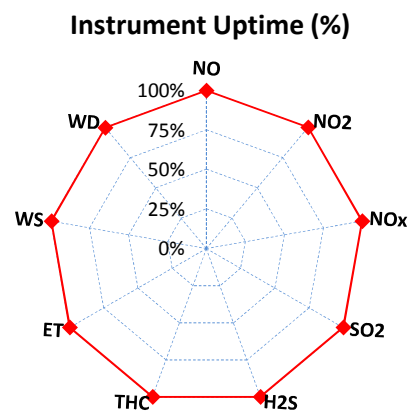
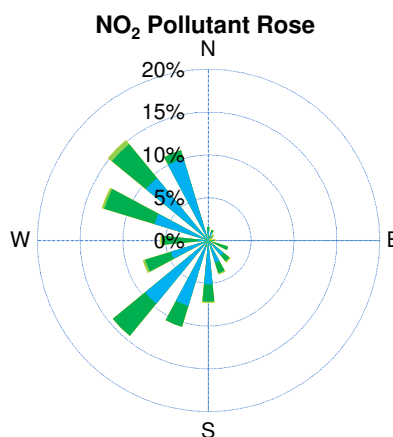
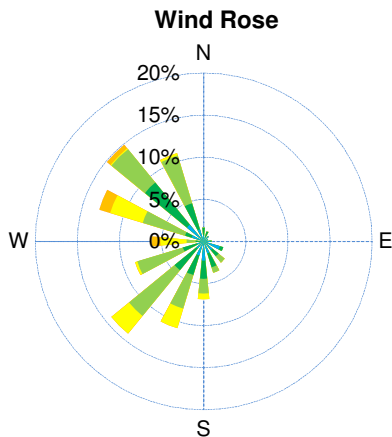
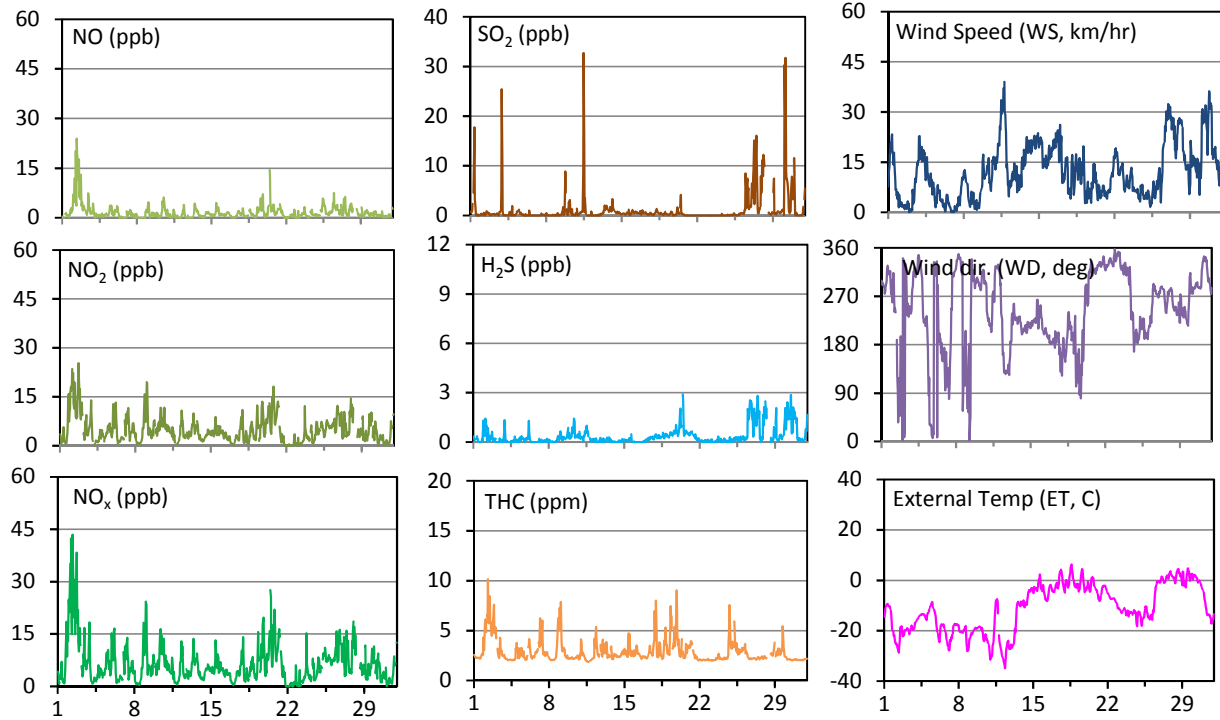


