

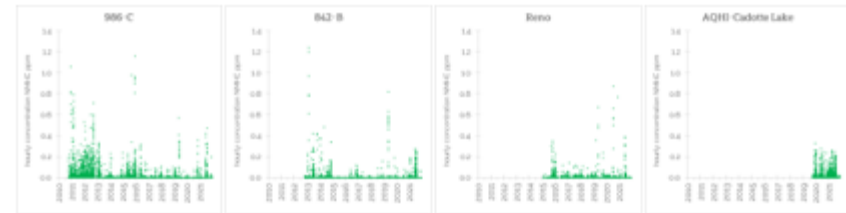


Figure 14: 2010-2021 hourly non-methane hydrocarbons concentrations



Figure 15: 2010-2021 annual averages and 95th percentile of hourly measurements of non-methane hydrocarbons



Figure 16: 2010-2021 hourly non-methane hydrocarbons concentration wind roses

2022 ANNUAL DATA REPORT



December XX, 2023
 Prepared by: Lily Lin & Michael Bisaga
 PRAMP Technical Program Managers

Table of Contents

Executive Summary	3
Acronyms	5
1 - Introduction	6
1.1 Historical Context	6
1.2 Monitoring Program Overview	6
1.3 Air Quality Monitoring Goals	8
2 - Continuous Monitoring Results	10
2.1 Interpretation Key	10
2.2 Methane	12
2.3 Non-Methane Hydrocarbons	14

x Pages



1



2



3



4



5



6



7



8



9



10



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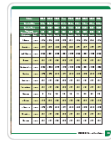
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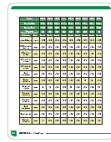
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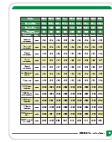
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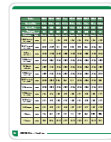
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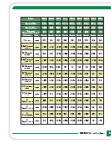
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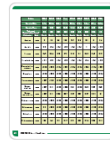
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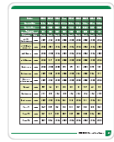
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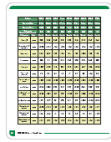
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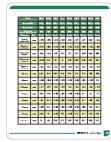
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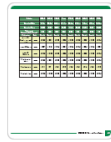
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43



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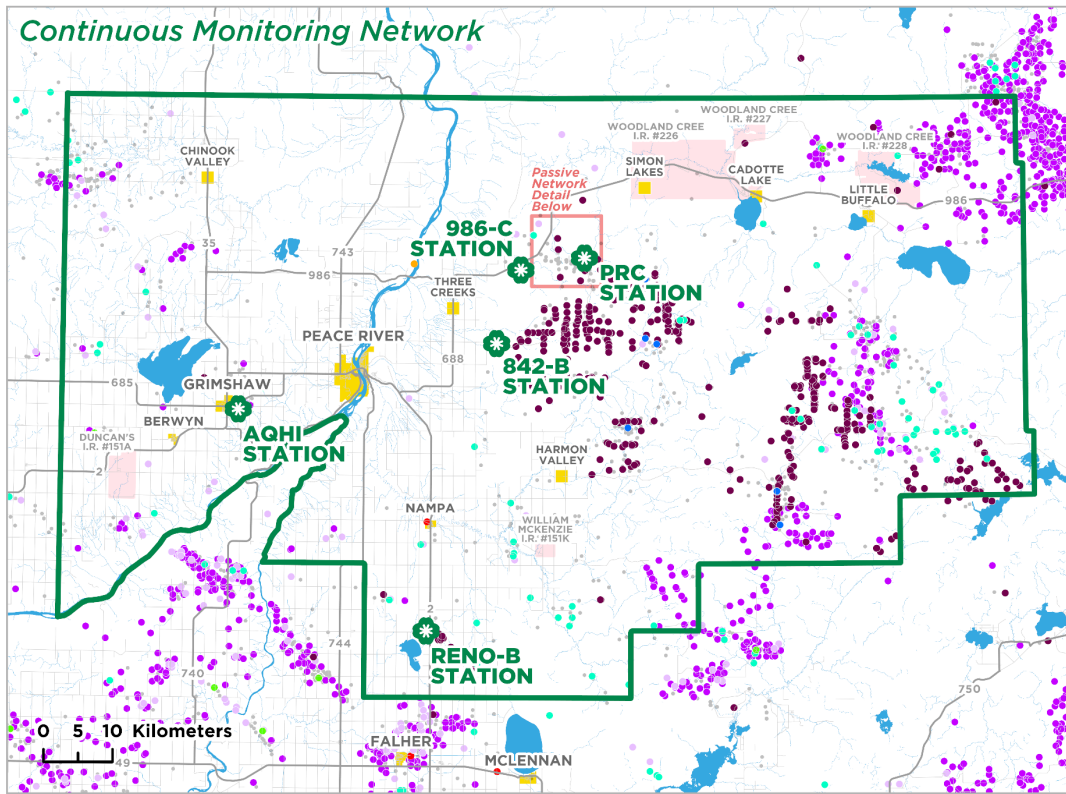


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46

Continuous Monitoring Network



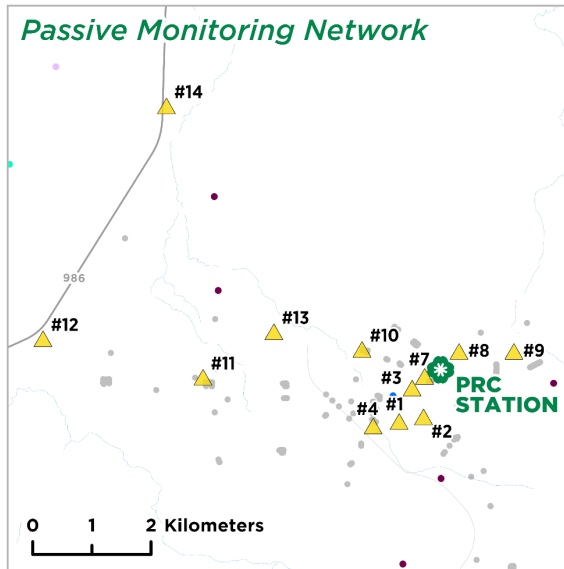
Legend

- PRAMP Boundary
- Populated Place
- First Nation
- ★ Continuous Monitoring Station
- ▲ Passive Monitoring Station

Industrial Facilities

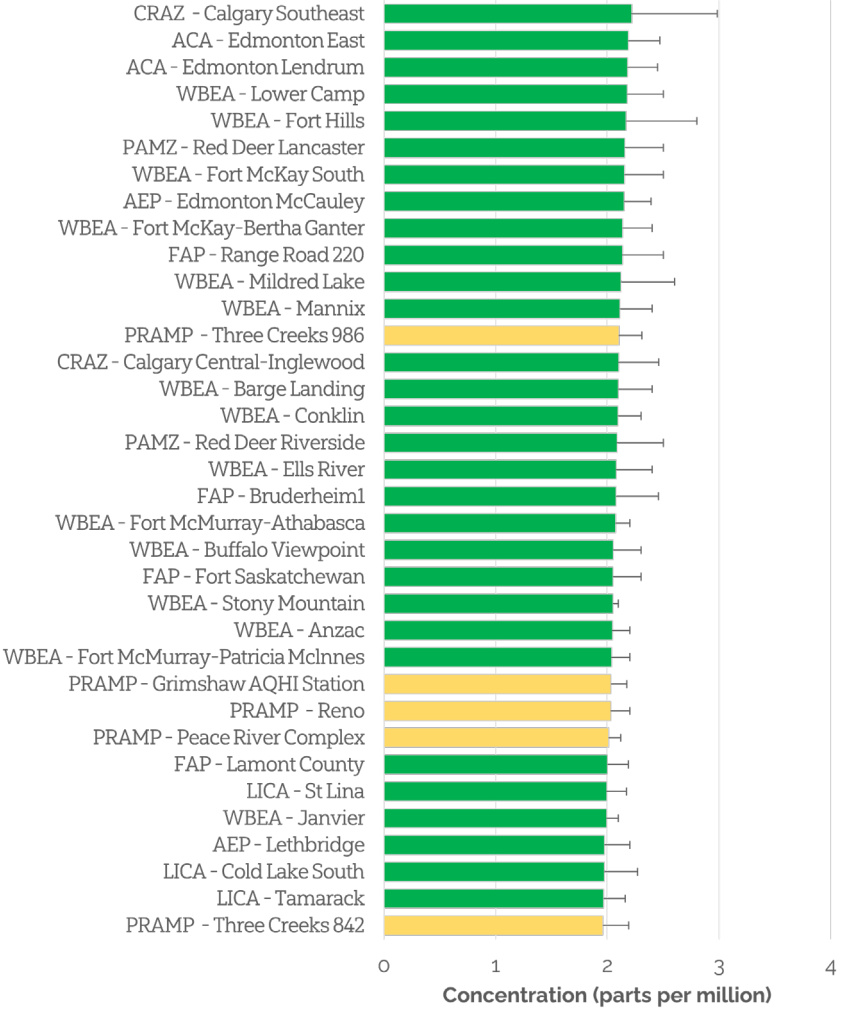
- In-Situ Oil Sands
- Heavy Oil/Bitumen Well or Battery
- Conventional Oil Well or Battery
- Natural Gas Well or Battery
- Gas Plant or Gas Processing
- Compressor Station or Pipeline
- Agricultural Storage and Transfer
- Pulp and Paper
- Well (Not Associated with Batteries)

