



## **Grimshaw AQHI Ambient Air Monitoring Station Site Documentation / Network Documentation**

**Ambient Site Doc-PRAMP-20240328-01689-V01**



## Ambient Air Monitoring Site Documentation Template

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## 1.0 General Information

### 1.1 Station

<b>Station identification/number</b>	AQHI - Grimshaw Station (01689)
<b>Station Name (building name, park name, etc.)</b>	AQHI - Grimshaw Station
<b>Date station established</b>	December 1, 2021
<b>Date information last updated</b>	March 28, 2024

### 1.2 Location

<b>Station address (street address/legal land description)</b>	13-8-83-23-W5	
<b>Nearest cross-street</b>	50 St and 48 Ave	
<b>Air zone / Airshed zone</b>	PRAMP Airshed	
<b>Latitude</b>	56.186570	
<b>Longitude</b>	-117.604994	
<b>UTM Coordinates</b>	<b>East:</b> 462450	<b>North:</b> 6227009
<b>Community (municipality, community or county)</b>	Grimshaw	
<b>Population of city or metropolitan area</b>	2646	
<b>Census year</b>	2022	

#### **DIRECTIONS:**

From Peace River, head west on AB-2 toward 80 St., travel 8.9km. Turn left on Roma Dr / Alberta 2 Alt S, travel 11.2km. Turn left on 50 St, travel around 600m. The trailer is set on the left side of the road.

### 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: Residential	
	2. East: Residential, Agricultural, School, Community center	
	3. South: Agricultural	
	4. West: Residential, Agricultural, Recreational	
<b>Site elevation (above sea level (m))</b>	603 m	
<b>Angle of elevation to nearby buildings</b>	1. <b>Greatest angle:</b> n/a	
	2. <b>Building direction:</b> East, North, and Southeast	
<b>Average building height in the area (m)</b>	10 m	
<b>Air flow restrictions (yes/no)</b>	<b>North:</b> No	<b>South:</b> No
	<b>East:</b> Yes	<b>West:</b> No
<b>Distance to nearest trees (m)</b>	No nearby trees around the station	
<b>Manifold</b>	1. <b>Type:</b> Stainless Steel / Glass	
	2. <b>Distance from supporting structure:</b> 1 m	
<b>Meteorological Information</b>	1. <b>Type:</b> Aluma Tower	
	2. <b>Distance from supporting structure:</b> 7 m	
	3. <b>Distance from station:</b> 10 m	
	4. <b>Contact:</b> on 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
50 St	Residential use	Minimal - Moderate	30 m	Paved Road
47 Ave	Residential use	Minimal – Moderate	30 m	Paved Road
Back alley of 48 Ave	Residential use	Minimal	15 m	Gravel Road

\*Average annual weekday traffic

#### 3.3 Major point sources

Source Name	Source Type	Production Capacity	Distance from Site (km)	Compass direction (degrees)
Recreation centre	Heating, vehicle emission	unknown	0.05 km	Southwest
Nutrien – Roma Distribution Terminal	PM, fertilizer	unknown	3km	Northwest

## 4.0 Instruments

Station Name: Grimshaw AQHI station

Instrument Type	Owner	Make	Serial No.	Sampling Height (m)	Date Installed
Sulphur dioxide	PRAMP	API T100	722	4	December 1, 2021
Methane / Non-methane hydrocarbons	PRAMP	Thermo 55i	1191032505	4	December 1, 2021
Total reduced sulphur	PRAMP	API T100	132	4	December 1, 2021
TRS convertor	PRAMP	CD Nova CDN-101	576	n/a	December 1, 2021
Nitrogen dioxide	PRAMP	API T200	837	4	December 1, 2021
Ozone	PRAMP	API T400A	824	4	December 1, 2021
Particulate Matter 2.5	PRAMP	API T640	318	6	December 1, 2021
Wind speed/direction	PRAMP	RM Young 05305AQ	174801	10.5	December 1, 2021
Temperature/RH	PRAMP	Vaisala HMP155	N2910506	4	December 1, 2021
Data logger	PRAMP	Envista Ultimate	282144	n/a	December 1, 2021
Barometric pressure	PRAMP	Met One 092	A2397	4	December 1, 2021
Hydrogen generator	PRAMP	Thermo HG300	190567059	n/a	December 1, 2021
Zero air generator	PRAMP	API 701	468	n/a	December 1, 2021
AQM trailer	PRAMP	ITB	VIN: 2C9CSC2G7J1044015	n/a	December 1, 2021

## 5.0 Continuous Stations

### 5.1 Area Map for Continuous Station



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

Retrieved: March 2022



## 5.2 Sketches for Continuous Stations



### 5.3 Photographs for Continuous Stations

East:



North:



**South:**



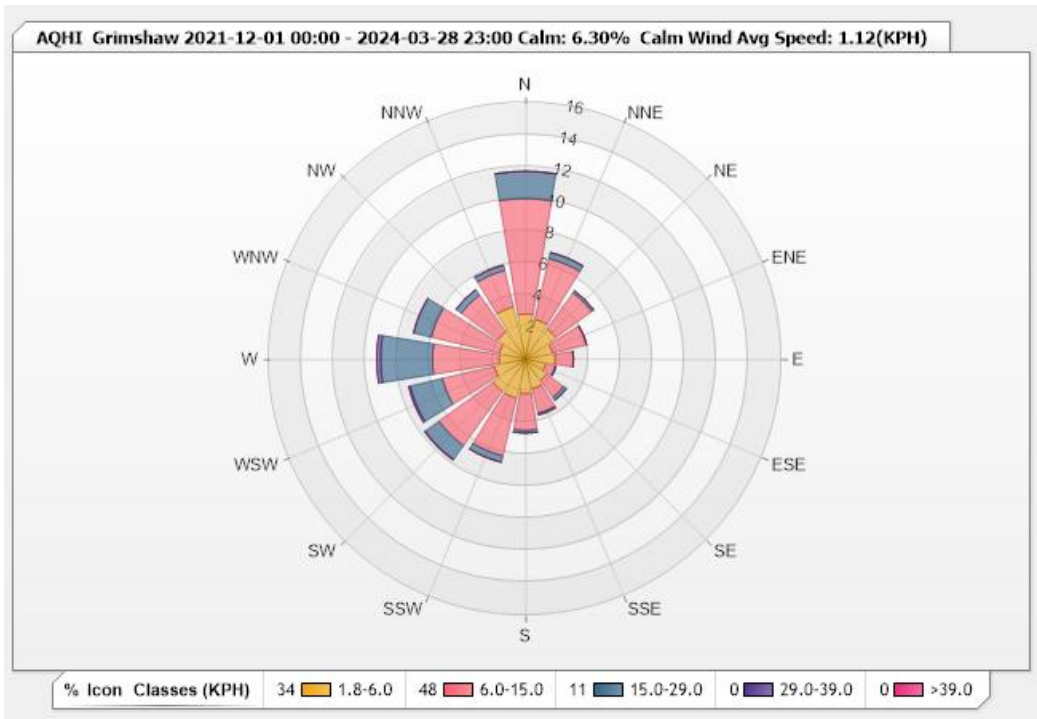
**West:**



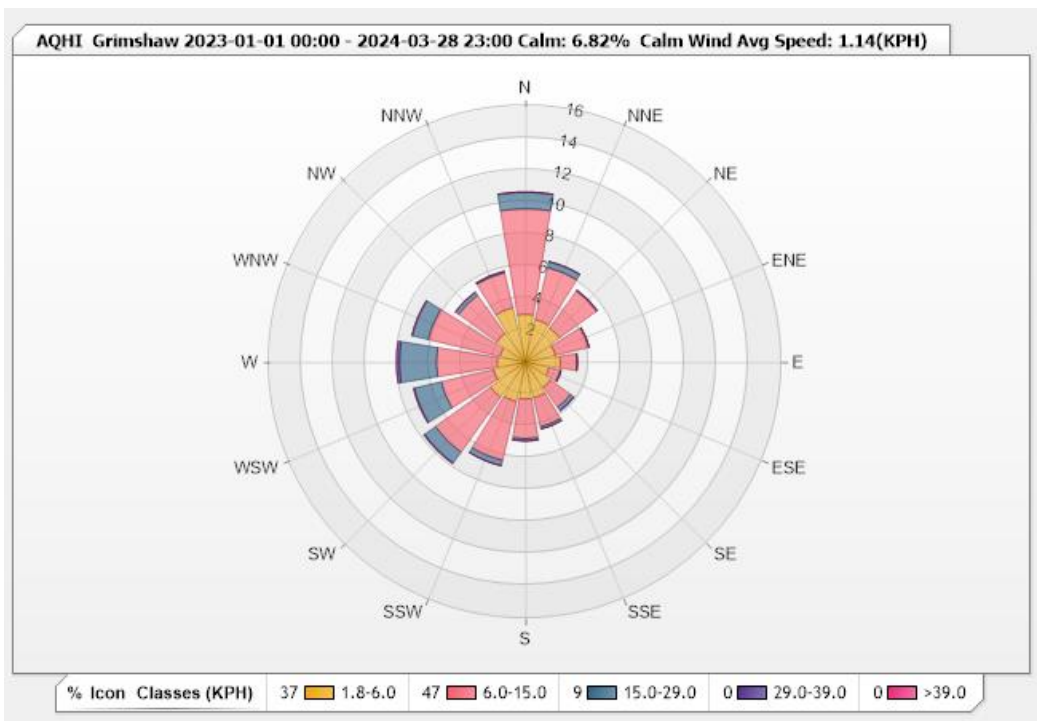
Colour picture showing the details of the sampling inlet(s) or manifold in relation to the station.



