



## **PRC Ambient Air Monitoring Station Site Documentation / Network Documentation**

**Ambient Site Doc-PRAMP-20240328-01698-V01**

---

March 2024

## Ambient Air Monitoring Site Documentation Template

<b>1.0</b>	<b>General Information .....</b>	<b>3</b>
1.1	Station .....	3
1.2	Location.....	3
1.3	Owner/Operator/Approval Holder .....	4
<b>2.0</b>	<b>Site Description.....</b>	<b>5</b>
<b>3.0</b>	<b>Site Influences .....</b>	<b>6</b>
3.1	Localized sources (within 20 metres of station, monitor, or sampler).....	6
3.2	Roadway influences .....	6
3.3	Major point sources.....	6
<b>4.0</b>	<b>Instruments .....</b>	<b>7</b>
<b>5.0</b>	<b>Continuous Stations .....</b>	<b>8</b>
5.1	Area Map for Continuous Station .....	8
5.2	Sketches for Continuous Stations .....	9
5.3	Photographs for Continuous Stations.....	10
5.4	Wind Rose .....	13
<b>6.0</b>	<b>Network of Stations .....</b>	<b>13</b>

## 1.0 General Information

### 1.1 Station

<b>Station identification/number</b>	PRC (Alberta's Data Warehouse Site ID: 01698)
<b>Station Name (building name, park name, etc.)</b>	PRC
<b>Date station established</b>	March 1, 2022
<b>Date information last updated</b>	March 28, 2024

### 1.2 Location

<b>Station address (street address/legal land description)</b>	Northern Sunrise County, AB T8S 1V1	
	Legal land description	
<b>Nearest cross-street</b>	CNRL Peace River Plant Complex site, east of Seal Lake Rd.	
<b>Air zone / Airshed zone</b>	PRAMP Airshed	
<b>Latitude</b>	56.38257, -116.769283	
<b>Longitude</b>	-117.137080	
<b>UTM Coordinates</b>	<b>East:</b> 514246.83	<b>North:</b> 6248683.81
<b>Community (municipality, community or county)</b>	Northern Sunrise County	
<b>Population of city or metropolitan area</b>	1711	
<b>Census year</b>	2021	

#### **DIRECTIONS:**

From Peace River, head west on AB-2W, turn right onto 75 St/ AB-743 N (sign for Weberville Rd / Peace River/ Pulp Mill) , travel for 14.6km. Turn right onto AB-986E. Travel 30.2 km. Turn right and travel for 5.2 km. The trailer will be 1.4km on the right.

### 1.3 Owner/Operator/Approval Holder

<b>Name of operating agency</b>	Bureau Veritas Canada
<b>Address</b>	#1 2080 39th Ave NE
	Calgary, AB T2E 6P7

<b>Contact name</b>	Christopher Wesson
<b>Phone number</b>	780-446-2724
<b>Email address</b>	Christopher.WESSON@bvlabs.com

<b>Name of owner/approval holder</b>	Peace River Air Monitoring Program
<b>Address</b>	Suite 91, 305 – 4625 Varsity Drive NW Calgary, AB, T3A 0Z9
<b>Contact name</b>	Mike Bisaga / Lily Lin
<b>Phone number</b>	780-266-7068 / 587-225-2248
<b>Email address</b>	prampotech@prampairshed.ca
<b>Approval number</b>	n/a

## 2.0 Site Description

<b>Land use by sector (use 90° as a sector)</b>	1. North: Pond / Forested area	
	2. East: Forested area	
	3. South: Forested area	
	4. West: Forested area	
<b>Site elevation (above sea level (m))</b>	610 m	
<b>Angle of elevation to nearby buildings</b>	<b>1. Greatest angle:</b> n/a	
	<b>2. Building direction:</b> n/a	
<b>Average building height in the area (m)</b>	No buildings present in immediate area	
<b>Air flow restrictions (yes/no)</b>	<b>North:</b> No	<b>South:</b> No
	<b>East:</b> No	<b>West:</b> No
<b>Distance to nearest trees (m)</b>	60 m	
<b>Description of Obstruction</b>	Trees, ~ 11m height	
<b>Angle of Elevation (wind system)</b>	<0°	
<b>Angle of Elevation (manifold)</b>	7°	
<b>Manifold</b>	<b>1. Type:</b> Stainless Steel / Glass	
	<b>2. Distance from supporting structure:</b> 1 m	
	<b>3. Total Height:</b> 4 m	
<b>Meteorological Information</b>	<b>1. Type:</b> Steel Tower	
	<b>2. Distance from supporting structure:</b> 17 m	
	<b>3. Distance from station:</b> 20 m	
	<b>4. Contact:</b> Adjacent to SW end of the air monitoring station	

