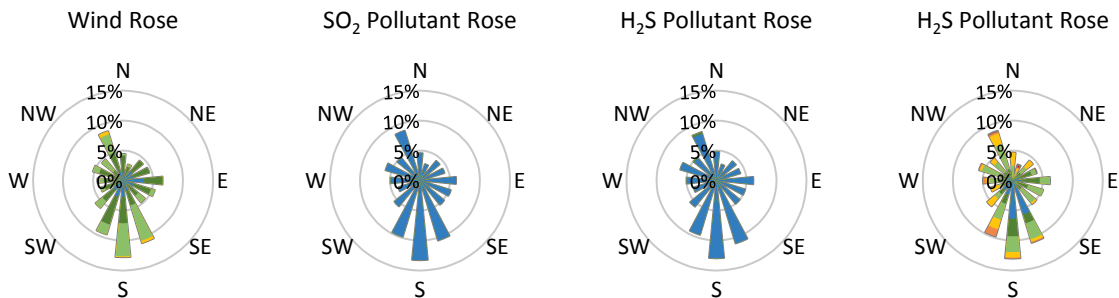
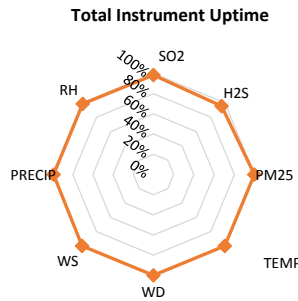
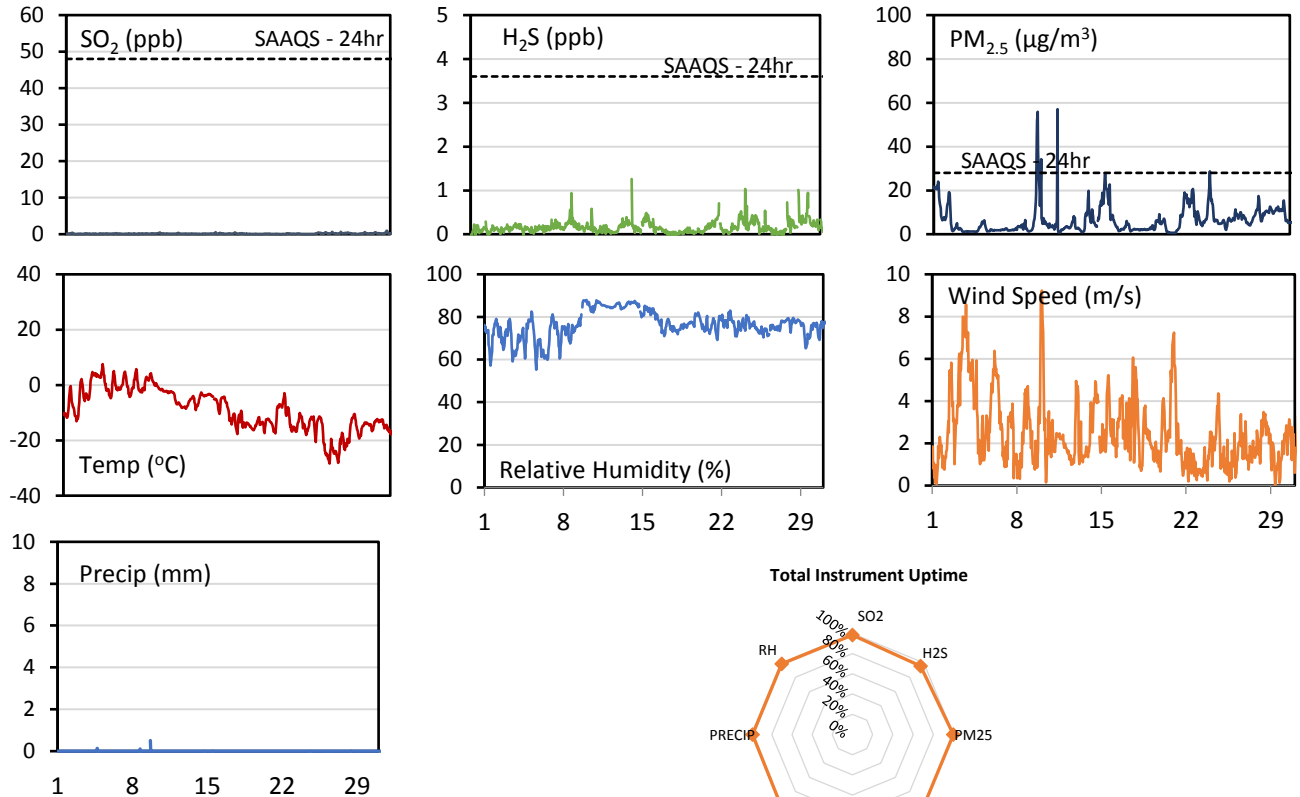


## WYAMZ Kindersley Station - December 2015 Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
SO <sub>2</sub>	ppb	0.1	98%	0.4	Dec-31	48	0	1.0	Dec-30 16:00	172	0
H <sub>2</sub> S	ppb	0.2	96%	0.4	Dec-29	3.6	0	1.3	Dec-14 20:00	11	0
PM <sub>2.5</sub>	µg/m <sup>3</sup>	6.5	100%	16.6	Dec-15	28	0	57.1	Dec-11 10:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class					
Wind Speed	m/s	0.3 ≤ WS < 1.4	1.4 ≤ WS < 3.1	3.1 ≤ WS < 7.8	7.8 ≤ WS < 10.8	10.8 ≤ WS < 13.6	WS ≥ 13.6
SO <sub>2</sub>	ppb	0 ≤ C < 1	1 ≤ C < 5	5 ≤ C < 10	10 ≤ C < 57	57 ≤ C < 172	C ≥ 172
H <sub>2</sub> S	ppb	0 ≤ C < 1	1 ≤ C < 3.6	3.6 ≤ C < 5	5 ≤ C < 8	8 ≤ C < 10.8	C ≥ 10.8
PM <sub>2.5</sub>	µg/m <sup>3</sup>	0 ≤ C < 2	2 ≤ C < 4	4 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 30	C ≥ 30

