



Wood Buffalo Environmental Association  
**Ambient Air Monitoring Station  
Site Documentation**

AMS 06- Patricia McInnes

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LAST UPDATED: MARCH 27, 2024



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## General Site Information

Revision Date: March 27, 2024

### Station

Station ID	AMS 06
Station name	Patricia McInnes
Date station established	1998

### Location

Station street address	Carteret Street, Fort McMurray
Legal land description	10-26-089-10 W4
Airshed Zone	Wood Buffalo Environmental Association
Latitude	56°45'4.96" North
Longitude	111°28'36.10" West
UTM East	470849
UTM North	6289812
Nearest community	Located in Fort McMurray
Community population	76000
Census Year	2023

### Owner/Operator/Approval Holder

Operating Agency	Wood Buffalo Environmental Association
Address of Operating Agency	Unit 3, 805 Memorial Drive, Fort McMurray, Alberta T9K 0K4
Name of Approval Holder	Wood Buffalo Environmental Association
Approval number	N/A
Contact Name	Wood Buffalo Environmental Association
Address	Unit 3, 805 Memorial Drive, Fort McMurray, Alberta T9K 0K4
Phone number	780-799-4420
Email address	info@wbea.org

### Site Description

Land use by sector	0 – 90 degrees	Residential
	91 – 180 degrees	Residential
	181 – 270 degrees	Sports Grounds
	271 – 360 degrees	Sports Grounds
Site elevation (m) (above sea level)	362 M	
Angle of elevation to nearby buildings	Greatest angle	0
	Building direction	N/A
Airflow restrictions	North	N/A
	East	N/A
	South	N/A

	West	N/A
Distance to nearest trees (m)	North	N/A
	East	N/A
	West	28m
	South	4m
Sample manifold	Type	All glass
	Inlet height above roof	1 metre
Wind Sensors	Type	Cup and vane
	Height above ground (m)	10
	Distance from station (m)	0

## Site Influences

### Localized Sources (within 20 metres of station)

Type	Distance (m)	Description
Recreational Complex	About 20-50 meters, north to northwest of the Station	Maintenance of sports fields and recreational complex, possible PM and NOx Sources
Residential Subdivision	South and southwest of the station	Wood burning in household stoves and backyard firepits

### Roadway Influences

Type	Traffic Volume	Distance (m)	Description
Residential Road	High	30	Paved road

### Major Point Sources

Facility Name	Source Type	Distance from site (km)	Compass direction from site
Fort McMurray Water Treatment Plant	Water treatment plant	4	South east
Eveready	Asphalt production	4	North
Suncor / Syncrude	Oil Sands Production	15	North

## Station Equipment

Equipment Owner: WBEA

### Analytical Equipment

Parameter	Make	Model	Serial Number	Date Instrument Installed	WBEA Data Start Date
<b>Continuous</b>					
SO <sub>2</sub>	Thermo Scientific	43i	1160290013	2020	January, 1999
TRS	Teledyne/API	43i-TLE	1218153358	2019	January, 1999
THC/CH <sub>4</sub> /NMHC/THC	Thermo Scientific	55i	1118148495	2020	January, 1999
NO <sub>x</sub> /NO/NO <sub>2</sub>	Thermo Scientific	42i	1172750022	2016	January, 1999
NH <sub>3</sub>	Teledyne/API	T 201	808	2020	August, 2006
O <sub>3</sub>	Thermo Scientific	49i	1300156234	2022	January, 1999
PM <sub>2.5</sub>	Teledyne/API	T640	871	2020	January, 1999
<b>Time-Integrated</b>					
PM <sub>2.5</sub> A	Thermo Scientific	2000i	2000I203861308	2018	-
PM <sub>2.5</sub> B	Thermo Scientific	2000i	2000I204851408	2018	-
PM <sub>10</sub> A	Thermo Scientific	2000i	2000I202151205	2018	-
PM <sub>10</sub> B	Thermo Scientific	2000i	2000IW20205251411	2018	-
PAH	Tisch	TE-1004BL	1001099	2016	-
VOC	Tisch	TE-123	1021	2016	-
Dustfall	Advantage Manufacturing	-	-	2022	-

