



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

**Ambient Site Doc-PRAMP-20210408-01563**

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April 2021

# Ambient Air Monitoring Site Documentation Template

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## 1.0 General Information

### 1.1 Station

<b>Station identification/number</b>	Reno
<b>Station Name (building name, park name, etc.)</b>	Reno
<b>Date station established</b>	June 12, 2016
<b>Date information last updated</b>	April 8, 2021

### 1.2 Location

<b>Station address (street address/legal land description)</b>	20306 Twp Rd 794, Smoky River No.130, AB	
	04-28-79-20, W5M	
<b>Nearest cross-street</b>	Twp 794 and unknown access to field	
<b>Air zone / Airshed zone</b>	PRAMP Airshed	
<b>Latitude</b>	55.86936	
<b>Longitude</b>	-117.05739	
<b>UTM Coordinates</b>	<b>East:</b> 303705	<b>North:</b> 4314711
<b>Community (municipality, community or county)</b>	Northern Sunrise County	
<b>Population of city or metropolitan area</b>	1952	
<b>Census year</b>	2020	

#### **DIRECTIONS:**

From Peace River, travel approx. 46 km on Hwy 2 (south) and turn onto Township Road 794 E. Follow this for 4.7 km and then turn into the driveway on the left (#20306). Follow the driveway to the right and the trailer will be directly ahead.

A permit is required from Baytex for activities on this land. Contact the local operator.

### 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: Agricultural	
	2. East: Agricultural	
	3. South: Agricultural	
	4. West: Agricultural	

<b>Site elevation (above sea level (m))</b>	610 m
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<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> Yes
	<b>East:</b> No	<b>West:</b> Yes
<b>Distance to nearest trees (m)</b>	66 m	
<b>Description of Obstruction</b>	Trees, ~ 16m in height	
<b>Angle of Elevation (wind system)</b>	5°	
<b>Angle of Elevation (manifold)</b>	10°	
<b>Manifold</b>	<b>1. Type:</b> Stainless Steel / Glass	
	<b>2. Distance from supporting structure:</b> 1 m	

<b>Meteorological Information</b>	<b>1. Type:</b> Aluma Tower
	<b>2. Distance from supporting structure:</b> 7 m
	<b>3. Distance from station:</b> 10 m
	<b>4. Contact:</b> East 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
Twp 794	Highway	Unknown – Minimal	60 m	Paved Rural Highway

\*Average annual weekday traffic

#### 3.3 Major point sources

Source Name	Source Type	Production Capacity	Distance from Site (km)	Compass direction (degrees)
Tervita Facility	H2S, THC	unknown	14.5 km	Northeast
CNUL Cliffdale Facility	H2S, THC	unknown	27 km	East