Passive Monitoring Network

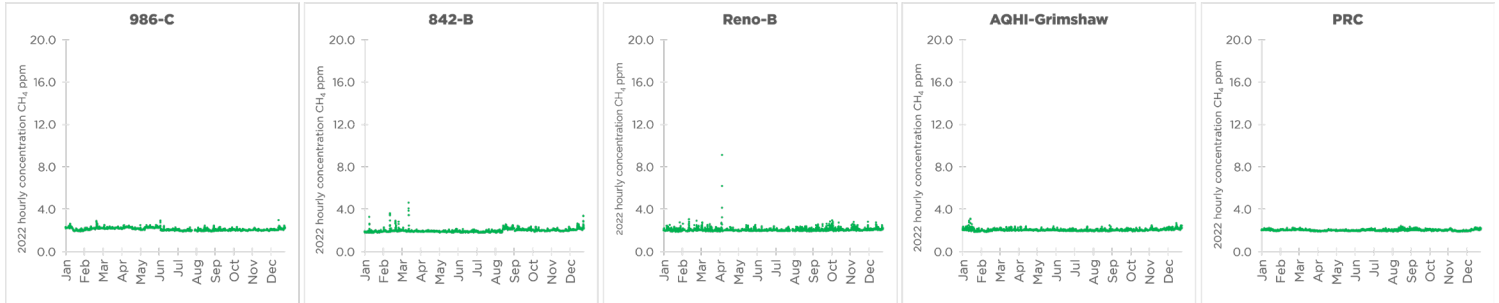


Methane in Alberta

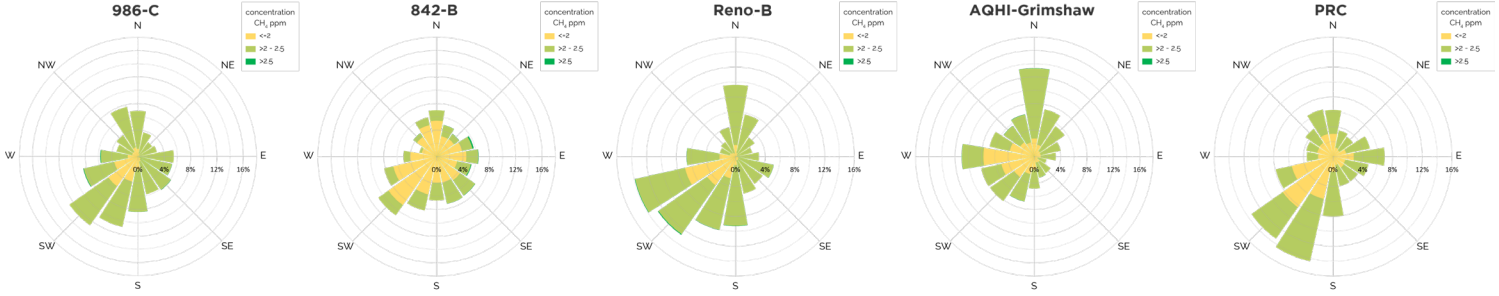
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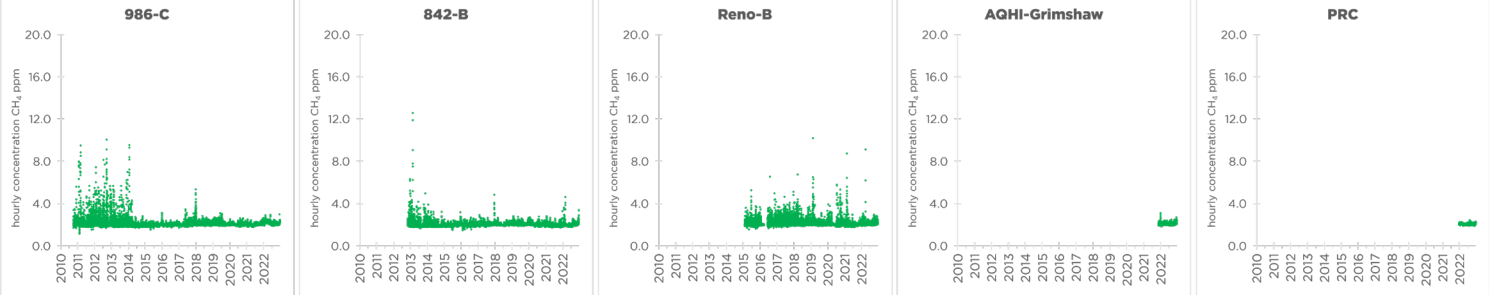
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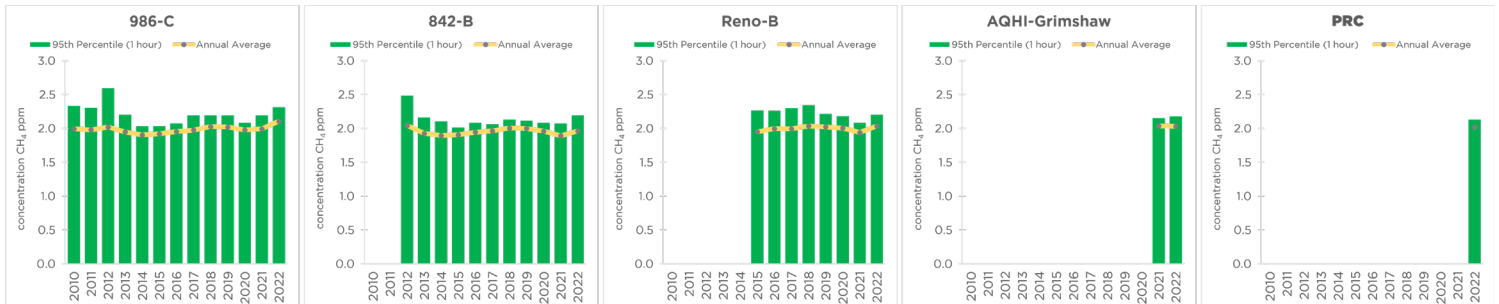
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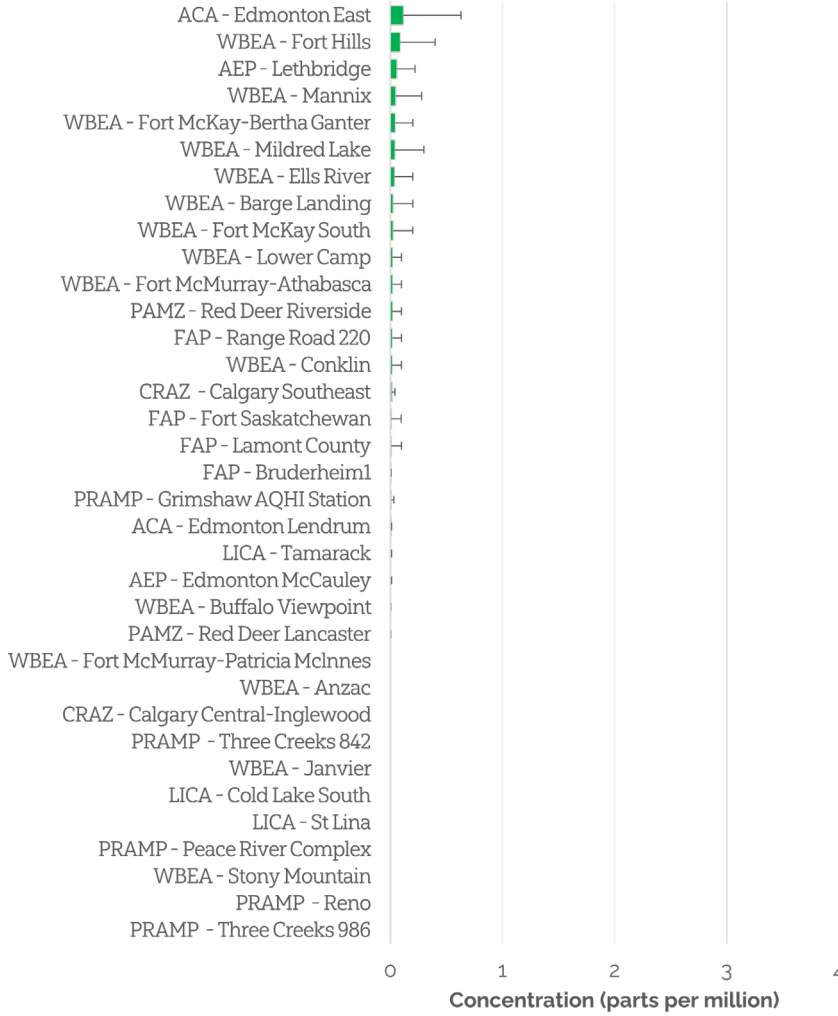


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Non-Methane Hydrocarbons in Alberta

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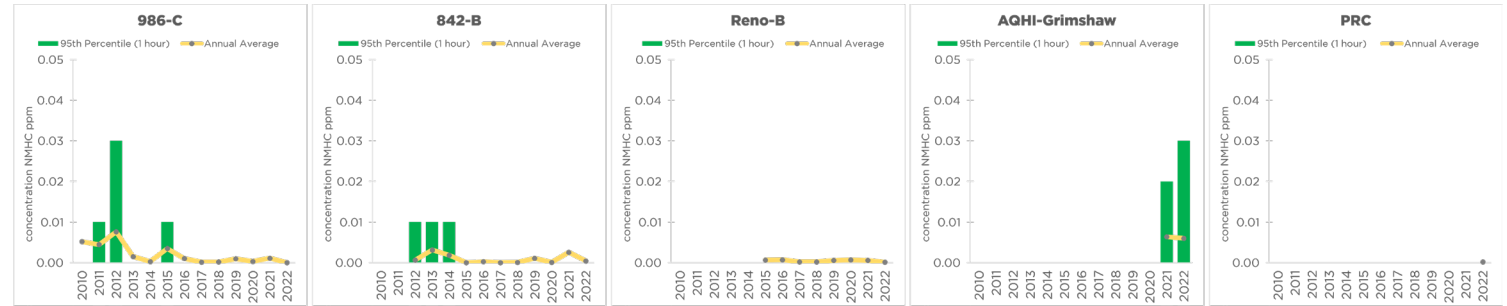
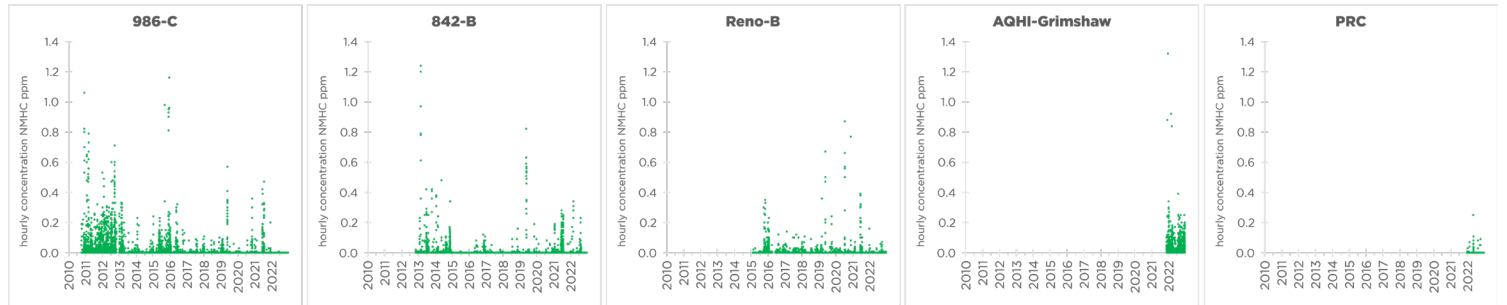
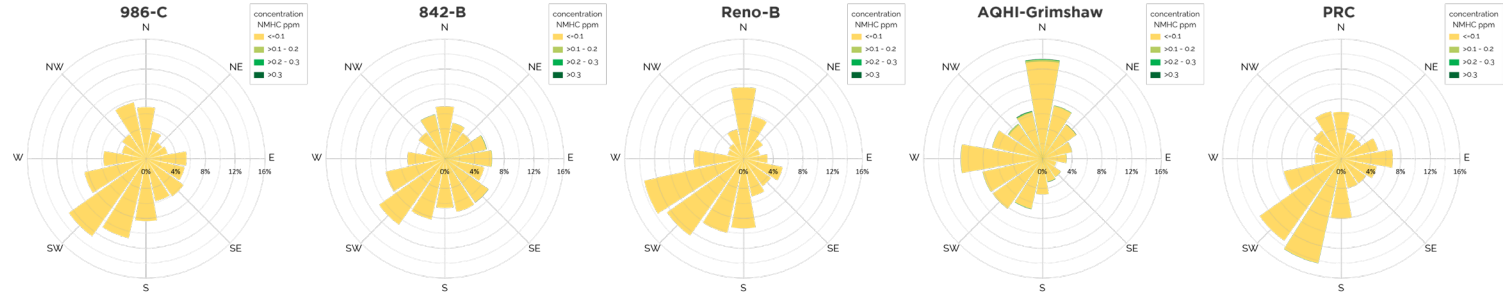
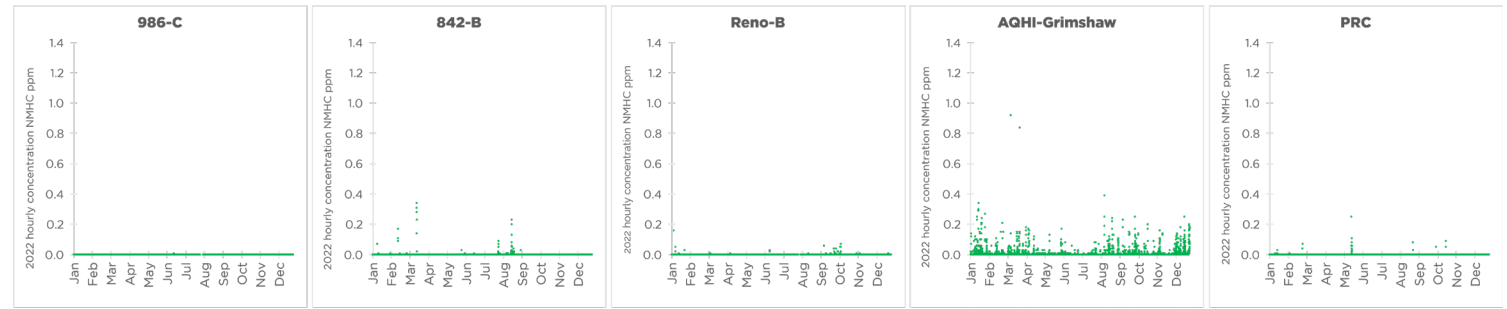