Husky Energy East Station - January 2017 Summary Report

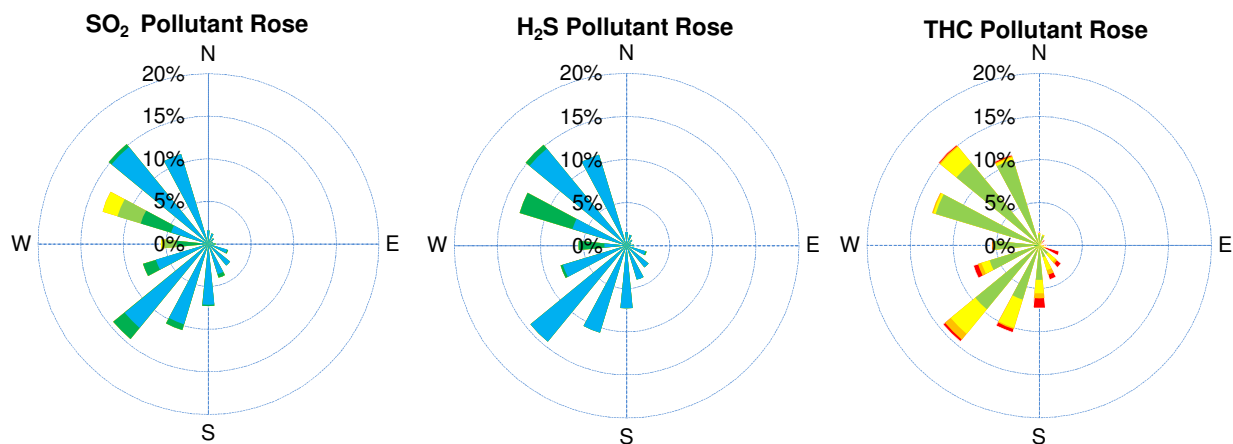
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Uptime	Maximum		SAAQS Standards	Exceed Days	Maximum		SAAQS Standards	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	1.6	99.9%	9.5	Jan-2	-	-	23.9	Jan-02 09:00	-	-
NO ₂	ppb	4.8	99.9%	15.3	Jan-2	106	0	25.4	Jan-02 18:00	159	0
NO _x	ppb	6.4	99.9%	24.6	Jan-2	-	-	43.4	Jan-02 09:00	-	-
SO ₂	ppb	1.2	99.9%	7.8	Jan-30	48	0	32.7	Jan-11 12:00	172	0
H ₂ S	ppb	0.4	99.9%	1.5	Jan-30	3.6	0	2.9	Jan-20 11:00	11.0	0
THC	ppm	2.9	99.9%	6.1	Jan-2	-	-	10.2	Jan-02 08:00	-	-

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 ₂	ppb	0 ≤ C < 1	1 ≤ C < 5	5 ≤ C < 10	10 ≤ C < 57	57 ≤ C < 172	C ≥ 172
NO ₂	ppb	0 ≤ C < 5	5 ≤ C < 15	15 ≤ C < 30	30 ≤ C < 100	100 ≤ C < 212	C ≥ 212
H ₂ S	ppb	0 ≤ C < 1	1 ≤ C < 3.6	3.6 ≤ C < 5	5 ≤ C < 8	8 ≤ C < 11	C ≥ 11
THC	ppm	0 ≤ C < 1	1 ≤ C < 2	2 ≤ C < 3	3 ≤ C < 4	4 ≤ C < 5	C ≥ 5

Husky Energy East Station - January 2017 Summary Report



Monthly Update

*Air monitoring data has been slope, intercept, and baseline corrected. Data may change after validation process.

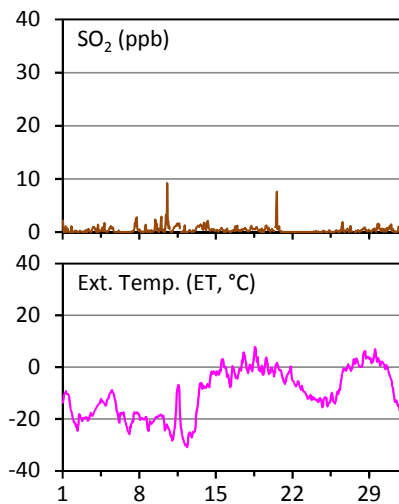
*All compliance parameters were within the Saskatchewan Ambient Air Quality Standards.