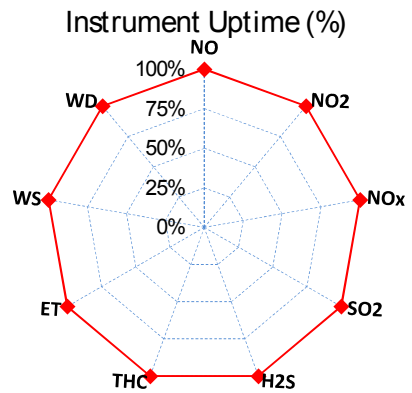
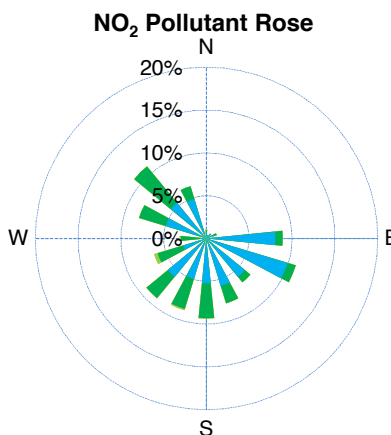
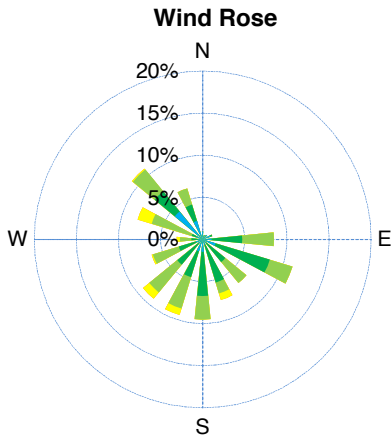
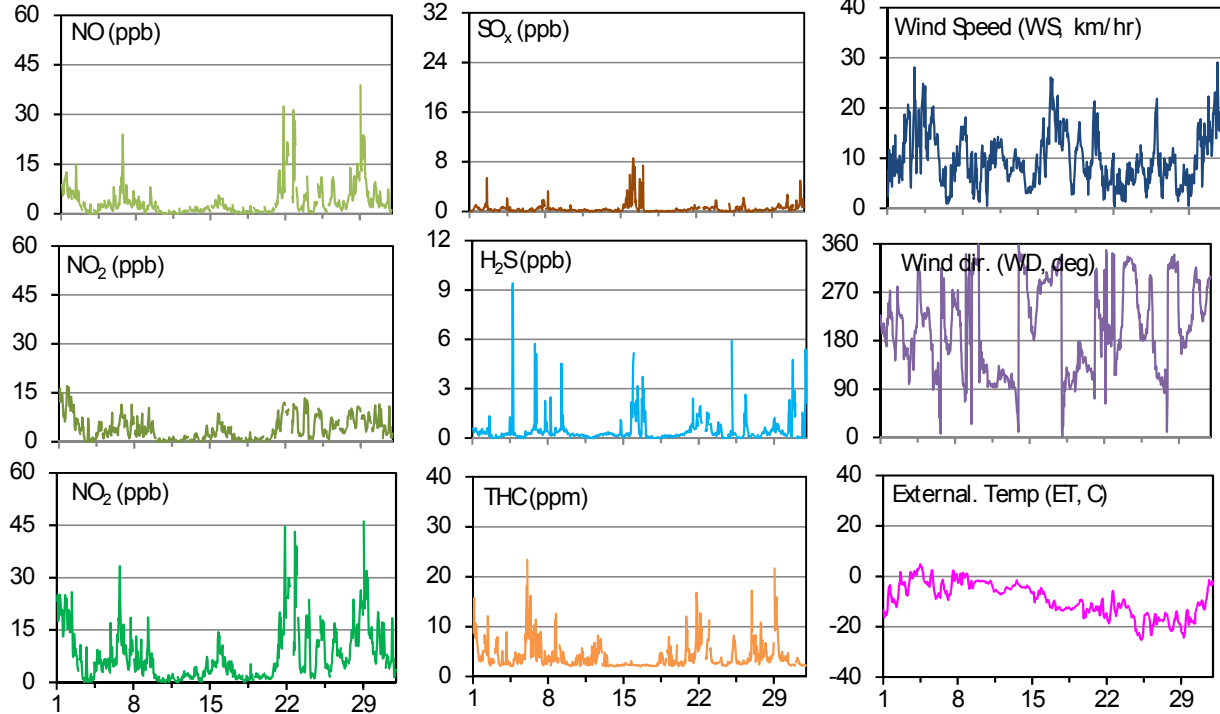
### Monthly Update

- Achieved >99% of scheduled uptime for all parameters
- Downtime results from routine daily Internal Zeroes and Spans