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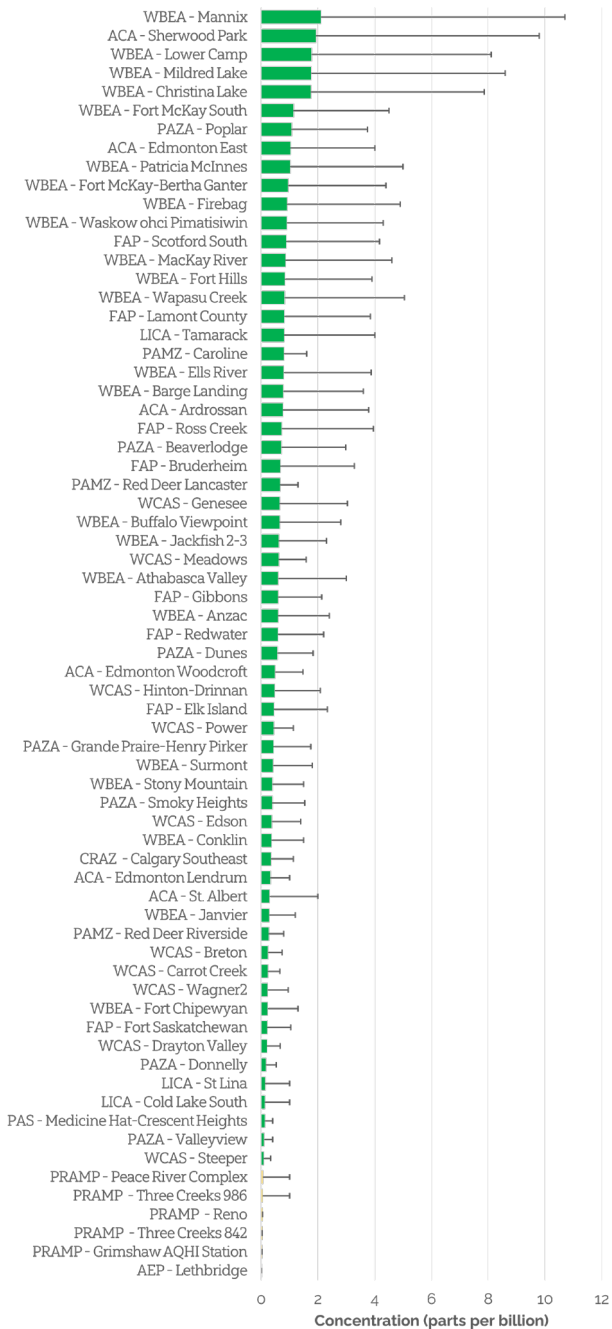
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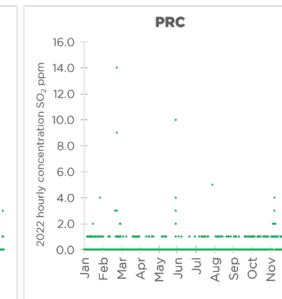
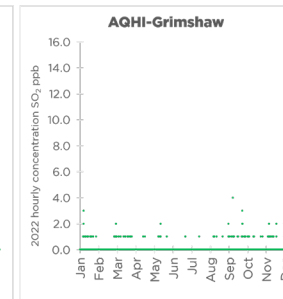
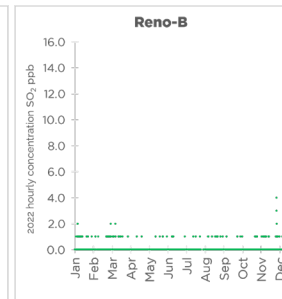
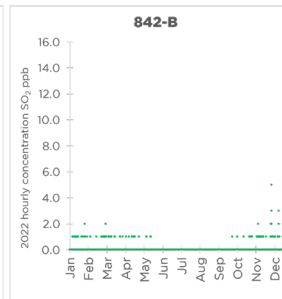
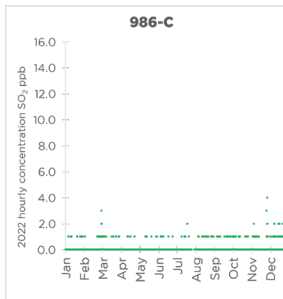


Sulphur Dioxide in Alberta

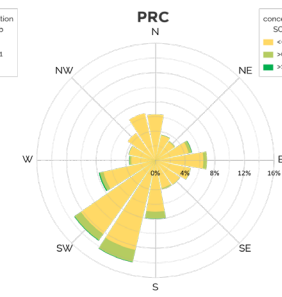
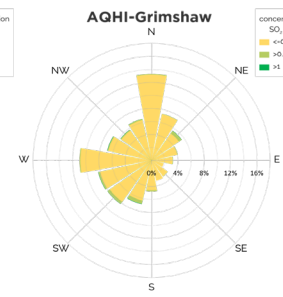
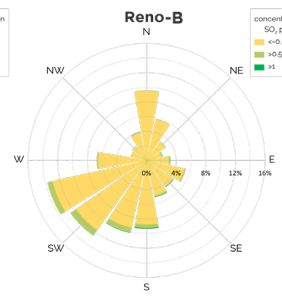
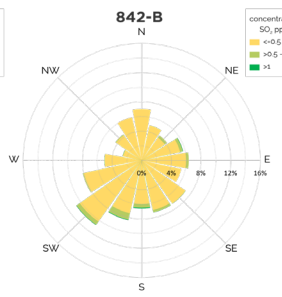
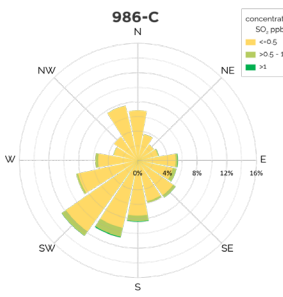
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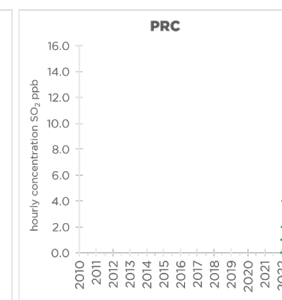
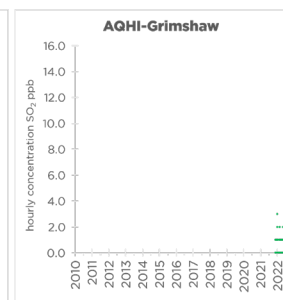
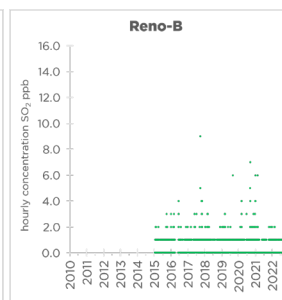
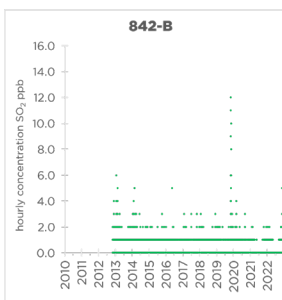
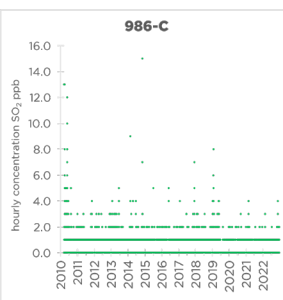
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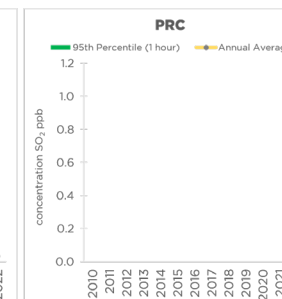
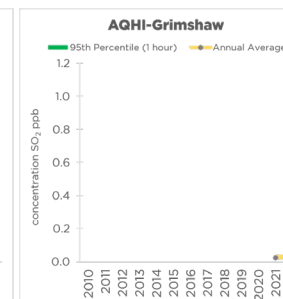
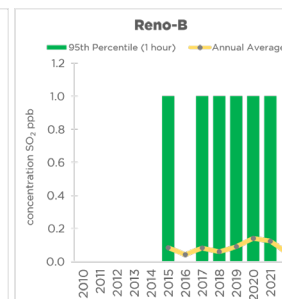
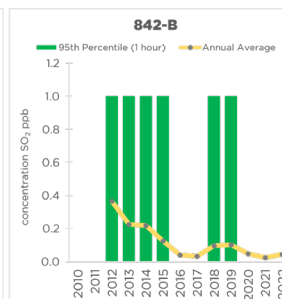
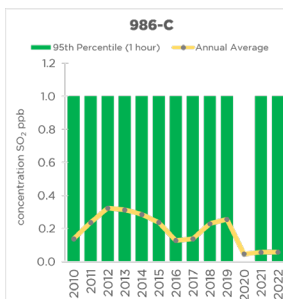
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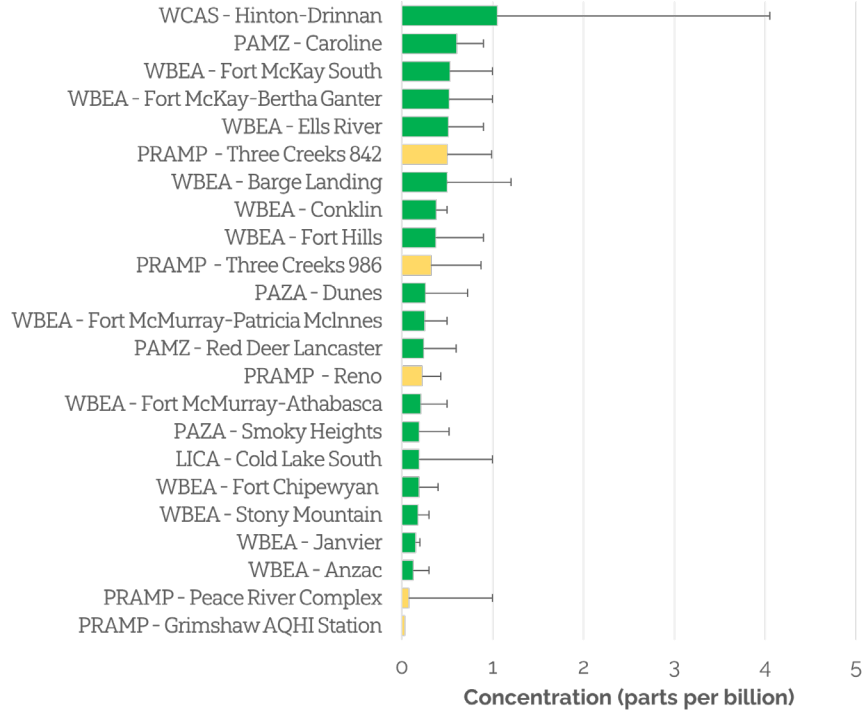


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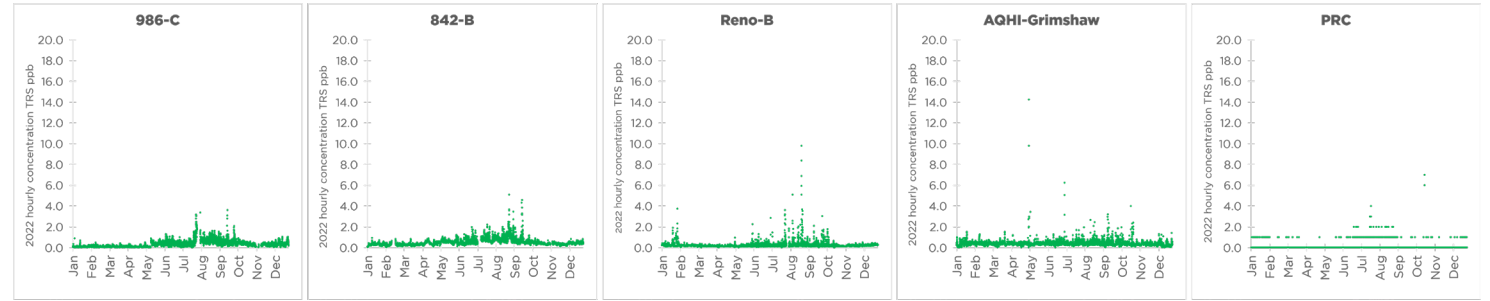