## 5.4 Wind Rose

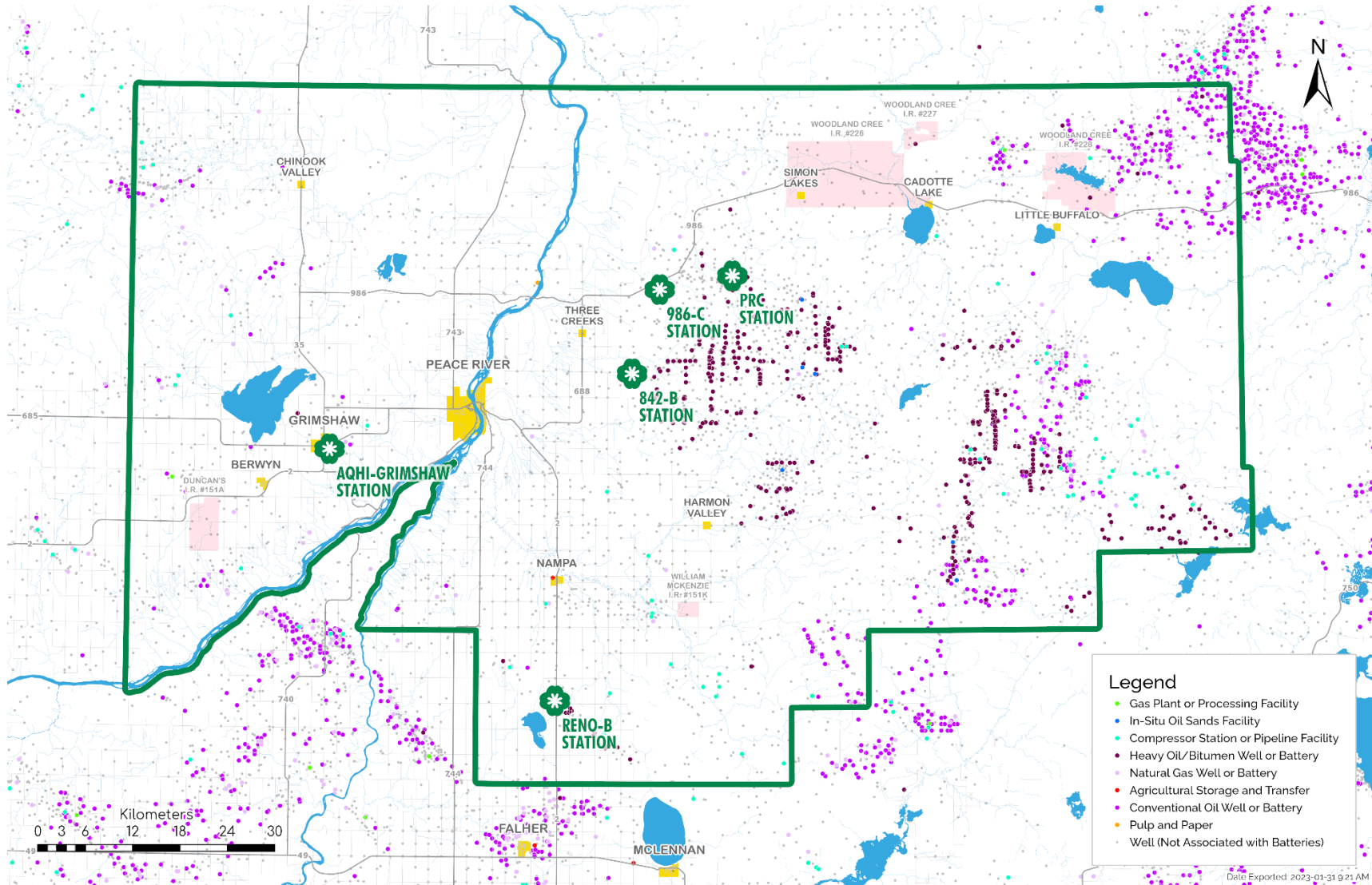


Data Period: December 1, 2021 – March 28, 2024 (AQM station was installed in December 2021.)



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

## 6.0 Network of Stations



## 7.0 REVISION

<b>Revision No.</b>	<b>Date</b>	<b>Reason For Revision</b>	<b>Prepared By</b>	<b>Approved By</b>
0	March 2023	Created a new site	Lily Lin, Technical Program Manager	Michael Bisage, Technical Program Manager
1	March 2024	Update station name, instrument list and wind rose	Lily Lin, Technical Program Manager	Michael Bisage, Technical Program Manager