### Meteorological Equipment

Parameter	Make	Model	Serial Number	WMO Site Class	Date Instrument Installed	WBEA Data Start Date
AT/RH	Vaisala	HMP155	N3840525	Class 3	2020	January, 1999
WS	Met One	010C-1	B10015	Class 3	2021	January, 1999
WD	Met One	020C-1	E4854	Class 3	2016	January, 1999

### Support Equipment

Name	Description	Make	Model	Serial Number
Datalogger	Datalogger	Campbell Scientific	CR3000	10957
Zero air generator	Zero Air Generator	Teledyne/API	701	261

HVAC	Heating and air conditioning system. Wall mount unit	BARD	2 ton	314H183561152-02
Shelter / Building	Air monitoring portable	ITB	8 x 16 trailer	09 14786
Gas Dilution Calibrator	Mass flow controlled gas dilution	Teledyne/API	T700	3566
Thermal Oxidizer	TRS Converter	Global	G150	2022-195
Thermal Oxidizer	NH3 Converter	API	T501	484
Tower	Aluma Tower	Aluma	T135	N/A
Hydrogen Generator	Hydrogen Generator	Peak Scientific Canada	63-0100	771056335

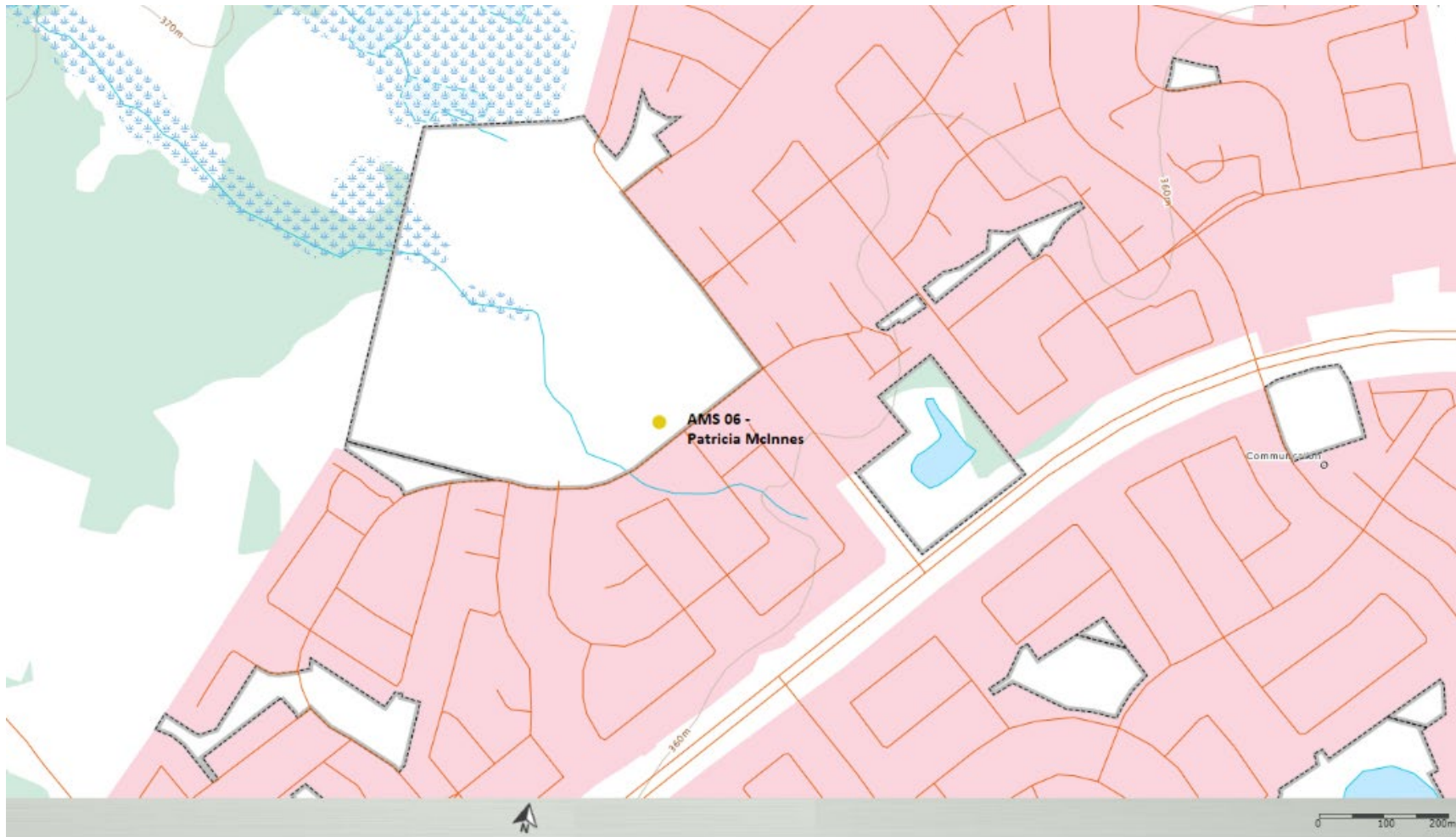


Figure 1 – Area topographic map showing AMS 06



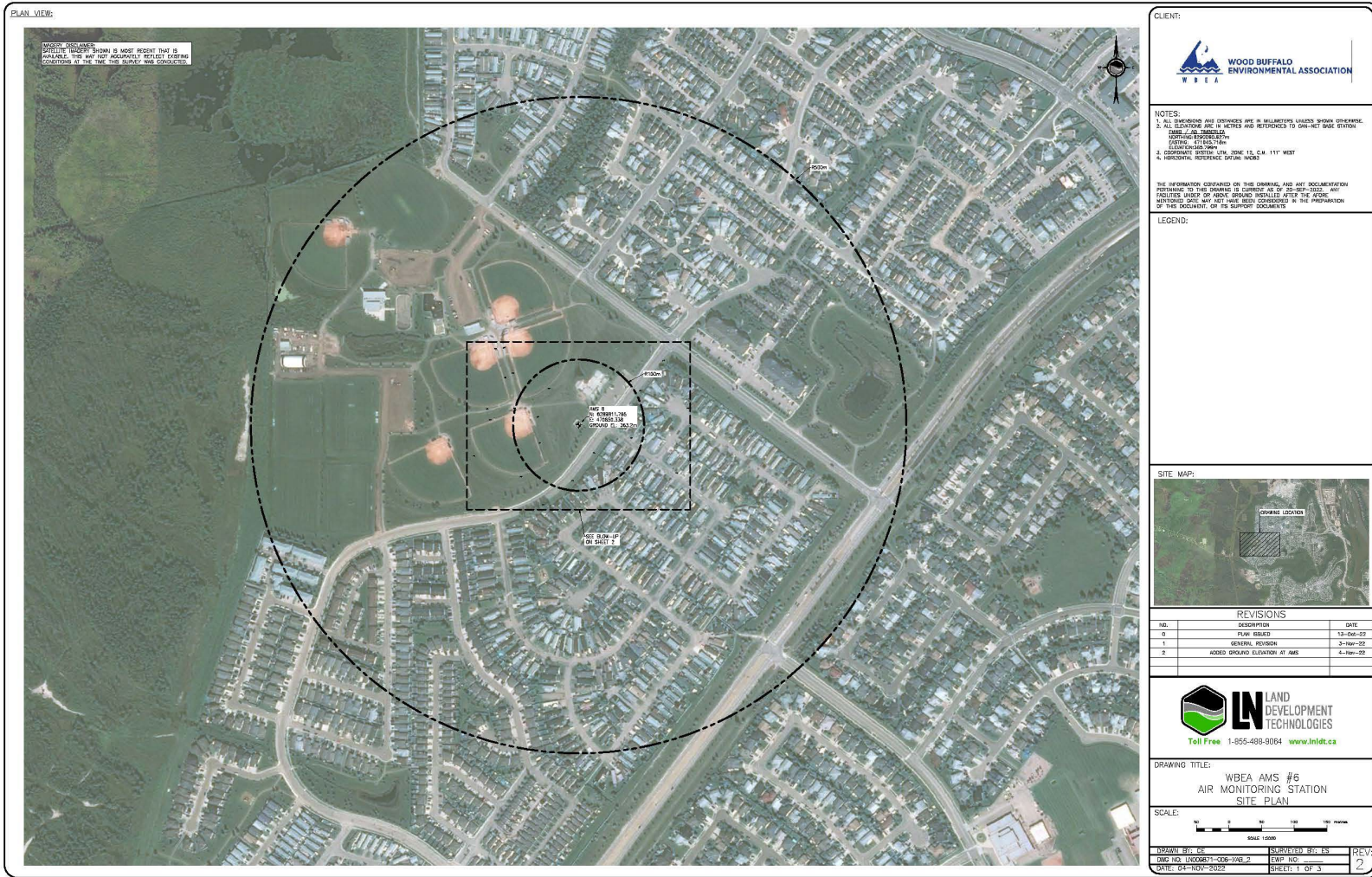


Figure 2 – Aerial image showing AMS 06



Figure 3 – Plan view image for AMS 06 site

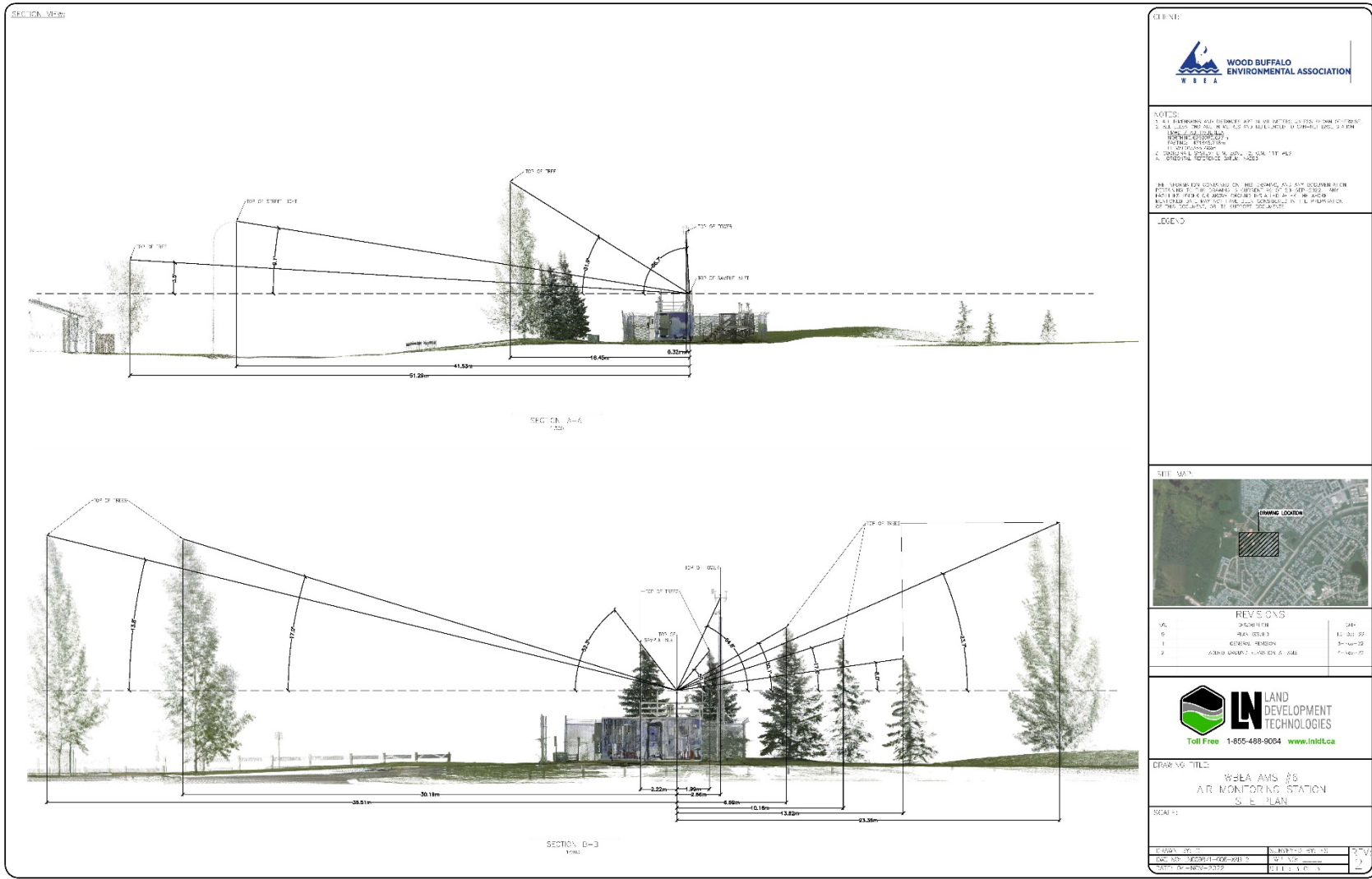


Figure 4 – Elevation view image for AMS 06 site

Site photos

The following photos show the environment surrounding the monitoring station.



Figure 5 – Environment looking North



Figure 6 – Environment looking East



Figure 7 – Environment looking South



Figure 8 – Environment looking West



Figure 9 – Meteorological Tower



## Station Photos

The following photos show the monitoring station and instrumentation.