Total Reduced Sulphurs in Alberta

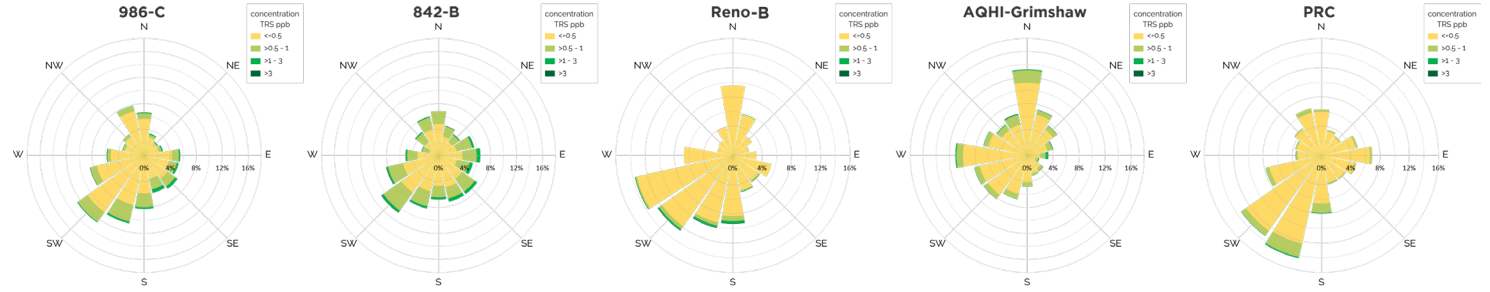
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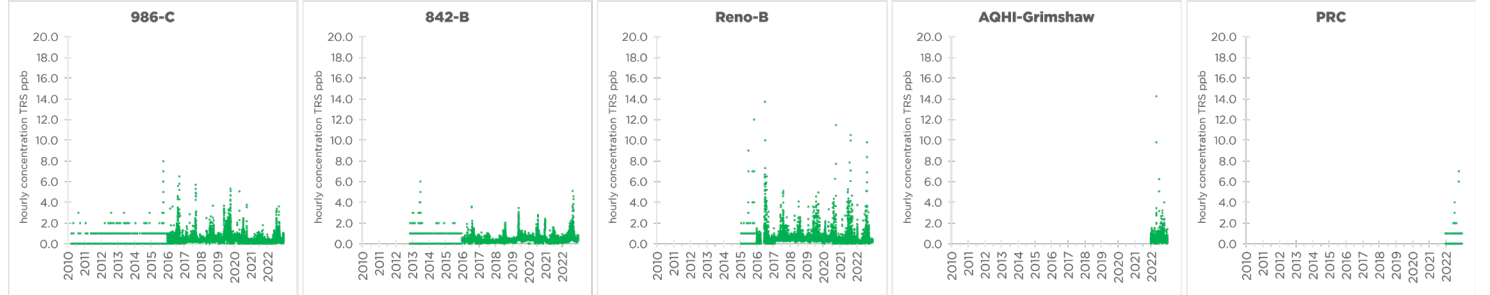
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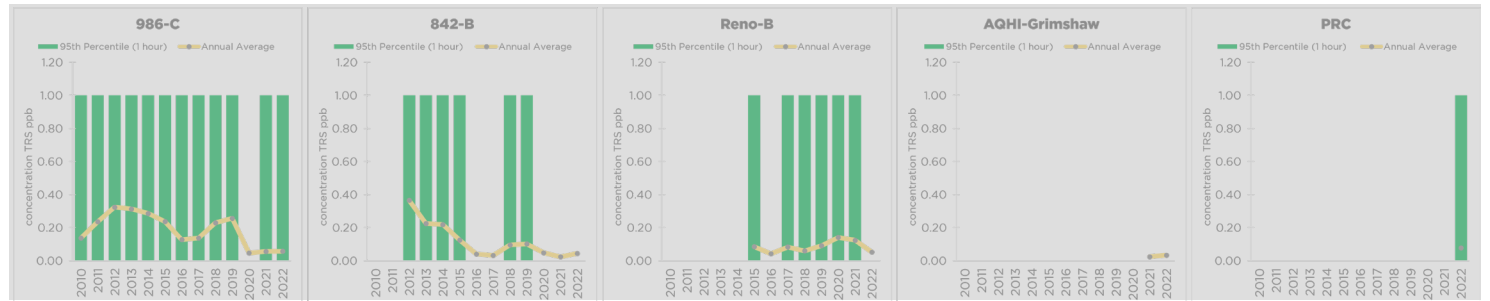
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2010-2022

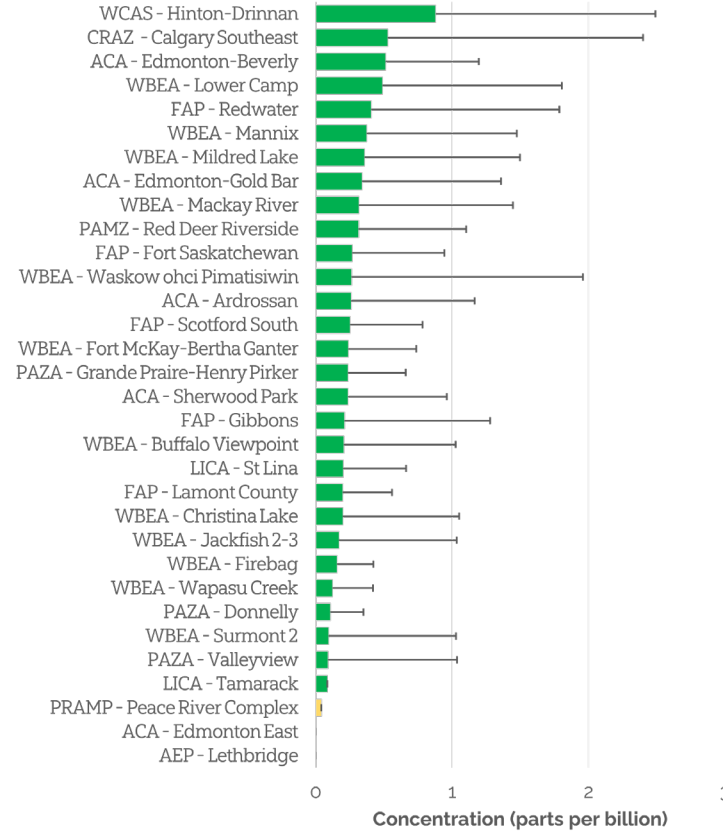


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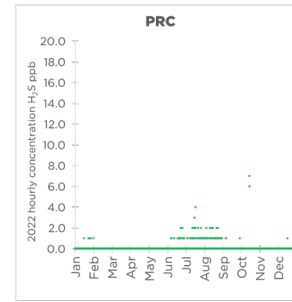


Hydrogen Sulphide in Alberta

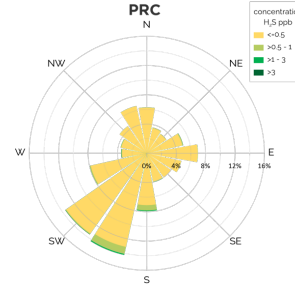
2022 Annual Average and 95th Percentile of 1-Hour Measurements



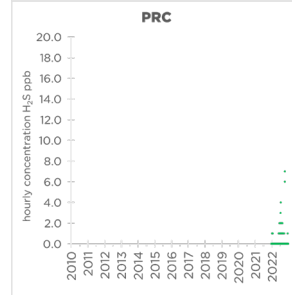
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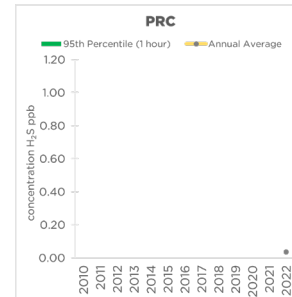
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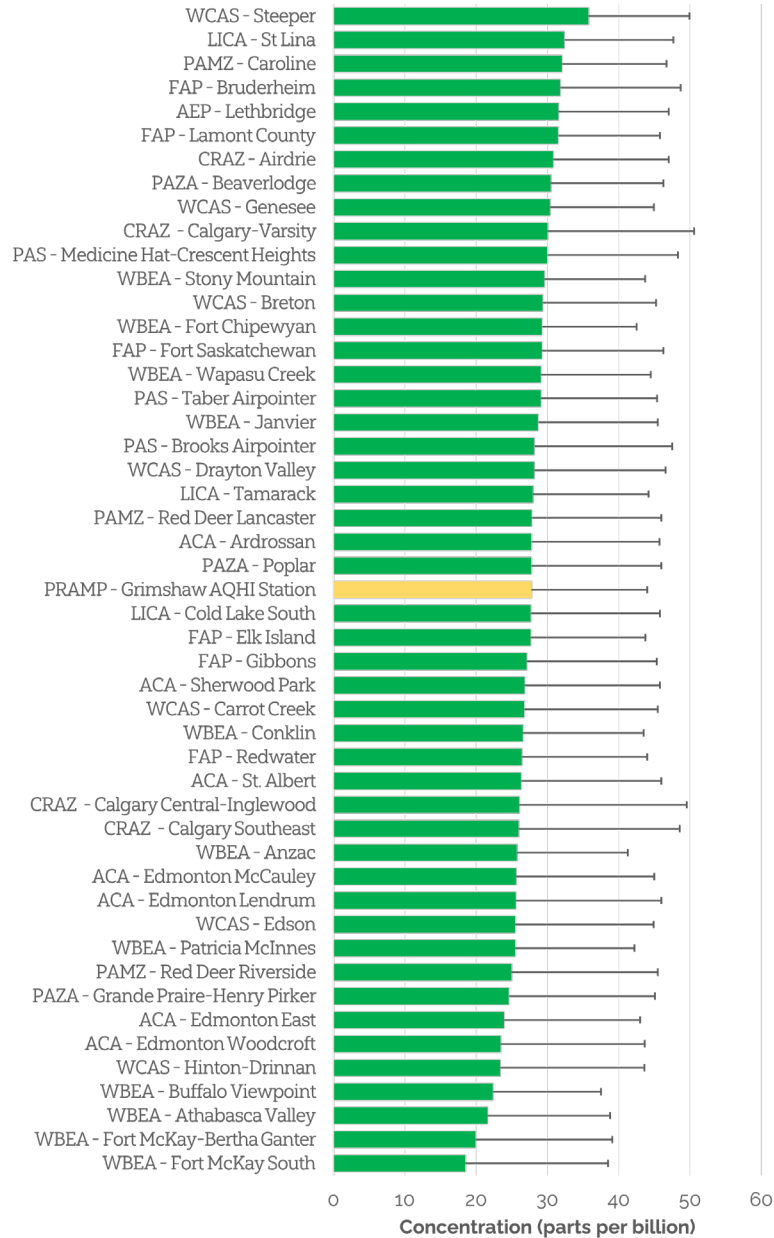


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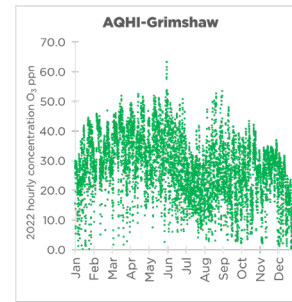


Ozone in Alberta

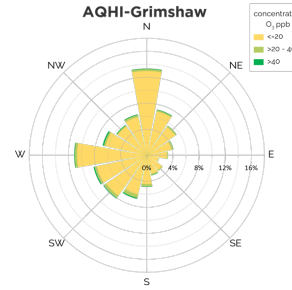
2022 Annual Average and 95th Percentile of 1-Hour Measurements