*All compliance parameters are above 90% operational. Operational issues include one hour of data on Jan 11 for all parameters flagged as "power failure", due to a power disruption at the station. Two hours of wind speed and direction data are flagged as "analyzer failure" on Jan 2, attributed to precipitation and cold temperatures causing the wind instrument to freeze up.

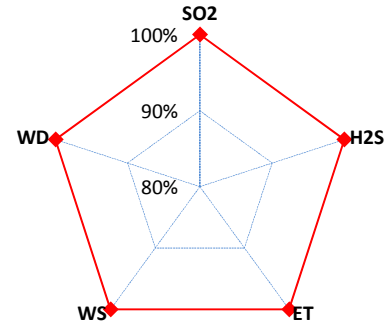
Husky Energy West Station - January 2017 Summary Report

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 ₂	ppb	0.4	100.0%	1.3	Jan-10	48 / 48	0 / 0	9.2	Jan-10 14:00	172 / 172	0 / 0
H ₂ S	ppb	0.2	100.0%	0.8	Jan-2	3 / 3.6	0 / 0	3.0	Jan-02 04:00	10 / 11.0	0 / 0

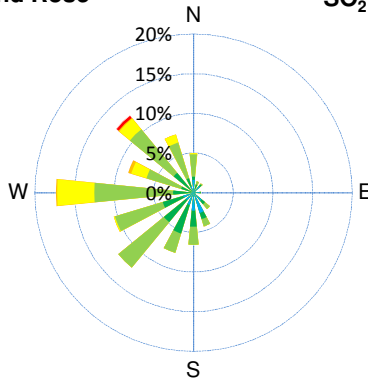
AAAQO: Alberta Ambient Air Quality Objectives; SAAQS: Saskatchewan Ambient Air Quality Standards.



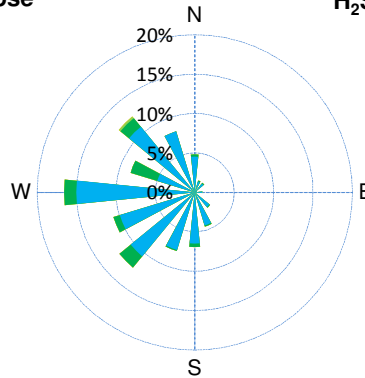
Uptime (%)



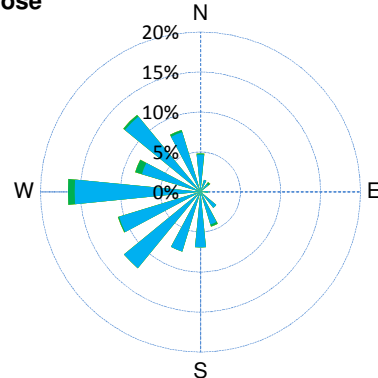
Wind Rose



SO₂ Rose



H₂S Rose



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 ₂	ppb	0 ≤ C < 1	1 ≤ C < 5	5 ≤ C < 10	10 ≤ C < 57	57 ≤ C < 172	C ≥ 172
H ₂ S	ppb	0 ≤ C < 1	1 ≤ C < 3.6	3.6 ≤ C < 5	5 ≤ C < 8	8 ≤ C < 11	C ≥ 11

Monthly Update

*Air monitoring data has been slope, intercept, and baseline corrected. Data may change after validation process.