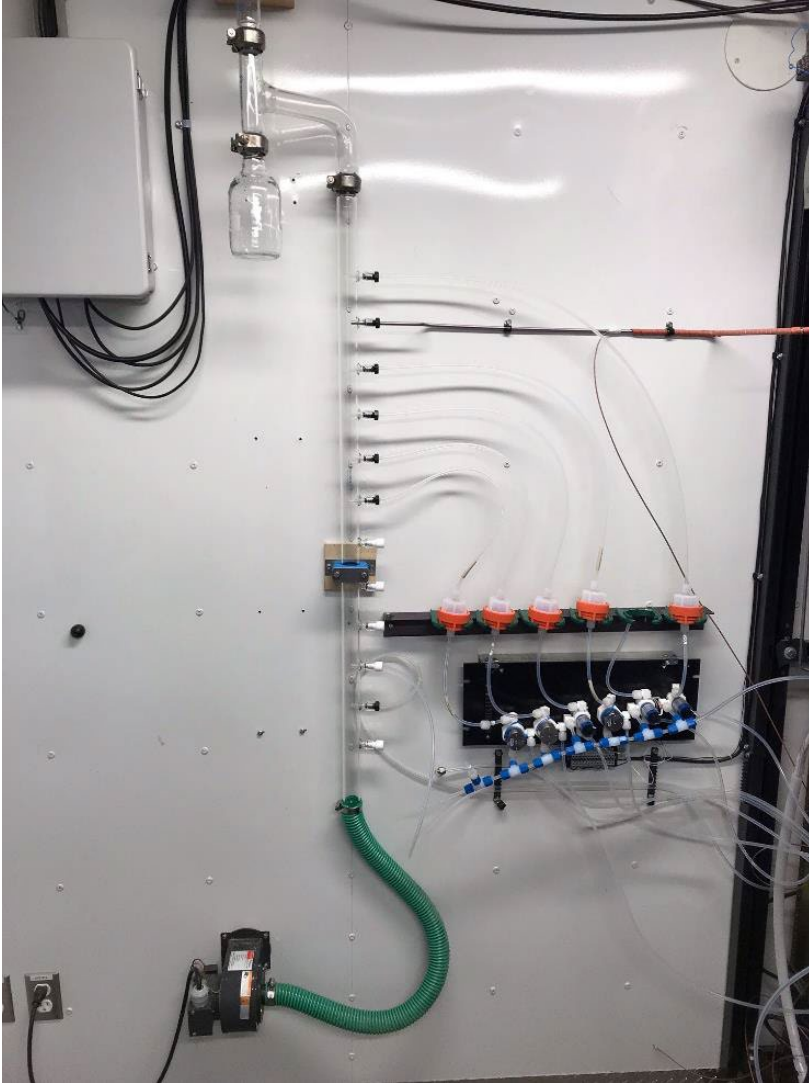


Figure 10 – Photo showing the sample manifold



Figure 11 – Curb shot of the monitoring station

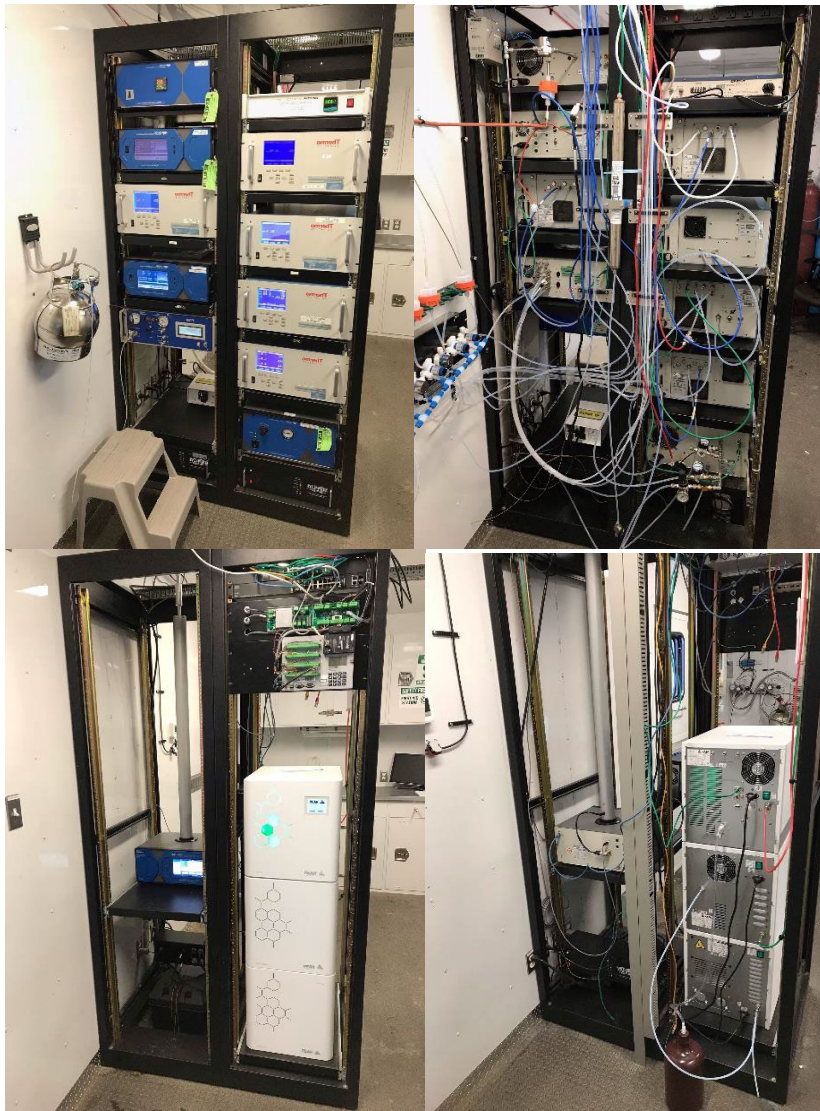