# Lloydminster East Station - December 2015 Summary Report

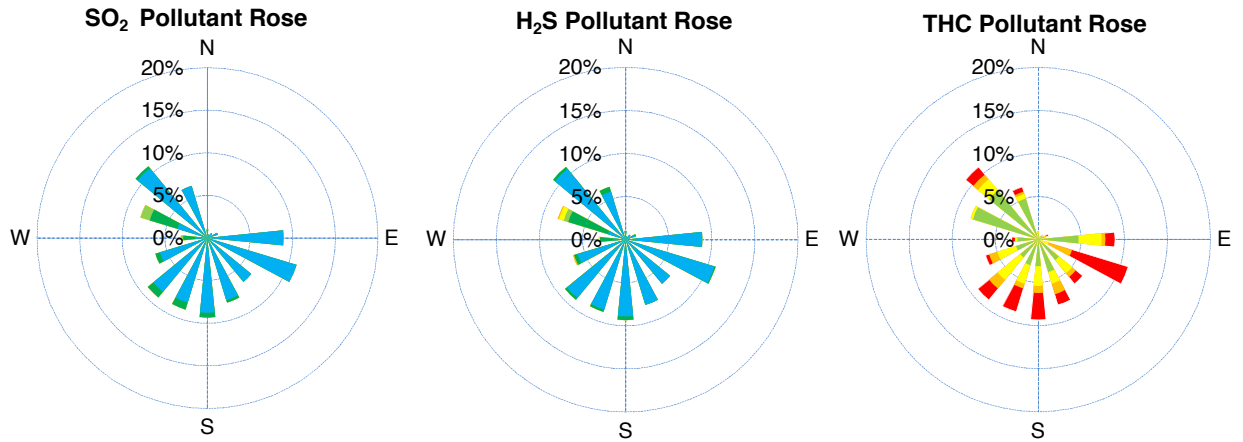
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Uptime	Maximum		SAAQS Standards	Exceed Days	Maximum		SAAQS Standards	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	3.6	100.0%	12.9	Dec-29	-	-	38.9	Dec-29 02:00	-	-
NO <sub>2</sub>	ppb	4.0	100.0%	12.4	Dec-1	106	0	17.1	Dec-01 19:00	159	0
NO <sub>x</sub>	ppb	7.7	100.0%	20.2	Dec-1	-	-	46.1	Dec-29 02:00	-	-
SO <sub>2</sub>	ppb	0.5	100.0%	2.6	Dec-16	48	0	8.6	Dec-16 04:00	172	0
H <sub>2</sub> S	ppb	0.5	100.0%	1.5	Dec-16	3.6	0	9.4	Dec-04 19:00	11.0	0
THC	ppm	4.0	100.0%	8.3	Dec-6	-	-	23.4	Dec-06 02:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



Parameters	Unit	Color Code for Wind Spd & Pollutant Conc. Class					
Wind Speed	km/hr	1 ≤ WS < 5	5 ≤ WS < 10	10 ≤ WS < 20	20 ≤ WS < 30	30 ≤ WS < 40	WS ≥ 40
SO <sub>2</sub>	ppb	0 ≤ C < 1	1 ≤ C < 5	5 ≤ C < 10	10 ≤ C < 57	57 ≤ C < 172	C ≥ 172
NO <sub>2</sub>	ppb	0 ≤ C < 5	5 ≤ C < 15	15 ≤ C < 30	30 ≤ C < 100	100 ≤ C < 212	C ≥ 212
H <sub>2</sub> S	ppb	0 ≤ C < 1	1 ≤ C < 3.6	3.6 ≤ C < 5	5 ≤ C < 8	8 ≤ C < 10.8	C ≥ 10.8
THC	ppm	0 ≤ C < 1	1 ≤ C < 2	2 ≤ C < 3	3 ≤ C < 4	4 ≤ C < 5	C ≥ 5

# Lloydminster East Station - December 2015 Summary Report



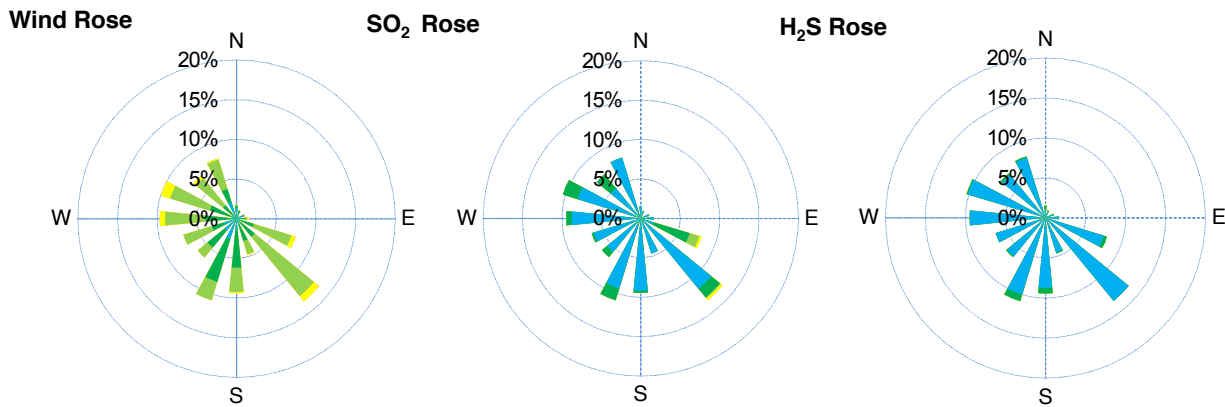
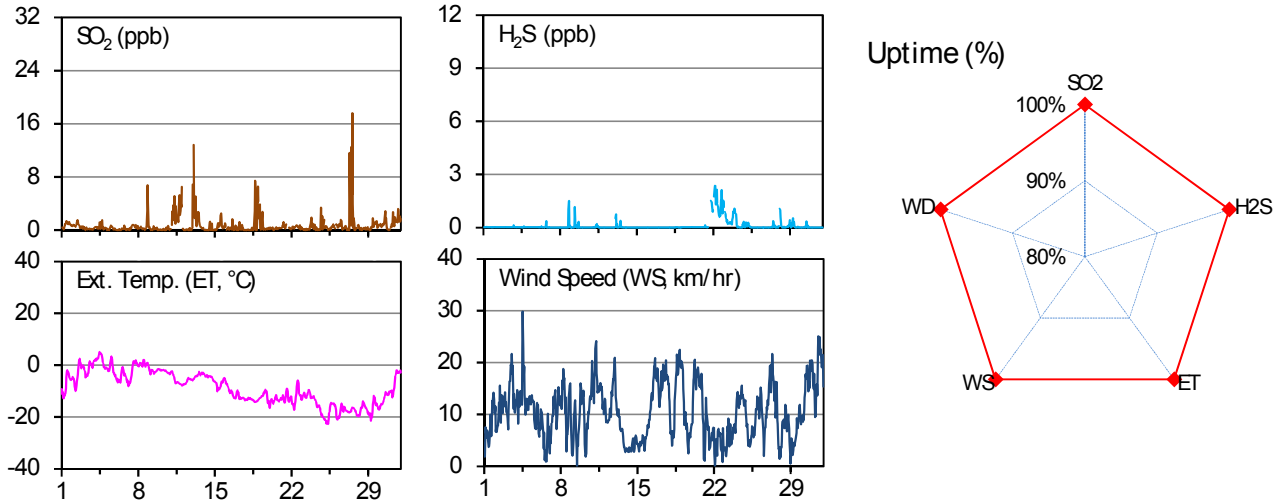
## Monthly Update

- \*Air monitoring data has been slope, intercept, and baseline corrected. Data may change after validation process.
- \*All compliance parameters were within the Saskatchewan Ambient Air Quality Standards.
- \*All compliance parameters are above 90% operational. There are no operational issues to report.