### 3.0 Site Influences

#### 3.1 Localized sources (within 20 metres of station, monitor, or sampler)

Type	Distance (m)	Description
Open field	n/a	n/a

#### 3.2 Roadway influences

Name	Type	*Traffic Volume	Distance (m)	Description
Unknown	Facility use road	Unknown - Minimum	575 m	Unpaved Rural Road
Seal Lake Road	Facility use road	Unknown - Minimum	1.5 km	Paved Road

\*Average annual weekday traffic

#### 3.3 Major point sources

Source Name	Source Type	Production Capacity	Distance from Site (km)	Compass direction (degrees)
Transalta Three Creeks Facility	H2S, TRS, THC	unknown	500 m	Southeast
CNUL Peace River Complex Facility	H2S, TRS, THC	unknown	500 m	West

## 4.0 Instruments

Station Name: PRC

Instrument Type	Owner	Make	Serial No.	Sampling Height (m)	Date Installed (Date PRAMP took over the station)
Sulphur dioxide	CNRL	Thermo 43i	1034746225	4	March 1, 2022
Methane / Non-methane hydrocarbons	CNRL	Thermo 55i	1034745845	4	March 1, 2022
Total reduced sulphur	CNRL	Thermo 450i	1034746224	4	March 1, 2022
Hydrogen Sulphide	CNRL	Thermo 450i	1308857354	4	March 1, 2022
TRS convertor	CNRL	CD Nova CDN-101	516	n/a	March 1, 2022
Wind speed/direction	CNRL	RM Young 05305VK	129612	10	March 1, 2022
Temperature/RH	PRAMP	Rotronic HC2-S3	20558318	3	March 1, 2022
Barometric Pressure	PRAMP	Met One 92	B19577	3	March 1, 2022
Data logger	PRAMP	Envista Ultimate	n/a	n/a	March 1, 2022
Zero Air Generator	PRAMP	Teledyne 701	n/a	n/a	March 1, 2022
Hydrogen Generator	PRAMP	AMA HG300	211067076	n/a	March 1, 2022
Station Temperature	CNRL	COMET	n/a	n/a	March 1, 2022

## 5.0 Continuous Stations

### 5.1 Area Map for Continuous Station



Source: <http://maps.google.com>

Retrieved: March 19, 2023



## 5.2 Sketches for Continuous Stations



Distances from the Reno-B Station:  
A: 75 m away from the north side of trees  
B: 70 m away from the east side of trees  
C: 60 m away from the south side of trees  
D: 60 m away from the west side of trees  
E: 60 m away from the unpaved road to the station

Notes:

\* The station is surrounded by trees.

### 5.3 Photographs for Continuous Stations

East:



North:



**South:**



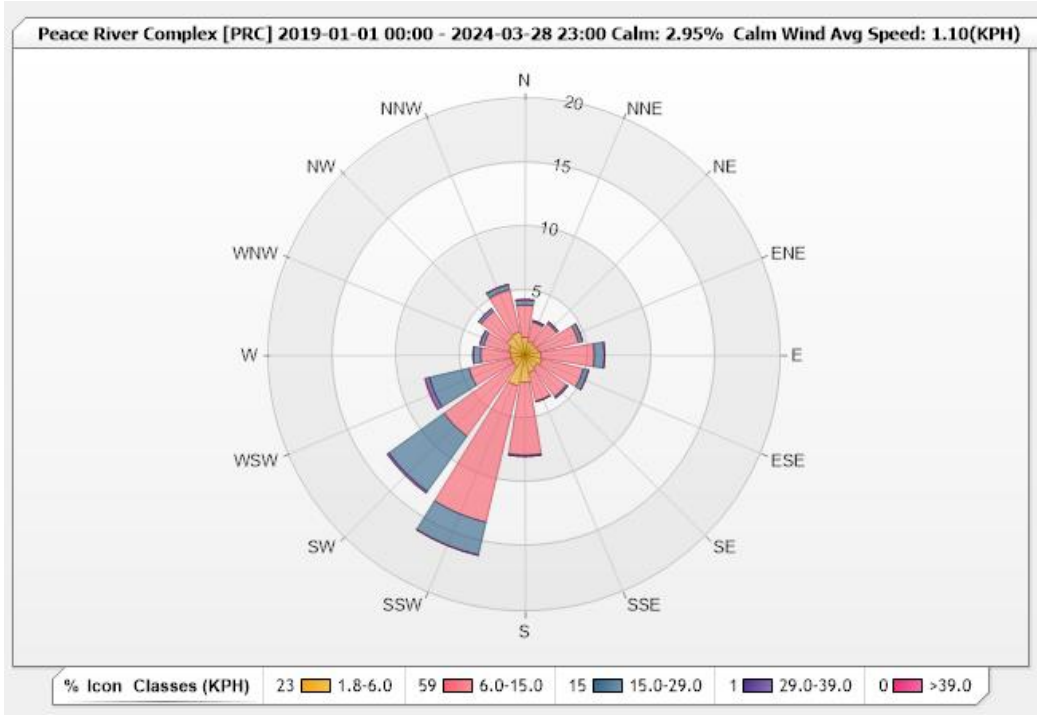
**West:**



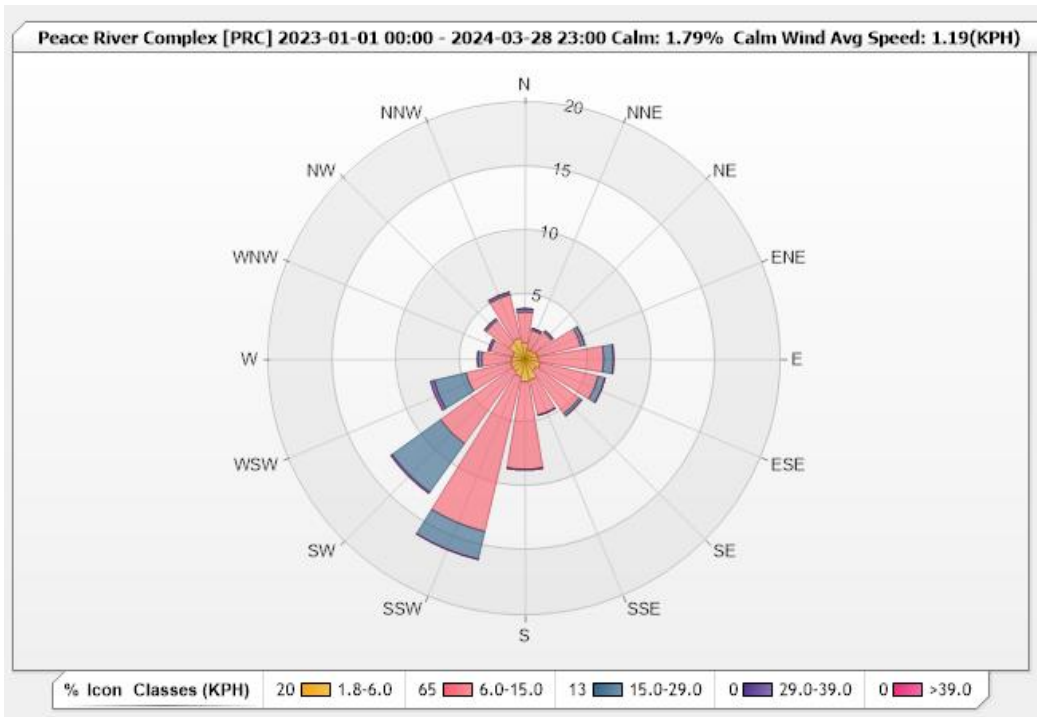
Colour picture showing the details of the sampling inlet(s) or manifold in relation to the station.