Figure 11 –Photo of the front and the back of instrument rack



Wood Buffalo Environmental Association  
Wind Rose 2019 - 2024

Wind Speed (WS) - km/h  
Patricia McInnes

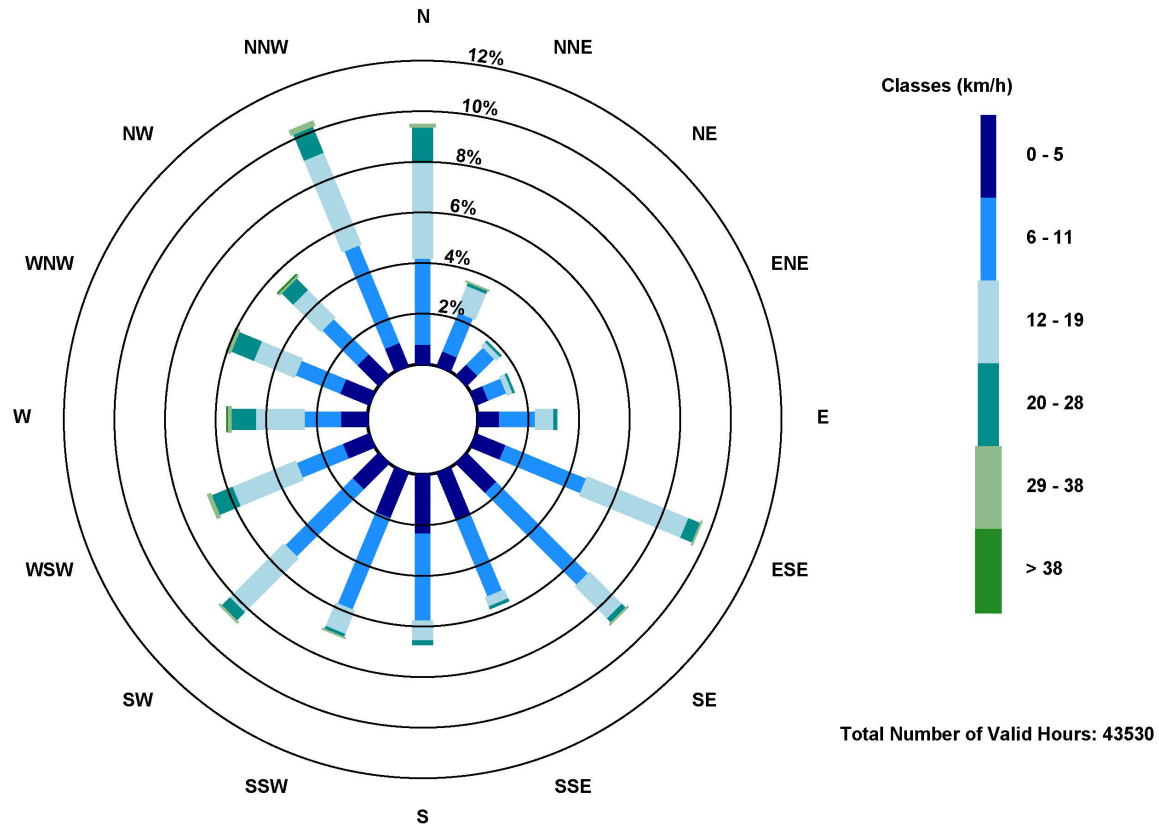


Figure 12 – Windrose (2019-2024)