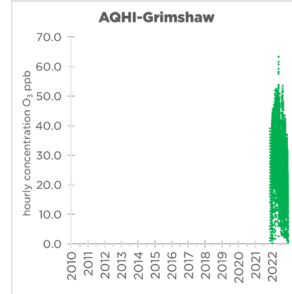
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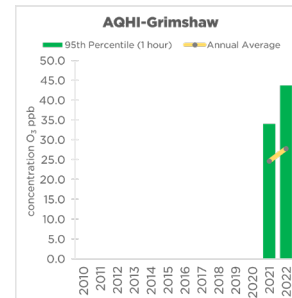
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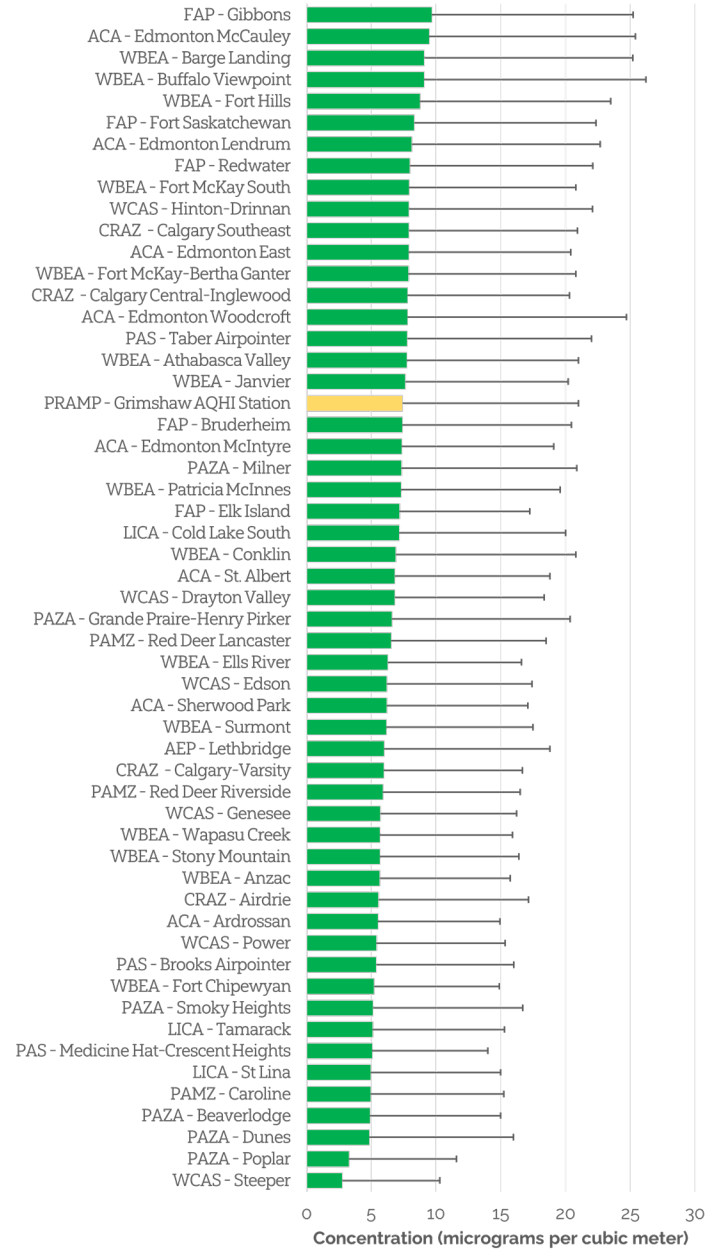
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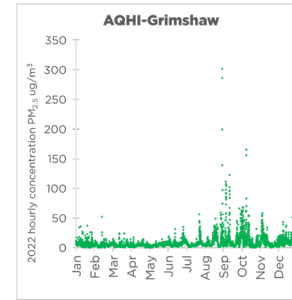
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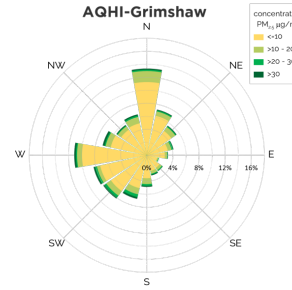
Particulate Matter in Alberta 2022 Annual Average and 95th Percentile of 1-Hour Measurements



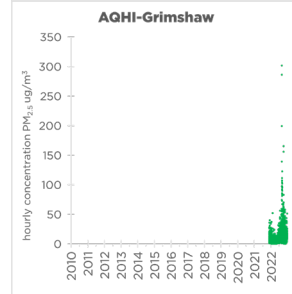
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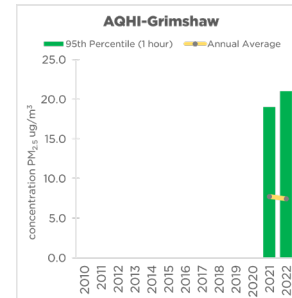
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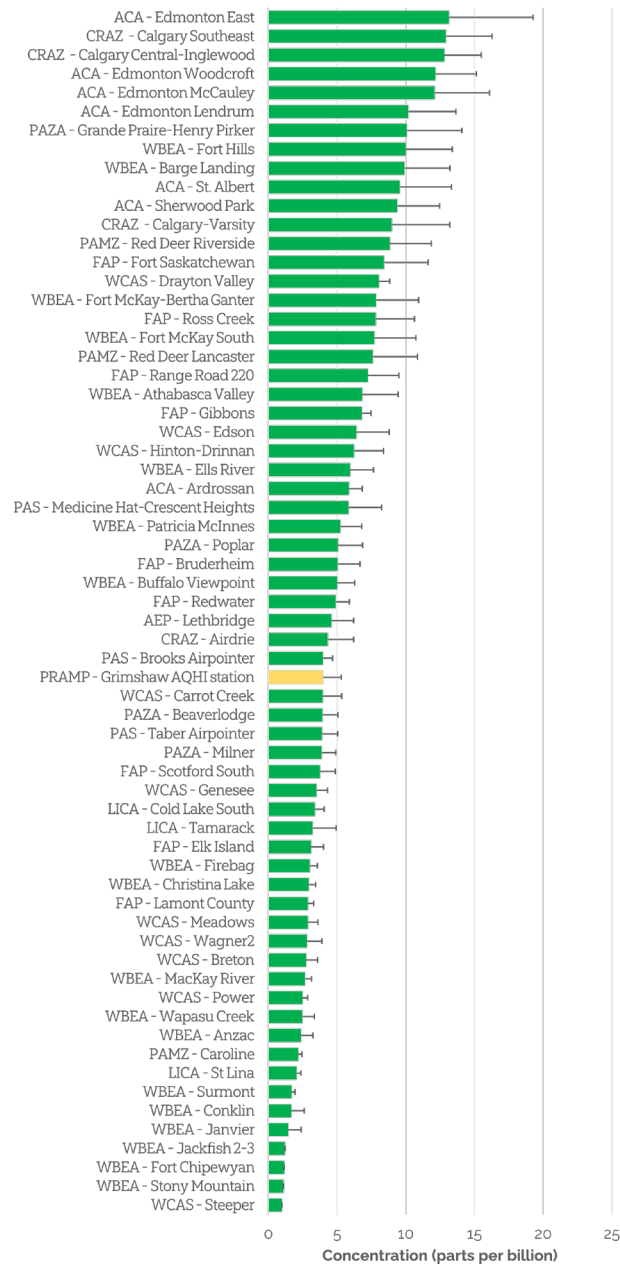


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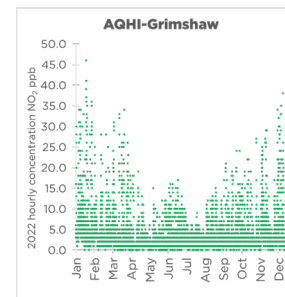


Nitrogen Dioxide in Alberta

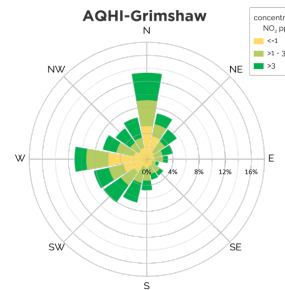
2022 Annual Average and 95th Percentile of 1-Hour Measurements



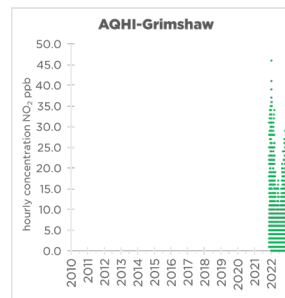
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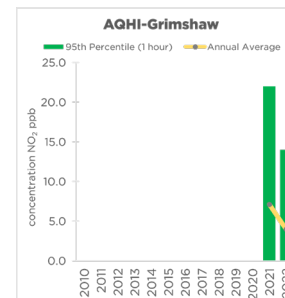
2022