## 5.4 Wind Rose

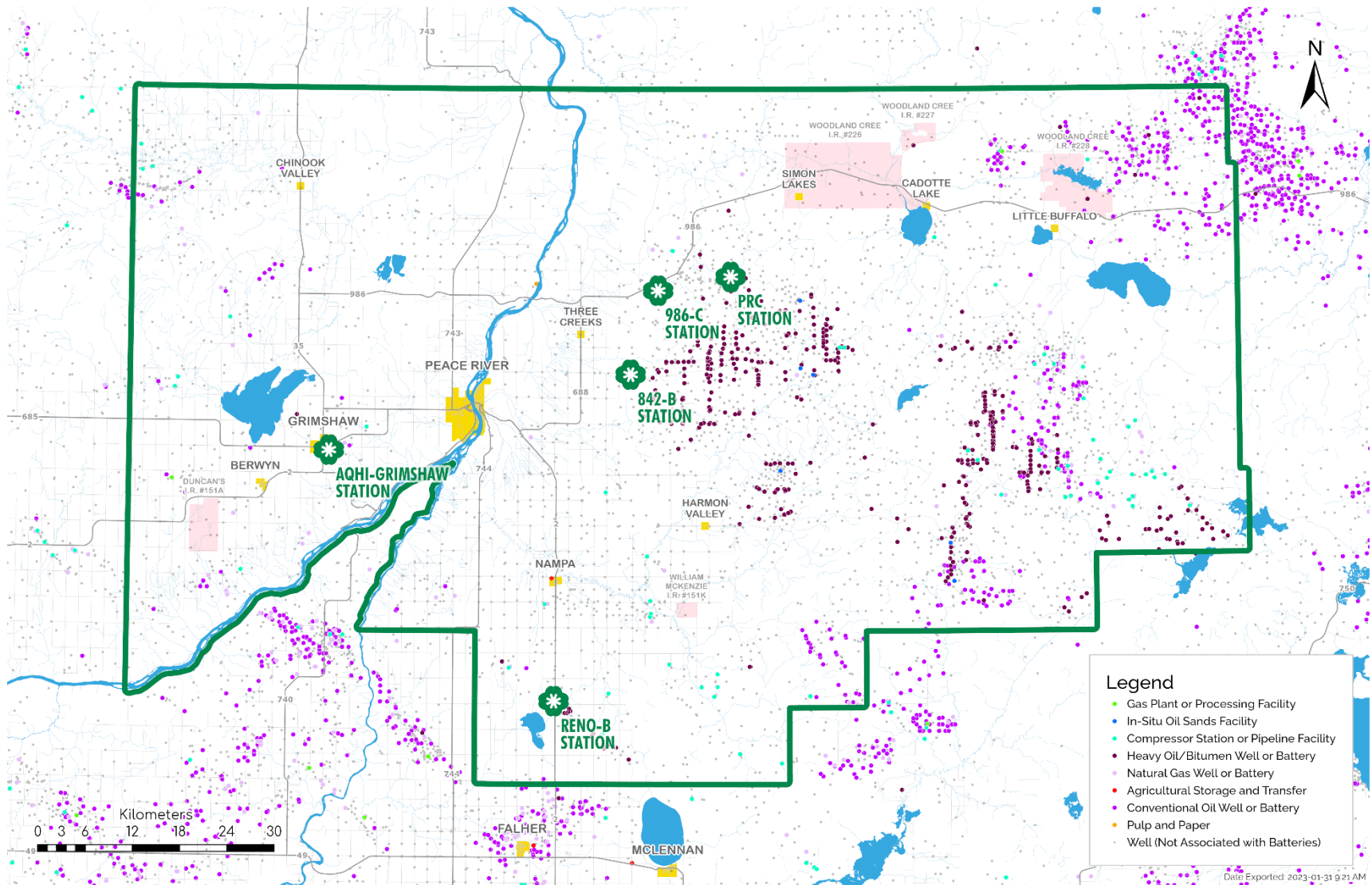


Data Period: January 1, 2019 – March 28, 2024 (PRAMP obtained the PRC site wind data from CNRL back to January 1, 2019)



Data Period: January 1, 2023 – March 28, 2024

## 6.0 Network of Stations



## 7.0 Revisions

<b>Revision No.</b>	<b>Date</b>	<b>Reason For Revision</b>	<b>Prepared By</b>	<b>Approved By</b>
0	March 2023	Original	Lily Lin, Technical Program Manager	Michael Bisage, Technical Program Manager
1	March 2024	Update instrument list and wind roses	Lily Lin, Technical Program Manager	Michael Bisage, Technical Program Manager