# Lloydminster West Station - December 2015 Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Uptime	Maximum		AAAQO / SAAQS	Exceed Days	Maximum		AAAQO / SAAQS	Exceed Hours
				Conc.	Time			Conc.	Time		
SO <sub>2</sub>	ppb	0.7	100.0%	2.8	Dec-11	48 / 48	0 / 0	12.4	Dec-27 14:00	172 / 172	0 / 0
H <sub>2</sub> S	ppb	0.1	100.0%	1.4	Dec-22	3 / 3.6	0 / 0	2.0	Dec-22 04:00	10 / 11.0	0 / 0

AAAQO: Alberta Ambient Air Quality Objectives; SAAQS: Saskatchewan Ambient Air Quality Standards.



Parameters	Unit	Color Code for Wind Spd & Pollutant Conc. Class					
Wind Speed	km/hr	1 ≤ WS < 5	5 ≤ WS < 10	10 ≤ WS < 20	20 ≤ WS < 30	30 ≤ WS < 40	WS ≥ 40
SO <sub>2</sub>	ppb	0 ≤ C < 1	1 ≤ C < 5	5 ≤ C < 10	10 ≤ C < 57	57 ≤ C < 172	C ≥ 172
H <sub>2</sub> S	ppb	0 ≤ C < 1	1 ≤ C < 3.6	3.6 ≤ C < 5	5 ≤ C < 8	8 ≤ C < 10.8	C ≥ 10.8

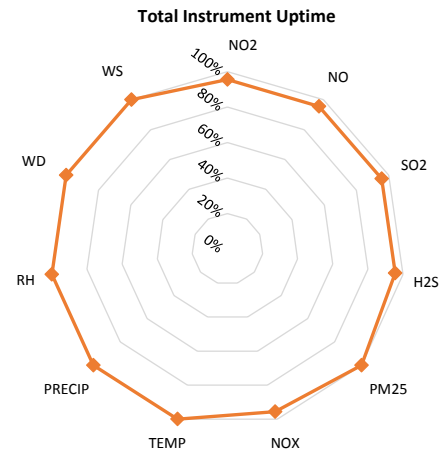
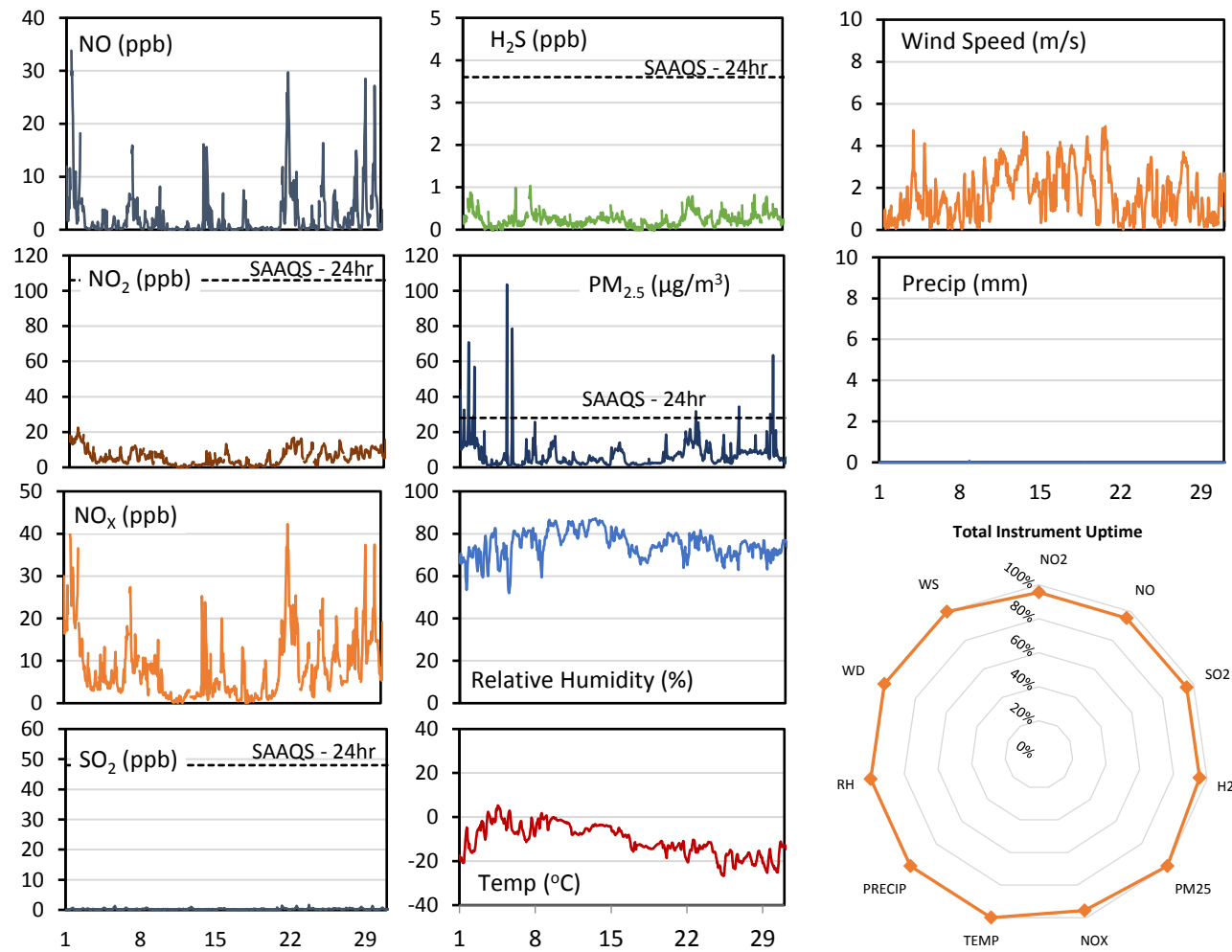
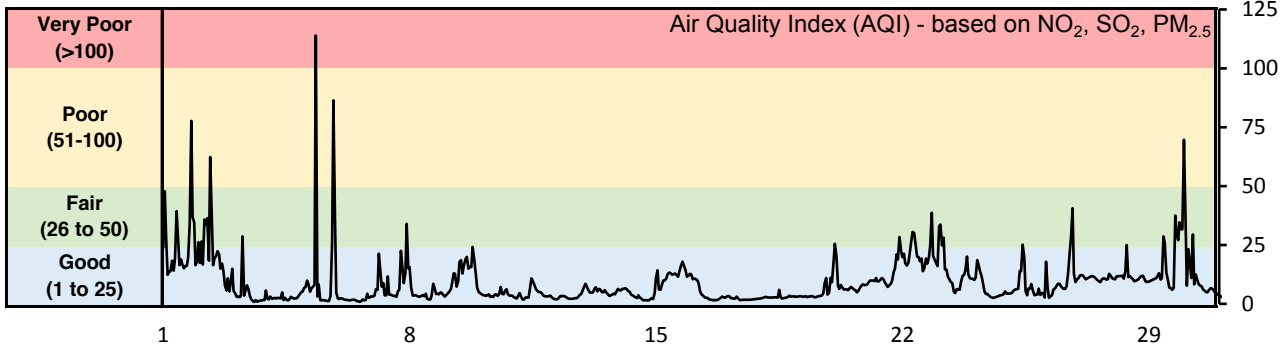
## Monthly Update