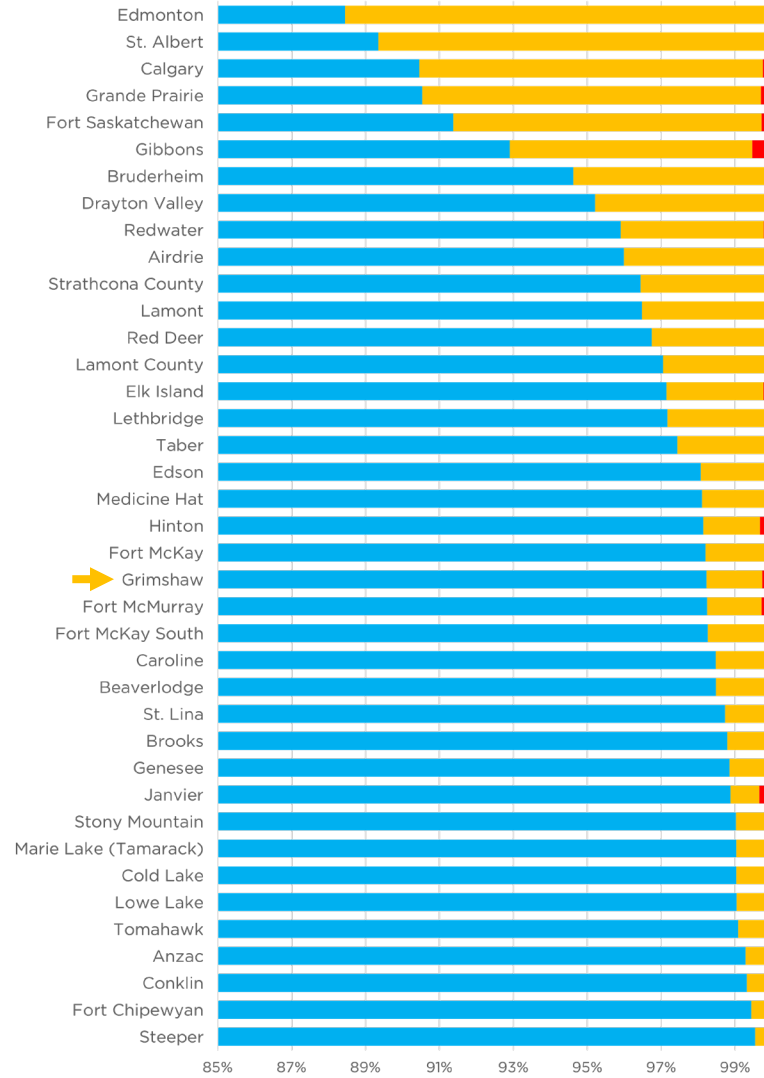
2010-2022



2010-2022

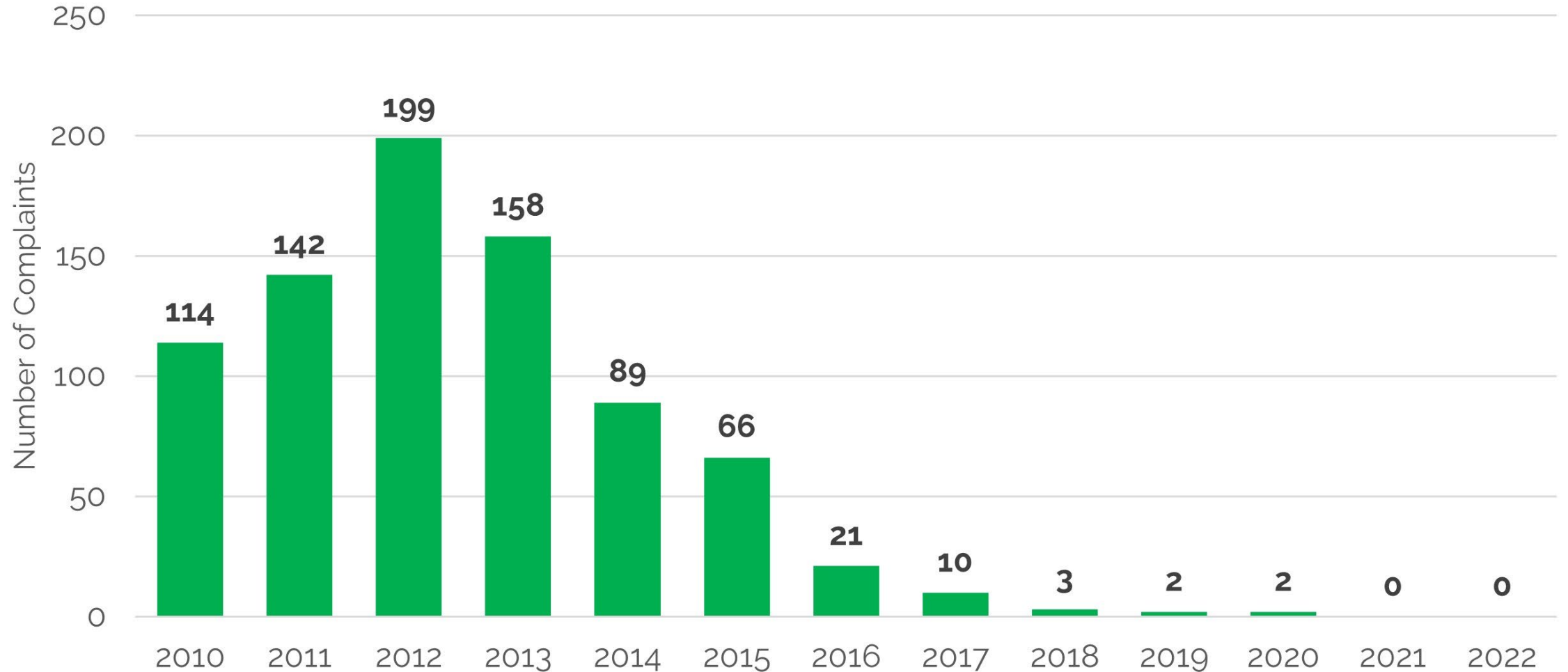


2022 Air Quality Health Index in Alberta Communities



Health Risk	Low	Moderate	High	Very High
Colour Code				
Risk Value	1 - 3	4 - 6	7 - 10	11+

Odour Complaints Reported to the AER for the Peace River Cold Heavy Oil Production Areas (Three Creeks, Reno, Seal, Walrus)



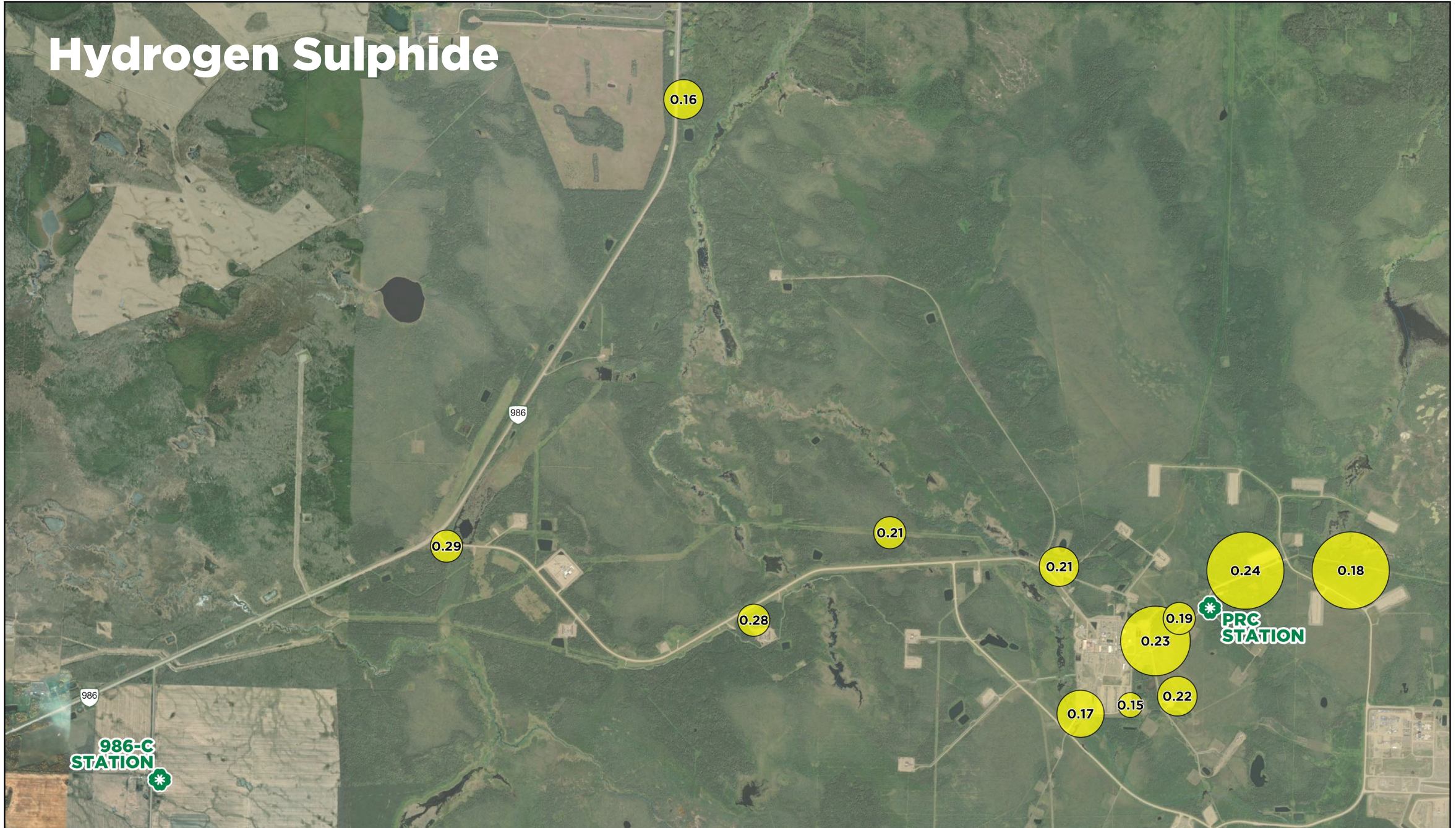
Sulphur Dioxide



0 1 2 Kilometers

Service Layer Credit: Maxar, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, USDA, NRCAN, Parks Canada

Hydrogen Sulphide



0 1 2 Kilometers

Service Layer Credit: Maxar, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, USDA, NRCAN, Parks Canada

2.3 AQHI Station Relocation

3.13 PORTABLE STATION SITING

3.13.1 INTRODUCTION

PRAMP employs a portable air monitoring station for use throughout the Airshed. The portable station is similar in construction and layout to other PRAMP continuous air monitoring stations, but the intention is that it is moved at approximately 18-month intervals as the need and issues arise.

This policy ensures that decisions on portable station re-locations follow consistent criteria and process steps. A *Standard Procedure on Selecting Locations for the Portable Air Quality Monitoring Station* provides additional details about the portable station as well as the selection process and site selection criteria.

3.13.2 APPLICATION

When PRAMP needs to identify a new site for the portable station, consideration of location options will focus on stakeholder input, monitoring objectives, cost comparisons and the requirements for siting stations in the Alberta Air Monitoring Directive (AMD).

Criteria for siting air monitoring stations in the AMD includes the following:

- A clear area with no trees or tall buildings inside a 100-meter radius around the station (deviations from this are evaluated on a case-by-case basis)
- Year-round access with a nearby power service
- Set back from roadways

Scheduling a relocation must be somewhat flexible to allow the portable station to remain at a site longer than originally planned should there be a need for more data to further evaluate or assess the issue or effects of any follow-up actions taken.

Location Intake

Potential locations and air quality issues will be gathered through various inputs, including the general public, Technical Working Group (TWG) and the Board.

Any requests for use of the portable station will normally be in writing to PRAMP. The content of the request must address the following:

- Concern or problem in which monitoring is requested,
- How long the problem has been occurring,
- What might be accomplished with air monitoring,
- How PRAMP could help.
- Any previous air monitoring in this area or for this concern, and
- Whether the appropriate regulatory organization been notified of the problem

The TWG will select the location for the next 18 months of monitoring, with ranked alternative locations should the initial selected location not be available (i.e. if no suitable “on the ground” location to place the station can be found) or the previously identified issue and/or the urgency to respond to the issue have diminished sufficiently to no longer warrant monitoring by the time the portable is available to go there.



The TWG will consider the various possible locations according to a scoring matrix identified in the *Standard Procedure*.

Since not all factors supporting the selection of a site can be empirically recorded, the process should allow for other factors, some of which are not so easily measured or may not even be included in the scoring matrix at the time it is used. The TWG may reprioritize the site selection, however there must be documented reasoning for the reprioritization.

Site Selection Approval Process

Once the TWG approves the site selection, the PRAMP Board of Directors will be informed of the TWG's decisions on siting, made as per this policy.

The TWG will decide if any additional monitoring capabilities will be added to the portable station to fully address the air quality issue at a given site. Once the TWG selects the site or issue to be addressed, work will begin to identify suitable “on the ground” locations if not already determined.

Although the sites selection process directs PRAMP to an issue or area to monitor, ground -truthing must be completed to select an appropriate site that has readily accessible power, good access, free of other potential ambient sources and meets the AMD siting criteria and have appropriate site documentation prepared prior to the end of sampling at the site.

The TPMs will identify and assess sites within an appropriate geographic area based on the monitoring objectives for the station. After an initial review of possible sites, the TPMs will provide options to the TWG. The TWG will provide a recommendation to the Board of Directors on the preferred site.

During the assessment phase for the siting, the TPMs will provide an update at each Board meeting. PRAMP Directors are expected to provide input as early in the process as possible so that the TPMs and TWG can incorporate the input into the assessment of options.



- Statement 1: “Once the TWG approves the site selection, the PRAMP Board of Directors will be informed of the TWG’s decision on siting, made as per this policy.”
- Statement 2: “The TWG will provide a recommendation to the Board of Directors on the preferred site.”

TWG recommendation regarding 3.13 Portable Station Siting Policy clarification:

- ***“The Technical Working Group is an advisory group and provides recommendations but does not make final decisions. The first statement should be removed and brought to the board for approval.”***