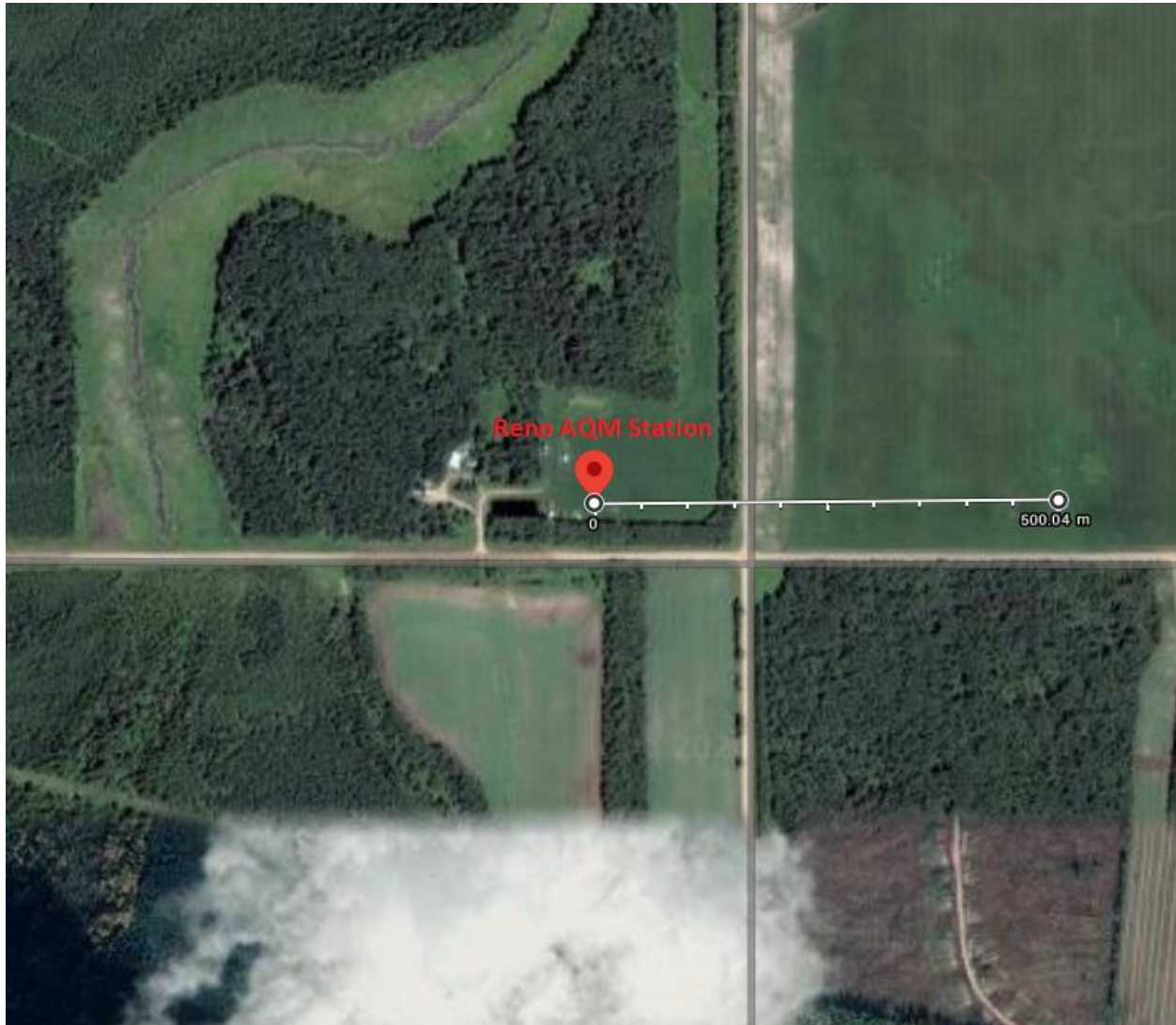
## 4.0 Instruments

Station Name: Reno

Instrument Type	Owner	Make	Serial No.	Sampling Height (m)	Date Installed
Sulphur dioxide	Bureau Veritas Canada	API 100A	1502	4	June 29, 2017
Methane / Non-methane hydrocarbons	PRAMP	Thermo 55i	1505664392	4	February 6, 2020
Total reduced sulphur	Bureau Veritas Canada	Thermo 43i-TLE	1162460022	4	June 29, 2017
TRS convertor	Bureau Veritas Canada	CD Nova CDN-101	534	n/a	June 29, 2017
Wind speed/direction	Bureau Veritas Canada	RM Young 05305VK	149769	10	June 29, 2017
Temperature/RH	Bureau Veritas Canada	RM Young 43172VC	60837897	3	June 29, 2017
Barometric Pressure	Bureau Veritas Canada	Met One 92	R12877	3	June 29, 2017
Precipitation	PRAMP	RM Young 5202	TB15877	4	July 18, 2020
Intermittent VOCs	Innotech / Bureau Veritas Canada	Suma Canister	n/a	4	n/a
Data logger	Bureau Veritas Canada	Envista Ultimate	n/a	n/a	September 18, 2018