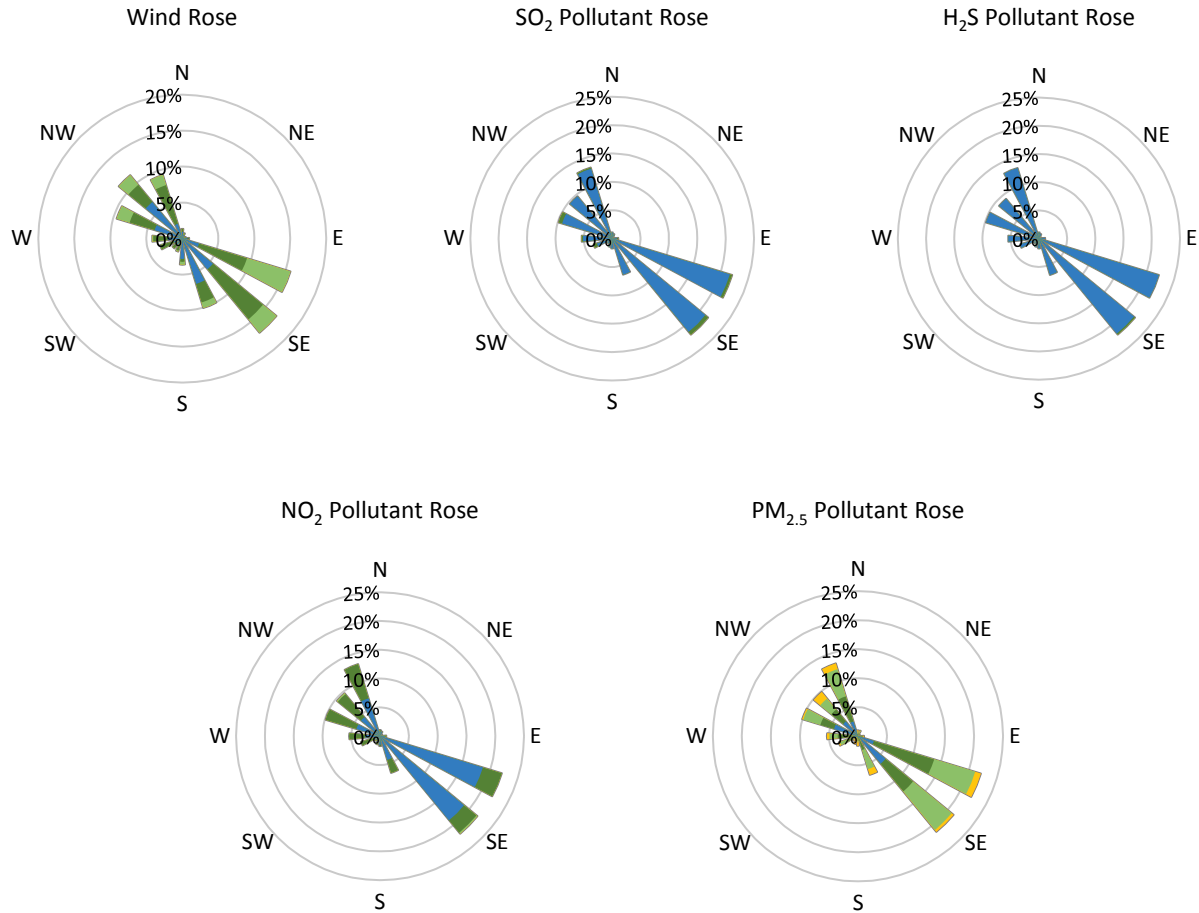
- \*Air monitoring data has been slope, intercept, and baseline corrected. Data may change after validation process.
- \*All compliance parameters were within the Alberta Ambient Air Quality Objectives and the Saskatchewan Ambient Air Quality Standards
- \*All compliance parameters are above 90% operational. There are no operational issues to report.