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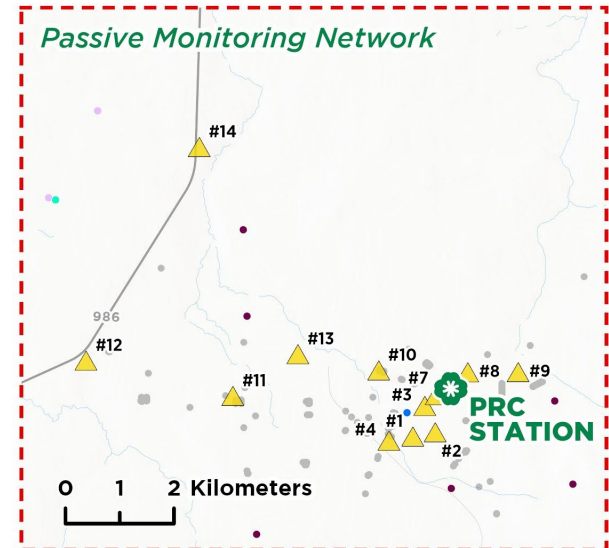
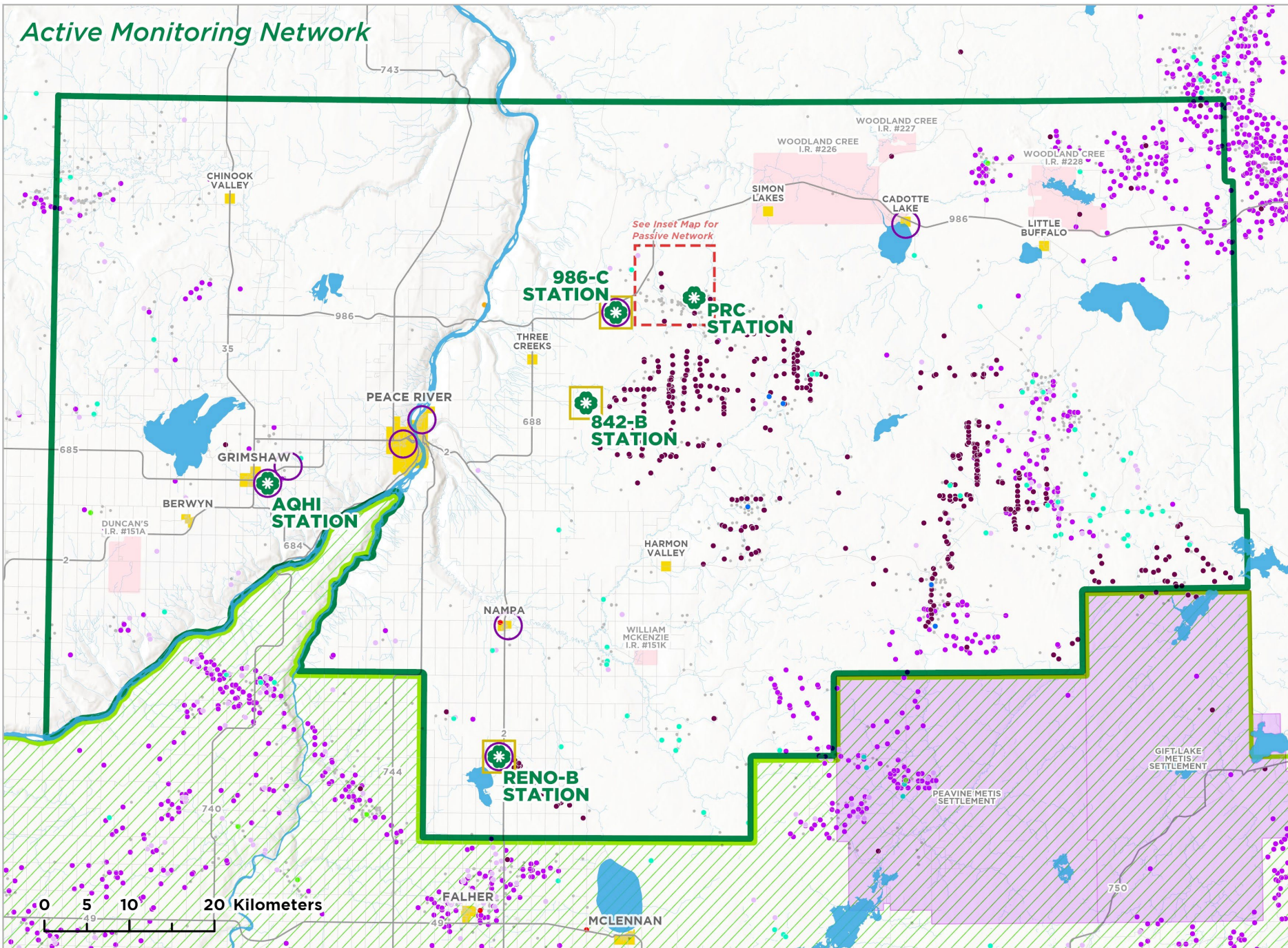
1. We'd like to know your general perception about local air quality. How would you rate the overall air quality in the Peace River and surrounding area (scale of 1-5)?	2. Are you aware of concerns about air quality in the Peace River or PRAMP area (refer to map for PRAMP area boundaries)?	3. If you answered yes above, please describe below.	4. Do you have any questions or comments about air quality or air quality monitoring in the Peace River area?	5. If we require more information, or to answer your questions, can we contact you?
3 = Fair	No	Smell from pump jacks at 3 mile corner by Grimshaw		Yes
3 = Fair	Yes	1 suggestion would be to locate the station within the SE area of Seal Lake. There are 2 Metis Settlements located south of that area, Peavine and Gift Lake Settlements. There have been odour concerns in The Peavine Metis Settlement. The Settlement is located just outside of the PRAMP boundary; we haven't had monitoring in Seal Lake before.		Yes
4 = Fair to Good	Yes	Oilfield related old shell site	97% of todays problems with air quality is Mother Nature related	Yes
5 = Good	No		Other than the smoke we have great air quality in this region	No
4 = Fair to Good	Yes	TRS from MPR and wastewater lagoons, particulate matter from wildfires		No
5 = Good	No			No
3 = Fair	Yes	Pulp mill odours in valley are common especially when there is an inversion. At least once a month and sometimes more in a month	Great work.	Yes
4 = Fair to Good	No		There has been an interest shown in the area of Eastridge Road of having a AQHI monitor for that area. the concerns stem from the Reno area.	Yes

Active Monitoring Network



Legend

- ▬ PRAMP Boundary
 - ▬ PAZA Boundary
 - ▬ Populated Place
 - ▬ First Nation
 - ▬ Metis Settlement
- ### Monitoring Locations
- ⊛ Continuous Monitoring Station
 - ▲ Passive Monitoring Station
 - Small Sensor
 - Canister Sampling
- ### Industrial Facilities
- In-Situ Oil Sands
 - Heavy Oil/Bitumen Well or Battery
 - Conventional Oil Well or Battery
 - Natural Gas Well or Battery
 - Gas Plant or Gas Processing
 - Compressor Station or Pipeline
 - Agricultural Storage and Transfer
 - Pulp and Paper
 - Well (Not Associated with Batteries)

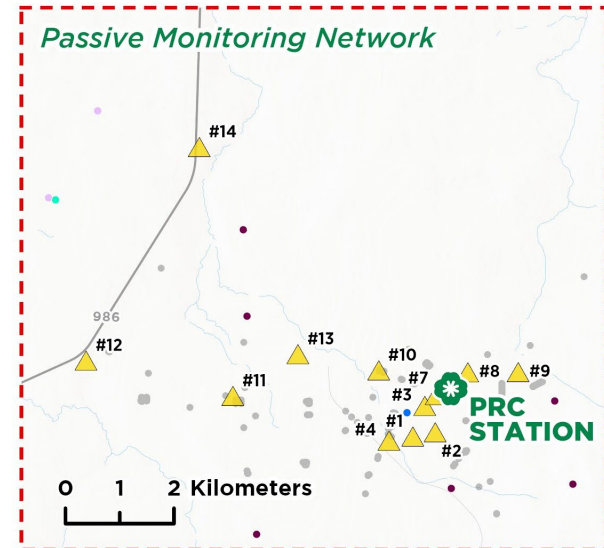
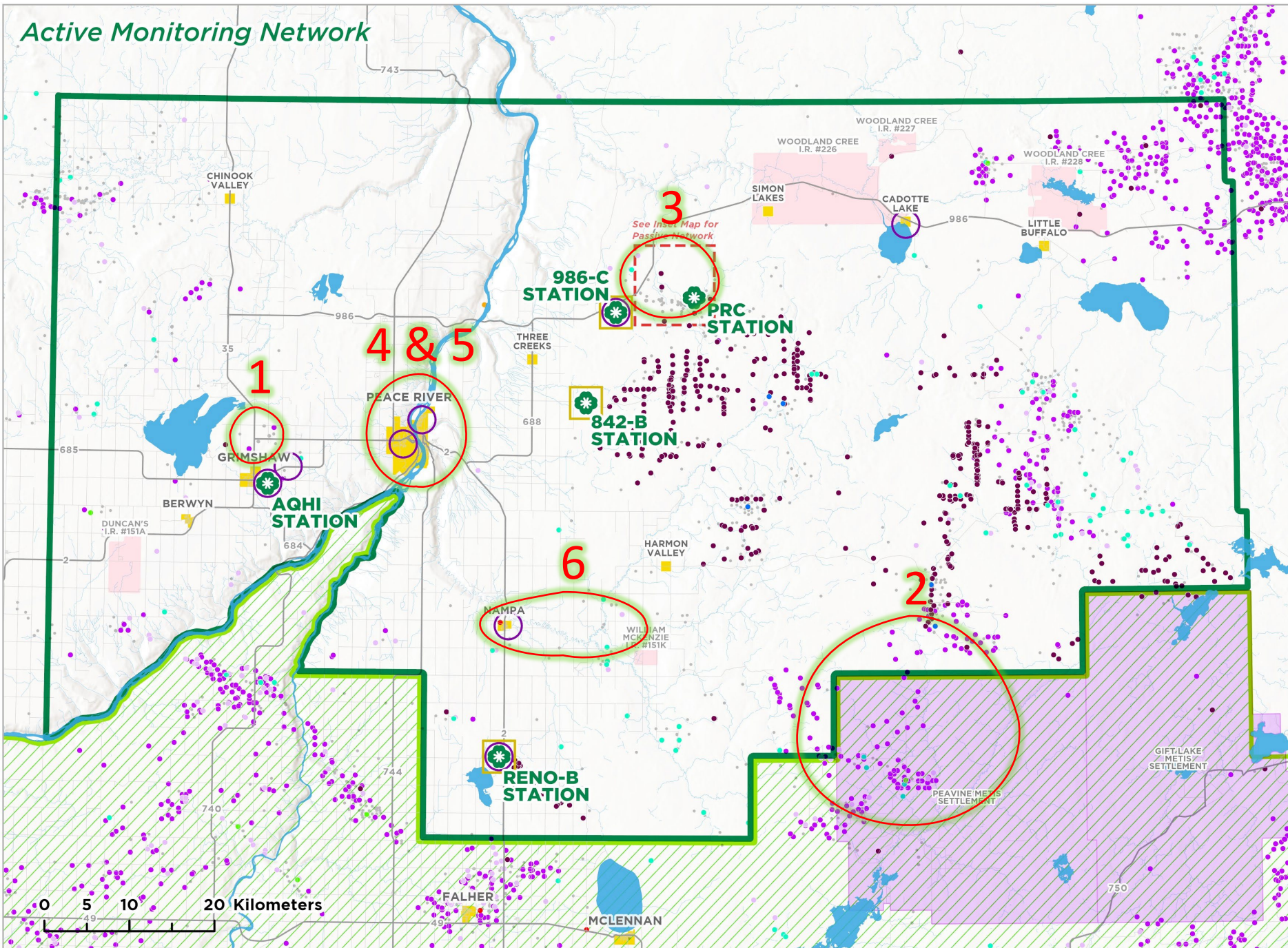


Active Monitoring Network



Legend

- ▬ PRAMP Boundary
 - ▬ PAZA Boundary
 - Populated Place
 - First Nation
 - Metis Settlement
- ### Monitoring Locations
- ⊛ Continuous Monitoring Station
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 - Small Sensor
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 - Heavy Oil/Bitumen Well or Battery
 - Conventional Oil Well or Battery
 - Natural Gas Well or Battery
 - Gas Plant or Gas Processing
 - Compressor Station or Pipeline
 - Agricultural Storage and Transfer
 - Pulp and Paper
 - Well (Not Associated with Batteries)



TWG recommendation regarding portable air monitoring station relocation:

- *“... leave monitor in Grimshaw, returning to this topic in one year”*

- Evaluation Matrices

Grimshaw odours

Score \ Criteria	0	1	2	3	4
Spatial data Gap	Data exists from that location	Data exists from a location <5km away	Data exists from location nearby: 5 to 10 km away	Data exists from location nearby: 10 to 20km	No continuous data exists from a nearby location
Temporal data gap	Recent data exists < 1yrs ago	Recent data exists < 3yrs ago	Data exists but is dated 3-5 yrs. ago	Data exists but is dated >5 yrs. ago	No continuous data exists at location
Transboundary	<ul style="list-style-type: none"> Not near a PRAMP boundary ~25km Significant local sources present Site not representative of incoming air mass 	Not representative of a boundary, i.e. localized sources will likely confound the data	<ul style="list-style-type: none"> Within 20 km of a PRAMP boundary Limited local sources, low impact or moderate frequency expected 	<ul style="list-style-type: none"> Within 10 km of a PRAMP boundary Very representative of a boundary air mass Possibility of occasional impact from local sources 	<ul style="list-style-type: none"> Within 5 km of a PRAMP boundary No significant local sources
Population exposure	No one lives within 0.5 km of proposed monitoring site or identified source	One or 2 families live within 0.5 km of proposed monitoring site or identified source	2 to 10 families live within 0.5 km of proposed monitoring site or identified source	10-40 families live within 0.5 km of proposed monitoring site or identified source	>50 families live within 0.5 km of proposed monitoring site or identified source
Respond to issues identified by "public" (not a member of PRAMP)	<ul style="list-style-type: none"> No issue identified Capability to address the issues identified cannot be addressed with current capability/analyzer complement or realistically added. No action can be taken regardless of monitoring findings (i.e. PRAMP has no influence on decision makers) 	<ul style="list-style-type: none"> Other parameters needed to address issue can be added with significant cost to PRAMP or funding is unlikely from other sources for additional parameters 	<ul style="list-style-type: none"> Identified by some residents (i.e. one family) Relatively new Issue with minimal impact, has only recently appeared on PRAMP radar Other parameters needed to address issue can be added with some cost to PRAMP Some consequences to not addressing it If source is identified, some likely hood action will be taken 	<ul style="list-style-type: none"> Issue identified by group of residents or several complaints to AEP, local councils Other parameters needed to address issue can be added with likely or promised funding from other sources 	<ul style="list-style-type: none"> Issue identified by an NGO, government body Has been ongoing for some time, PRAMP has previously not been able to address it or it has escalated recently Potentially serious, concerning/damaging Damaging to public perception if not addressed Issue can be directly addressed once monitoring data is available
Response to Issues identified by PRAMP	<ul style="list-style-type: none"> No issue identified Capability to address the issues identified cannot be addressed with current capability/analyzer complement or realistically added. No action can be taken regardless of monitoring findings (i.e. PRAMP has no influence on decision makers) 	<ul style="list-style-type: none"> PRAMP is pre-emptive and thinks this may become an issue Other parameters needed to address issue can be added with significant cost to PRAMP or funding is unlikely from other sources for additional parameters 	<ul style="list-style-type: none"> Relatively new Issue with minimal impact, has only recently appeared on PRAMP radar Other parameters needed to address issue can be added with some cost to PRAMP Some consequences to not addressing it If source is identified, likely hood action will be taken 	<ul style="list-style-type: none"> Other parameters needed to address issue can be added with likely or promised funding from other sources 	<ul style="list-style-type: none"> Has been ongoing for some time, PRAMP has previously not been able to address it or it has escalated recently Potentially serious, concerning/damaging Damaging to public perception if not addressed Issue can be directly addressed once monitoring data is available

Shell/CNUL odours

Score \ Criteria	0	1	2	3	4
Spatial data Gap	Data exists from that location	Data exists from a location <5km away	Data exists from location nearby: 5 to 10 km away	Data exists from location nearby: 10 to 20km	No continuous data exists from a nearby location
Temporal data gap	Recent data exists < 1yrs ago	Recent data exists < 3yrs ago	Data exists but is dated 3-5 yrs. ago	Data exists but is dated >5 yrs. ago	No continuous data exists at location
Transboundary	<ul style="list-style-type: none"> Not near a PRAMP boundary ~25km Significant local sources present Site not representative of incoming air mass 	Not representative of a boundary, i.e. localized sources will likely confound the data	<ul style="list-style-type: none"> Within 20 km of a PRAMP boundary Limited local sources, low impact or moderate frequency expected 	<ul style="list-style-type: none"> Within 10 km of a PRAMP boundary Very representative of a boundary air mass Possibility of occasional impact from local sources 	<ul style="list-style-type: none"> Within 5 km of a PRAMP boundary No significant local sources
Population exposure	No one lives within 0.5 km of proposed monitoring site or identified source	One or 2 families live within 0.5 km of proposed monitoring site or identified source	2 to 10 families live within 0.5 km of proposed monitoring site or identified source	10-40 families live within 0.5 km of proposed monitoring site or identified source	>50 families live within 0.5 km of proposed monitoring site or identified source
Respond to issues identified by "public" (not a member of PRAMP)	<ul style="list-style-type: none"> No issue identified Capability to address the issues identified cannot be addressed with current capability/analyzer complement or realistically added. No action can be taken regardless of monitoring findings (i.e. PRAMP has no influence on decision makers) 	<ul style="list-style-type: none"> Other parameters needed to address issue can be added with significant cost to PRAMP or funding is unlikely from other sources for additional parameters 	<ul style="list-style-type: none"> Identified by some residents (i.e. one family) Relatively new Issue with minimal impact, has only recently appeared on PRAMP radar Other parameters needed to address issue can be added with some cost to PRAMP Some consequences to not addressing it If source is identified, some likely hood action will be taken 	<ul style="list-style-type: none"> Issue identified by group of residents or several complaints to AEP, local councils Other parameters needed to address issue can be added with likely or promised funding from other sources 	<ul style="list-style-type: none"> Issue identified by an NGO, government body Has been ongoing for some time, PRAMP has previously not been able to address it or it has escalated recently Potentially serious, concerning/damaging Damaging to public perception if not addressed Issue can be directly addressed once monitoring data is available
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Peavine odours & AQ concerns

Score \ Criteria	0	1	2	3	4
Spatial data Gap	Data exists from that location	Data exists from a location <5km away	Data exists from location nearby: 5 to 10 km away	Data exists from location nearby: 10 to 20km	No continuous data exists from a nearby location
Temporal data gap	Recent data exists < 1yrs ago	Recent data exists < 3yrs ago	Data exists but is dated 3-5 yrs. ago	Data exists but is dated >5 yrs. ago	No continuous data exists at location
Transboundary	<ul style="list-style-type: none"> Not near a PRAMP boundary ~25km Significant local sources present Site not representative of incoming air mass 	Not representative of a boundary, i.e. localized sources will likely confound the data	<ul style="list-style-type: none"> Within 20 km of a PRAMP boundary Limited local sources, low impact or moderate frequency expected 	<ul style="list-style-type: none"> Within 10 km of a PRAMP boundary Very representative of a boundary air mass Possibility of occasional impact from local sources 	<ul style="list-style-type: none"> Within 5 km of a PRAMP boundary No significant local sources
Population exposure	No one lives within 0.5 km of proposed monitoring site or identified source	One or 2 families live within 0.5 km of proposed monitoring site or identified source	2 to 10 families live within 0.5 km of proposed monitoring site or identified source	10-40 families live within 0.5 km of proposed monitoring site or identified source	>50 families live within 0.5 km of proposed monitoring site or identified source
Respond to issues identified by "public" (not a member of PRAMP)	<ul style="list-style-type: none"> No issue identified Capability to address the issues identified cannot be addressed with current capability/analyzer complement or realistically added. No action can be taken regardless of monitoring findings (i.e. PRAMP has no influence on decision makers) 	<ul style="list-style-type: none"> Other parameters needed to address issue can be added with significant cost to PRAMP or funding is unlikely from other sources for additional parameters 	<ul style="list-style-type: none"> Identified by some residents (i.e. one family) Relatively new Issue with minimal impact, has only recently appeared on PRAMP radar Other parameters needed to address issue can be added with some cost to PRAMP Some consequences to not addressing it If source is identified, some likely hood action will be taken 	<ul style="list-style-type: none"> Issue identified by group of residents or several complaints to AEP, local councils Other parameters needed to address issue can be added with likely or promised funding from other sources 	<ul style="list-style-type: none"> Issue identified by an NGO, government body Has been ongoing for some time, PRAMP has previously not been able to address it or it has escalated recently Potentially serious, concerning/damaging Damaging to public perception if not addressed Issue can be directly addressed once monitoring data is available
Response to Issues identified by PRAMP	<ul style="list-style-type: none"> No issue identified Capability to address the issues identified cannot be addressed with current capability/analyzer complement or realistically added. No action can be taken regardless of monitoring findings (i.e. PRAMP has no influence on decision makers) 	<ul style="list-style-type: none"> PRAMP is pre-emptive and thinks this may become an issue Other parameters needed to address issue can be added with significant cost to PRAMP or funding is unlikely from other sources for additional parameters 	<ul style="list-style-type: none"> Relatively new Issue with minimal impact, has only recently appeared on PRAMP radar Other parameters needed to address issue can be added with some cost to PRAMP Some consequences to not addressing it If source is identified, likely hood action will be taken 	<ul style="list-style-type: none"> Other parameters needed to address issue can be added with likely or promised funding from other sources 	<ul style="list-style-type: none"> Has been ongoing for some time, PRAMP has previously not been able to address it or it has escalated recently Potentially serious, concerning/damaging Damaging to public perception if not addressed Issue can be directly addressed once monitoring data is available

Peace River 1

Score \ Criteria	0	1	2	3	4
Spatial data Gap	Data exists from that location	Data exists from a location <5km away	Data exists from location nearby: 5 to 10 km away	Data exists from location nearby: 10 to 20km	No continuous data exists from a nearby location
Temporal data gap	Recent data exists < 1yrs ago	Recent data exists < 3yrs ago	Data exists but is dated 3-5 yrs. ago	Data exists but is dated >5 yrs. ago	No continuous data exists at location
Transboundary	<ul style="list-style-type: none"> Not near a PRAMP boundary ~25km Significant local sources present Site not representative of incoming air mass 	Not representative of a boundary, i.e. localized sources will likely confound the data	<ul style="list-style-type: none"> Within 20 km of a PRAMP boundary Limited local sources, low impact or moderate frequency expected 	<ul style="list-style-type: none"> Within 10 km of a PRAMP boundary Very representative of a boundary air mass Possibility of occasional impact from local sources 	<ul style="list-style-type: none"> Within 5 km of a PRAMP boundary No significant local sources
Population exposure	No one lives within 0.5 km of proposed monitoring site or identified source	One or 2 families live within 0.5 km of proposed monitoring site or identified source	2 to 10 families live within 0.5 km of proposed monitoring site or identified source	10-40 families live within 0.5 km of proposed monitoring site or identified source	>50 families live within 0.5 km of proposed monitoring site or identified source
Respond to issues identified by "public" (not a member of PRAMP)	<ul style="list-style-type: none"> No issue identified Capability to address the issues identified cannot be addressed with current capability/analyzer complement or realistically added. No action can be taken regardless of monitoring findings (i.e. PRAMP has no influence on decision makers) 	<ul style="list-style-type: none"> Other parameters needed to address issue can be added with significant cost to PRAMP or funding is unlikely from other sources for additional parameters 	<ul style="list-style-type: none"> Identified by some residents (i.e. one family) Relatively new Issue with minimal impact, has only recently appeared on PRAMP radar Other parameters needed to address issue can be added with some cost to PRAMP Some consequences to not addressing it If source is identified, some likely hood action will be taken 	<ul style="list-style-type: none"> Issue identified by group of residents or several complaints to AEP, local councils Other parameters needed to address issue can be added with likely or promised funding from other sources 	<ul style="list-style-type: none"> Issue identified by an NGO, government body Has been ongoing for some time, PRAMP has previously not been able to address it or it has escalated recently Potentially serious, concerning/damaging Damaging to public perception if not addressed Issue can be directly addressed once monitoring data is available
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Peace River 2

Score \ Criteria	0	1	2	3	4
Spatial data Gap	Data exists from that location	Data exists from a location <5km away	Data exists from location nearby: 5 to 10 km away	Data exists from location nearby: 10 to 20km	No continuous data exists from a nearby location
Temporal data gap	Recent data exists < 1yrs ago	Recent data exists < 3yrs ago	Data exists but is dated 3-5 yrs. ago	Data exists but is dated >5 yrs. ago	No continuous data exists at location
Transboundary	<ul style="list-style-type: none"> Not near a PRAMP boundary ~25km Significant local sources present Site not representative of incoming air mass 	Not representative of a boundary, i.e. localized sources will likely confound the data	<ul style="list-style-type: none"> Within 20 km of a PRAMP boundary Limited local sources, low impact or moderate frequency expected 	<ul style="list-style-type: none"> Within 10 km of a PRAMP boundary Very representative of a boundary air mass Possibility of occasional impact from local sources 	<ul style="list-style-type: none"> Within 5 km of a PRAMP boundary No significant local sources
Population exposure	No one lives within 0.5 km of proposed monitoring site or identified source	One or 2 families live within 0.5 km of proposed monitoring site or identified source	2 to 10 families live within 0.5 km of proposed monitoring site or identified source	10-40 families live within 0.5 km of proposed monitoring site or identified source	>50 families live within 0.5 km of proposed monitoring site or identified source
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East Ridge Road

Score \ Criteria	0	1	2	3	4
Spatial data Gap	Data exists from that location	Data exists from a location <5km away	Data exists from location nearby: 5 to 10 km away	Data exists from location nearby: 10 to 20km	No continuous data exists from a nearby location
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Other items

- Return to school