## 5.0 Continuous Stations

### 5.1 Area Map for Continuous Station

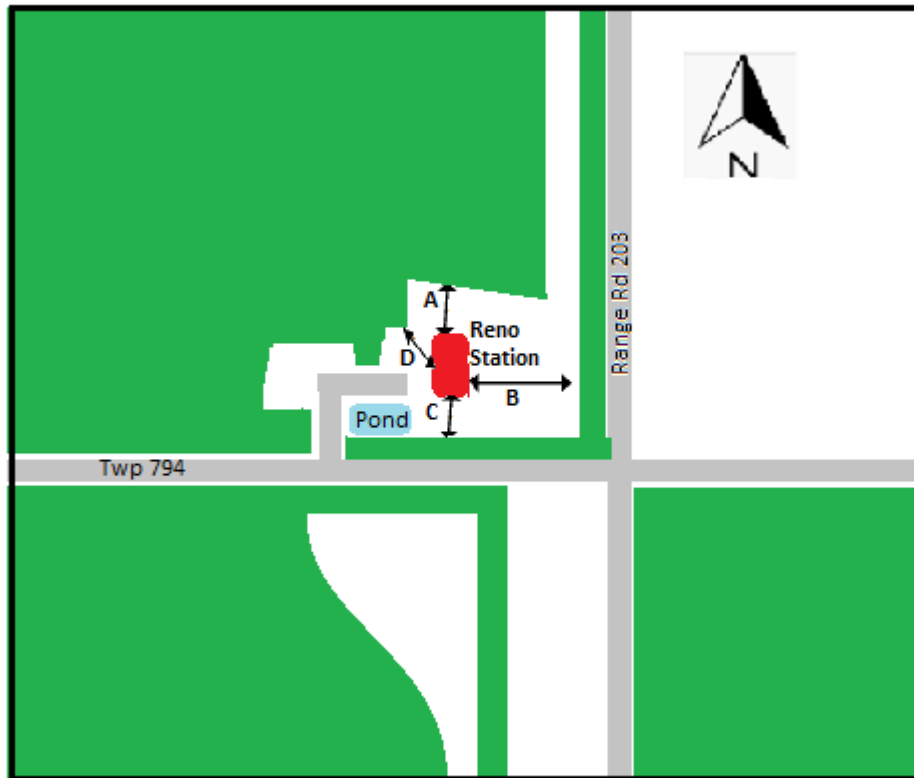


Source: <http://maps.google.com>

Retrieved: April 2020



## 5.2 Sketches for Continuous Stations



Height of trees (distance from trailer)

A = 11m (96m)

B = 10m (140m)

C = 16m (66m)

D = 17m (66m)

Notes:

Unless otherwise marked, land use is agricultural

### 5.3 Photographs for Continuous Stations

East:



North:



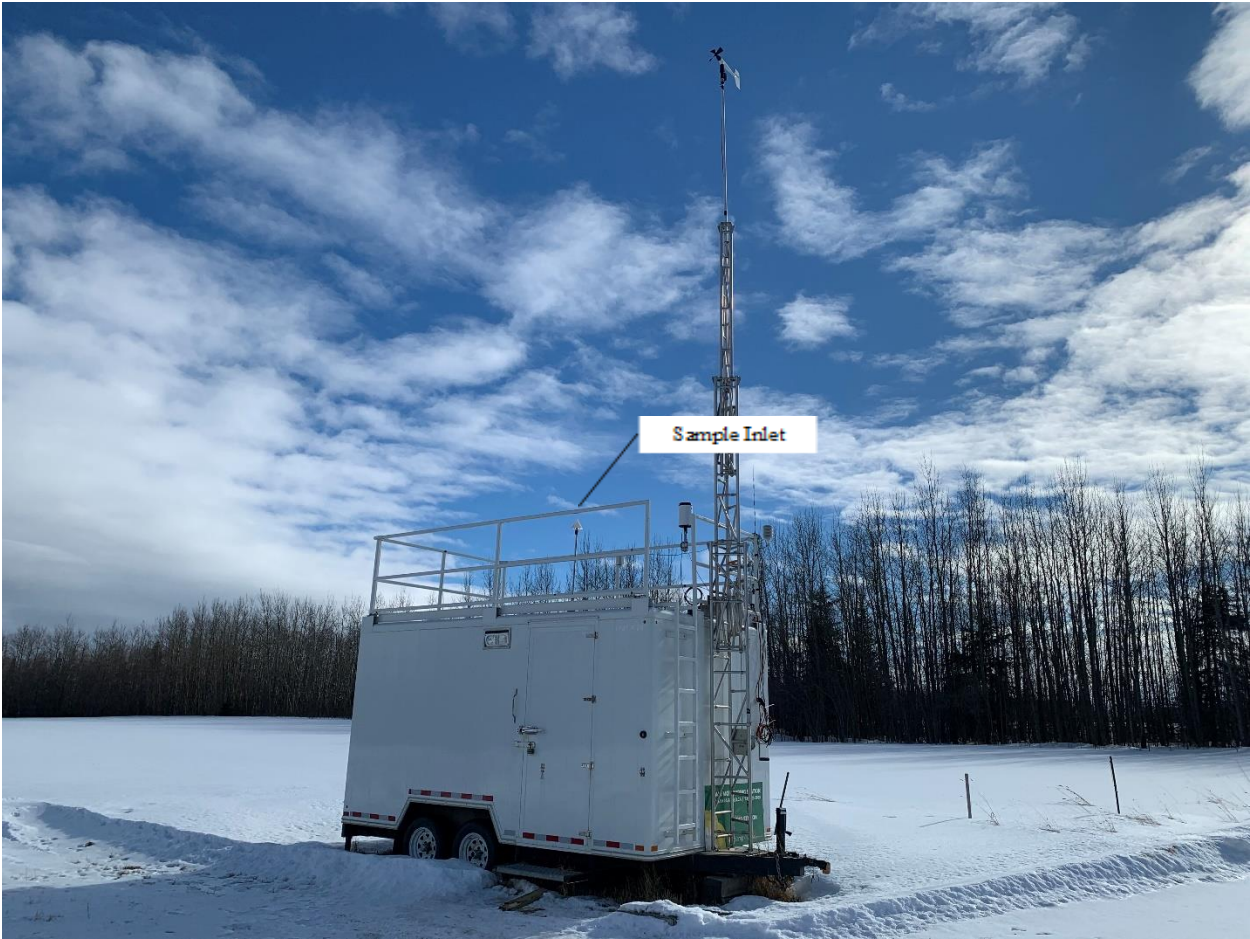
**South:**



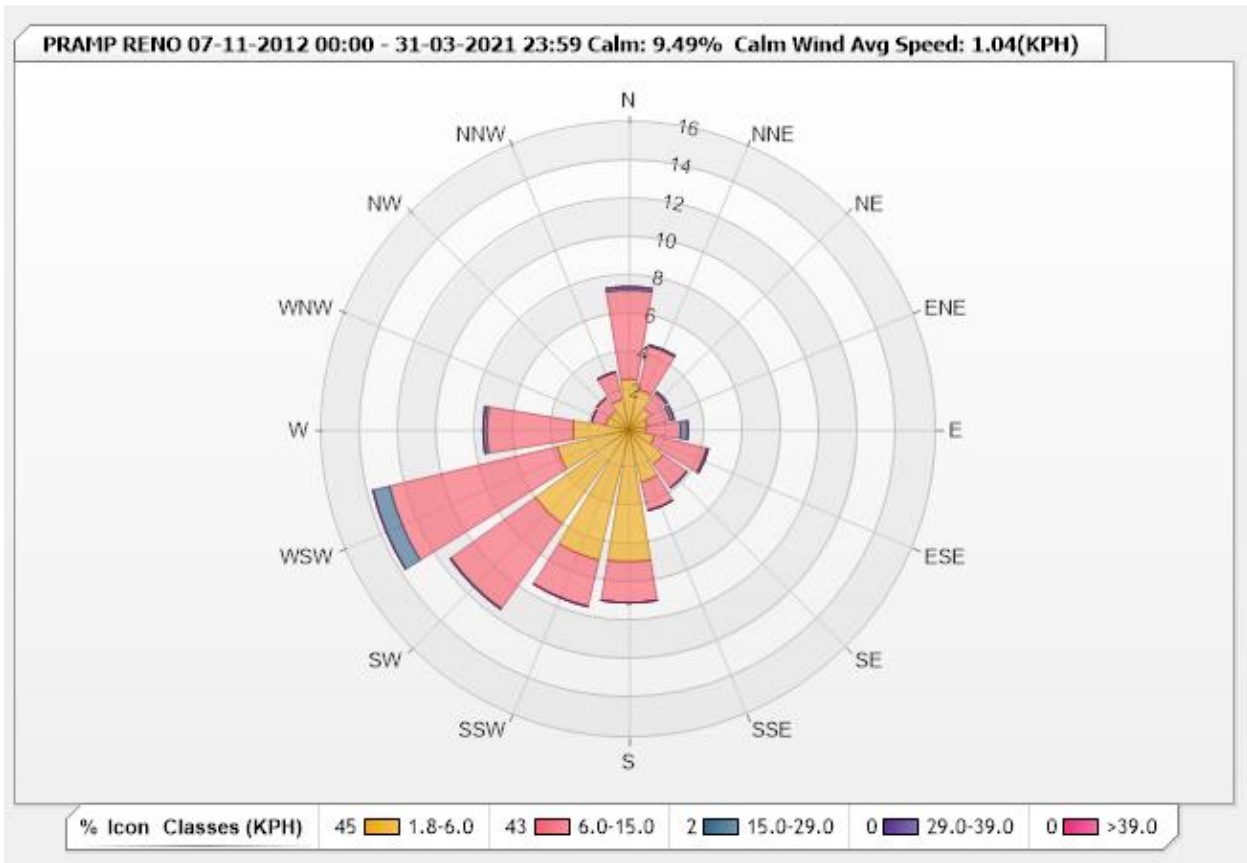
**West:**



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

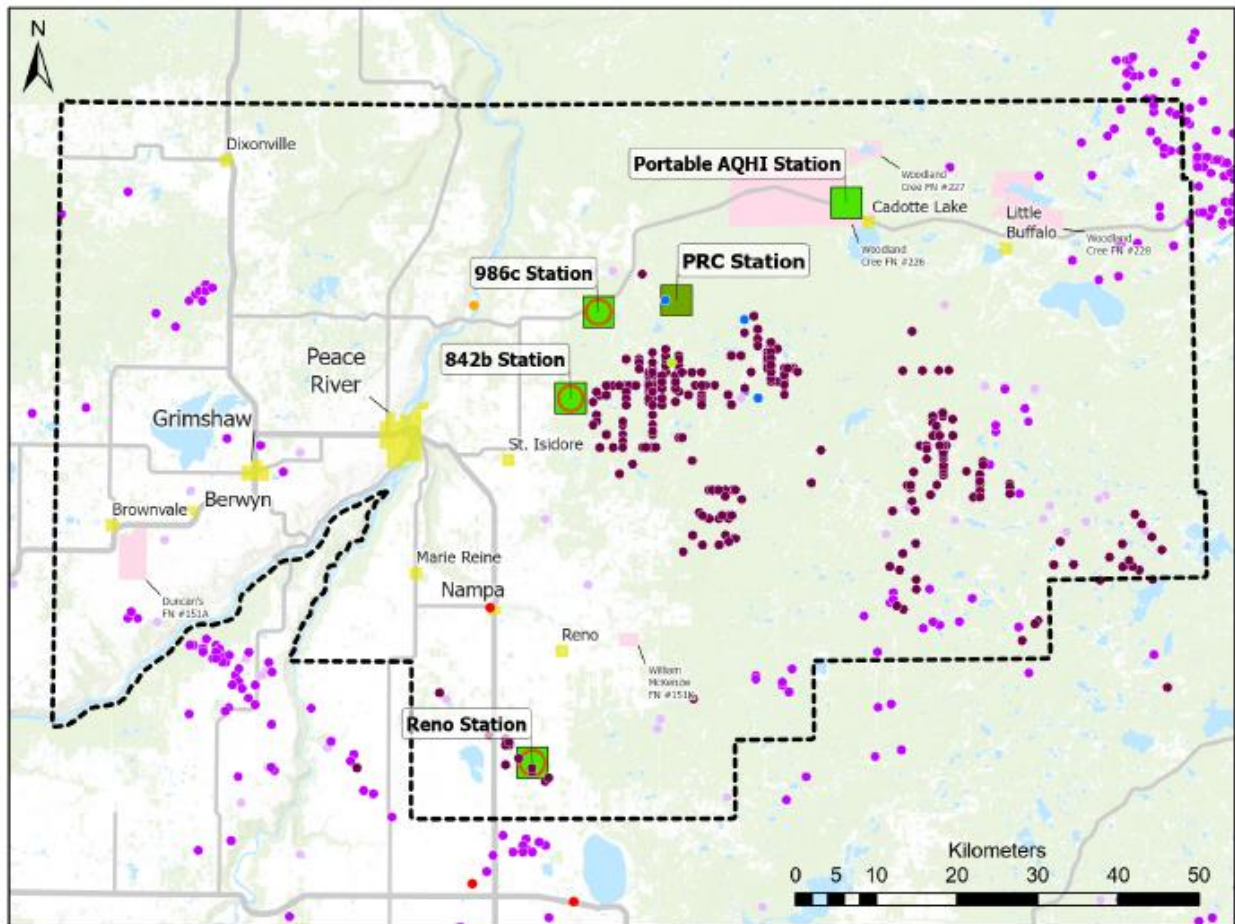


## 5.4 Wind Rose



Data Period: November 7, 2012 – March 31, 2021

## 6.0 Network of Stations



# Peace River Area Monitoring Program



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**Date Exported:** 2021-04-08 1:56 AM

**Sources:** Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NRCAN, Parks Canada, Esri, CGIAR, USGS, Sources: NRCAN, Esri Canada, and Canadian Community Maps contributors., Esri Canada

## Map Legend

### Monitoring Methods

- Continuous (existing)
- Continuous (planned)
- Triggered Canister (existing)

### Industrial Facilities

- Heavy Oil/Bitumen Wells and Batteries
- Conventional Oil Wells and Batteries
- Natural Gas Wells and Batteries
- In-Situ Oil Sands Facilities
- Compressor Stations and Pipeline Facilities
- Power Plants and Generating Stations
- Pulp and Paper
- Agricultural Storage and Transfer