## WYAMZ Maidstone Station - December 2015 Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	2.5	96%	11.5	Dec-22	-	-	33.8	Dec-01 11:00	-	-
NO <sub>2</sub>	ppb	6.0	96%	16.6	Dec-01	106	0	22.5	Dec-01 20:00	159	0
NO <sub>x</sub>	ppb	8.5	96%	27.1	Dec-01	-	-	49.0	Dec-01 11:00	-	-
SO <sub>2</sub>	ppb	0.3	96%	0.7	Dec-31	48	0	1.7	Dec-23 18:00	172	0
H <sub>2</sub> S	ppb	0.2	96%	0.6	Dec-22	3.6	0	1.0	Dec-07 08:00	11	0
PM <sub>2.5</sub>	µg/m <sup>3</sup>	7.0	100%	19.6	Dec-01	28	0	103.6	Dec-05 08:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards





Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class					
		0.3 ≤ WS < 1.4	1.4 ≤ WS < 3.1	3.1 ≤ WS < 7.8	7.8 ≤ WS < 10.8	10.8 ≤ WS < 13.6	WS ≥ 13.6
SO <sub>2</sub>	ppb	0 ≤ C < 1	1 ≤ C < 5	5 ≤ C < 10	10 ≤ C < 57	57 ≤ C < 172	C ≥ 172
NO <sub>2</sub>	ppb	0 ≤ C < 5	5 ≤ C < 15	15 ≤ C < 30	30 ≤ C < 100	100 ≤ C < 212	C ≥ 212
H <sub>2</sub> S	ppb	0 ≤ C < 1	1 ≤ C < 3.6	3.6 ≤ C < 5	5 ≤ C < 8	8 ≤ C < 10.8	C ≥ 10.8
PM <sub>2.5</sub>	µg/m <sup>3</sup>	0 ≤ C < 2	2 ≤ C < 4	4 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 30	C ≥ 30

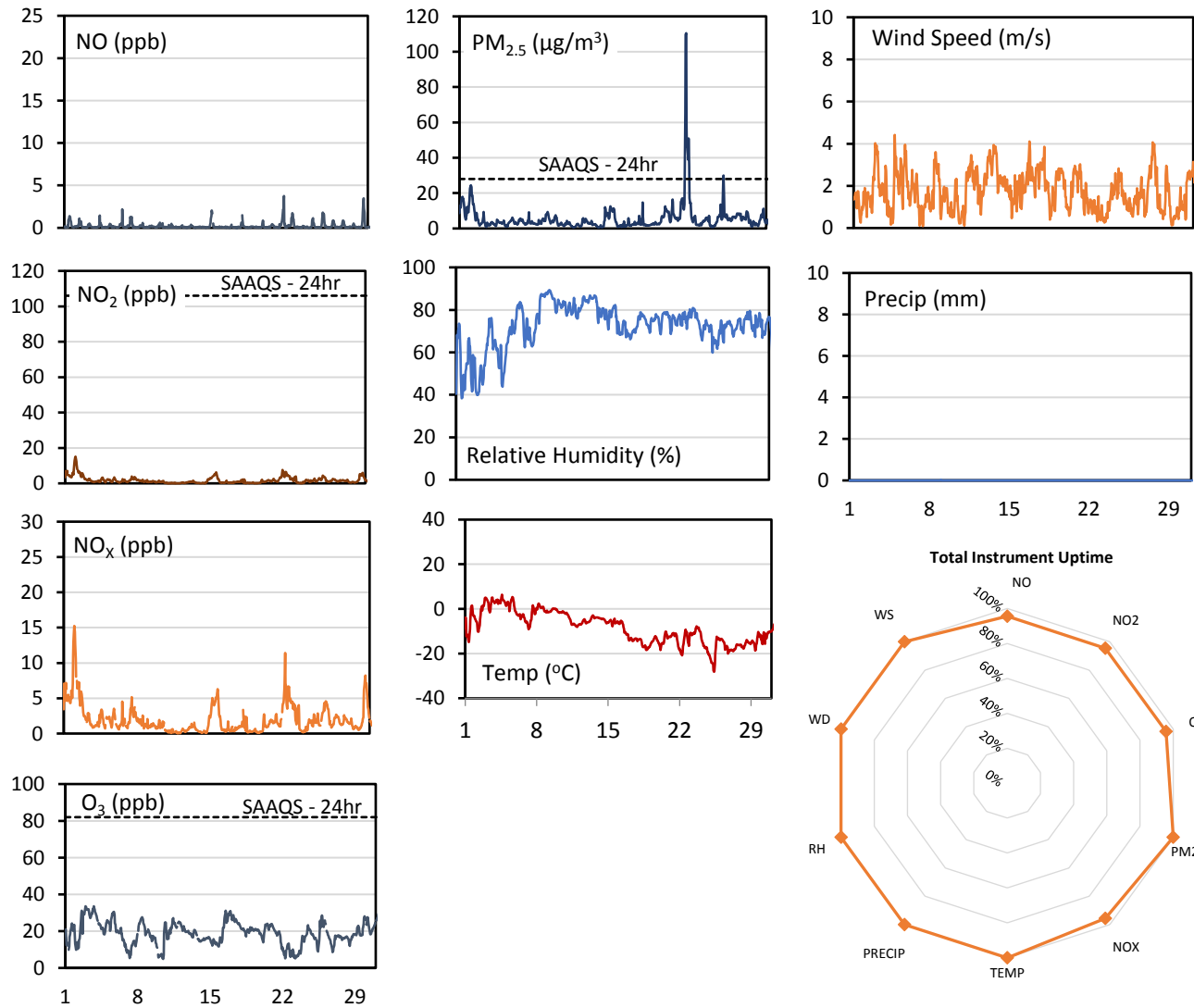
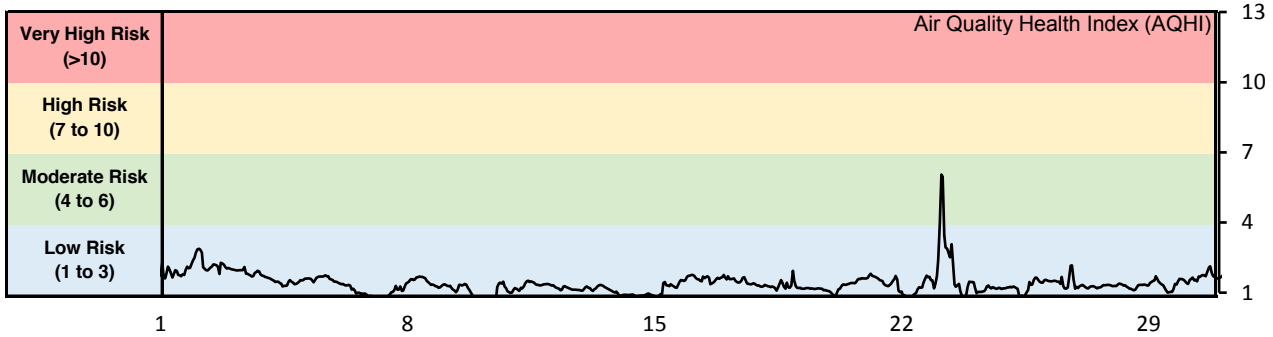
**Monthly Update**

- Achieved 100% of scheduled uptime for all parameters
- Downtime results from routine daily Internal Zeroes and Spans
- All compliance parameters are above 90% data validity

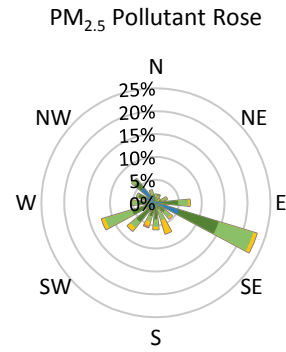
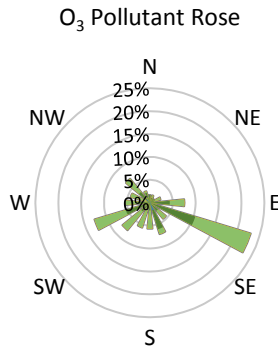
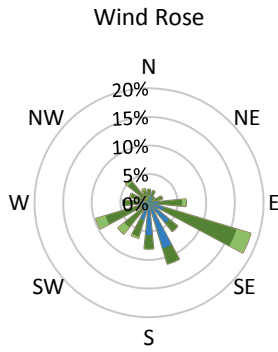
## WYAMZ Meadow Lake Station - December 2015 Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.2	96%	0.7	Dec-30	-	-	3.8	Dec-22 17:00	-	-
NO <sub>2</sub>	ppb	1.7	96%	7.0	Dec-02	106	0	15.1	Dec-02 01:00	159	0
NO <sub>x</sub>	ppb	2.0	96%	7.2	Dec-02	-	-	15.2	Dec-02 01:00	-	-
O <sub>3</sub>	ppb	19.3	96%	30.6	Dec-03	-	-	34.1	Dec-31 13:00	82	0
PM <sub>2.5</sub>	µg/m <sup>3</sup>	5.6	100%	31.4	Dec-23	28	1	110.5	Dec-23 04:00	-	-

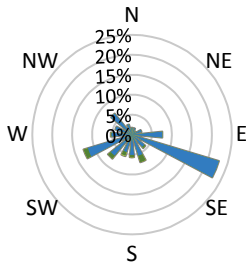
SAAQS: Saskatchewan Ambient Air Quality Standards



## WYAMZ Meadow Lake Station - December 2015 Summary Report



NO<sub>2</sub> Pollutant Rose



Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class						
Wind Speed	m/s	0.3 ≤ WS < 1.4	1.4 ≤ WS < 3.1	3.1 ≤ WS < 7.8	7.8 ≤ WS < 10.8	10.8 ≤ WS < 13.6	WS ≥ 13.6	
O <sub>3</sub>	ppb	0 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 40	40 ≤ C < 60	60 ≤ C < 82	C ≥ 82	
NO <sub>2</sub>	ppb	0 ≤ C < 5	5 ≤ C < 15	15 ≤ C < 30	30 ≤ C < 100	100 ≤ C < 212	C ≥ 212	
PM <sub>2.5</sub>	µg/m <sup>3</sup>	0 ≤ C < 2	2 ≤ C < 4	4 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 30	C ≥ 30	

### Monthly Update

- Achieved 100% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- All compliance parameters are above 90% data validity; no operational issues

### Exceedance Summary (24- Hour Average - Exceedances Highlighted)

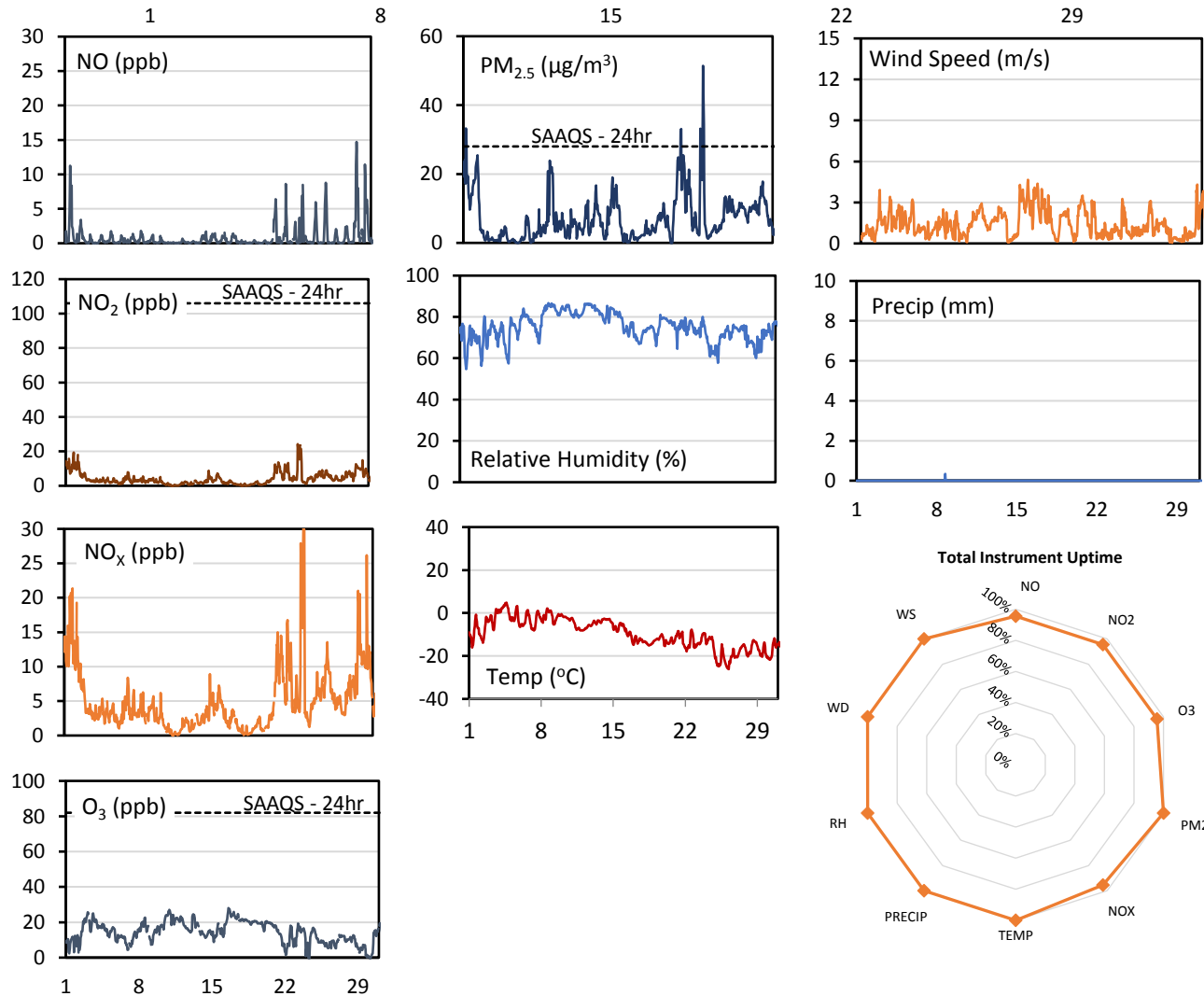
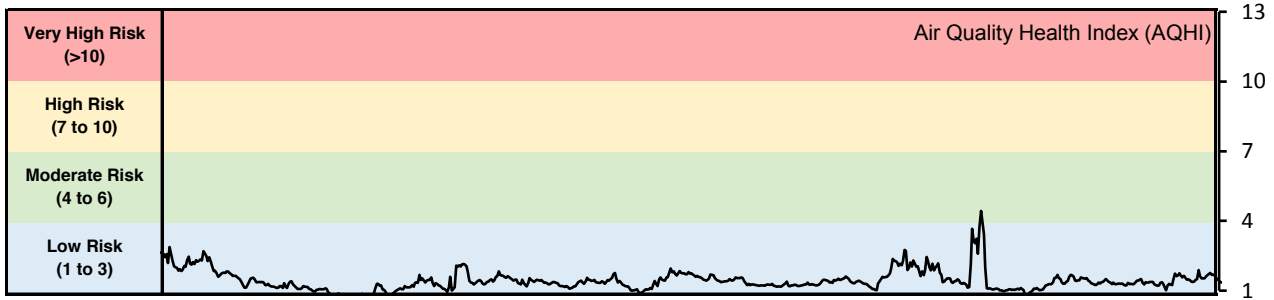
Exceedance Time	AQI	NO <sub>2</sub> ppb	NO ppb	O <sub>3</sub> ppb	PM <sub>2.5</sub> µg/m <sup>3</sup>	NO <sub>x</sub> ppb	Temp °C	WD deg	WS m/s
Dec-23	2.2	3.6	0.5	8.9	<b>31.4</b>	4.1	-10.0	168.4	1.0



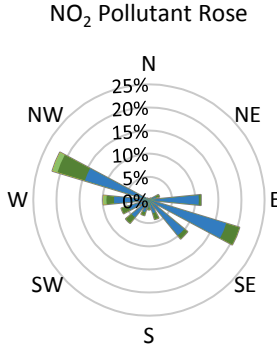
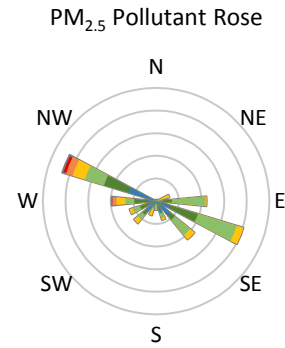
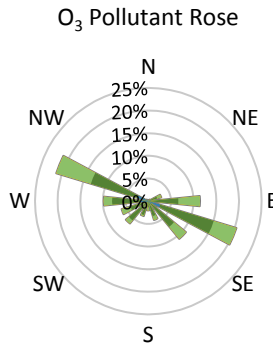
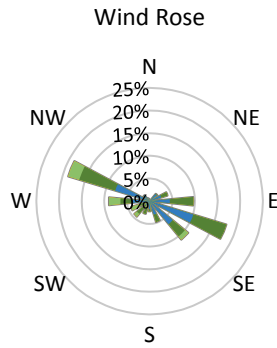
## WYAMZ Unity Station - December 2015 Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.8	96%	3.5	Dec-29	-	-	14.7	Dec-29 14:00	-	-
NO <sub>2</sub>	ppb	4.2	96%	11.6	Dec-01	106	0	24.2	Dec-24 00:00	159	0
NO <sub>x</sub>	ppb	5.0	96%	14.3	Dec-01	-	-	30.4	Dec-24 06:00	-	-
O <sub>3</sub>	ppb	14.6	96%	22.7	Dec-17	-	-	28.1	Dec-16 14:00	82	0
PM <sub>2.5</sub>	µg/m <sup>3</sup>	7.1	100%	19.0	Dec-22	28	0	51.4	Dec-24 06:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



## WYAMZ Unity Station - December 2015 Summary Report



Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class						
Wind Speed	m/s	0.3 ≤ WS < 1.4	1.4 ≤ WS < 3.1	3.1 ≤ WS < 7.8	7.8 ≤ WS < 10.8	10.8 ≤ WS < 13.6	WS ≥ 13.6	
O <sub>3</sub>	ppb	0 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 40	40 ≤ C < 60	60 ≤ C < 82	C ≥ 82	
NO <sub>2</sub>	ppb	0 ≤ C < 5	5 ≤ C < 15	15 ≤ C < 30	30 ≤ C < 100	100 ≤ C < 212	C ≥ 212	
PM <sub>2.5</sub>	µg/m <sup>3</sup>	0 ≤ C < 2	2 ≤ C < 4	4 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 30	C ≥ 30	

### Monthly Update

- Achieved 100% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- All compliance parameters are above 90% data validity