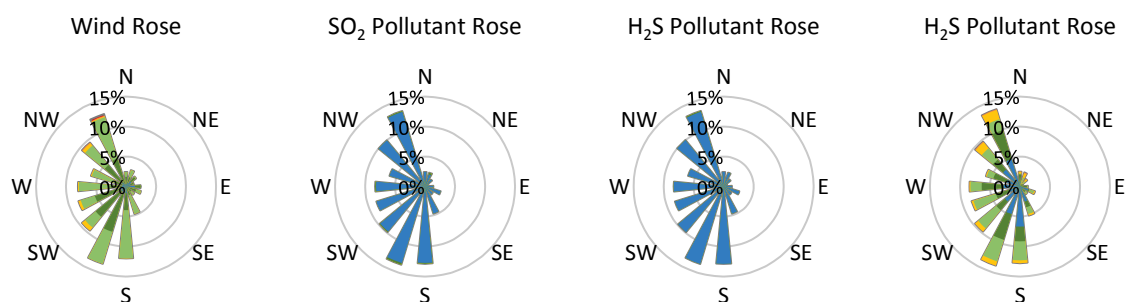
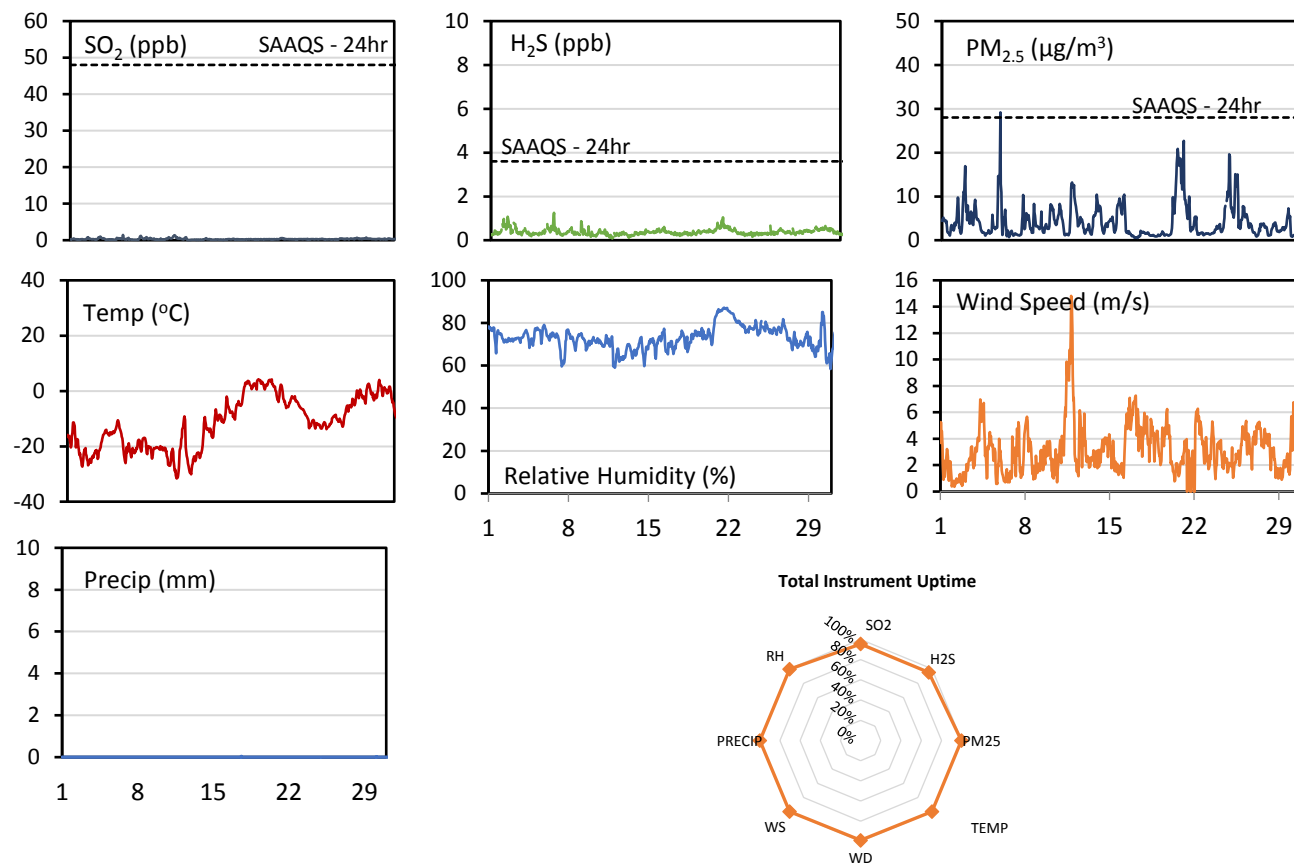
*All compliance parameters were within the Alberta Ambient Air Quality Objectives and the Saskatchewan Ambient Air Quality Standards

*All compliance parameters are above 90% operational. There are no operational issues to report.

WYAMZ Kindersley Station - January 2017 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 ₂	ppb	0.3	95%	0.7	Jan-10	48	0	1.4	Jan-05 21:00	172	0
H ₂ S	ppb	0.4	95%	0.6	Jan-02	3.6	0	1.3	Jan-06 10:00	11	0
PM _{2.5}	µg/m ³	4.1	100%	11.0	Jan-21	28	0	29.2	Jan-05 22:00	-	-

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 ₂	ppb	0 ≤ C < 1	1 ≤ C < 5	5 ≤ C < 10	10 ≤ C < 57	57 ≤ C < 172	C ≥ 172
H ₂ S	ppb	0 ≤ C < 1	1 ≤ C < 3.6	3.6 ≤ C < 5	5 ≤ C < 8	8 ≤ C < 10.8	C ≥ 10.8
PM _{2.5}	µg/m ³	0 ≤ C < 2	2 ≤ C < 4	4 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 30	C ≥ 30

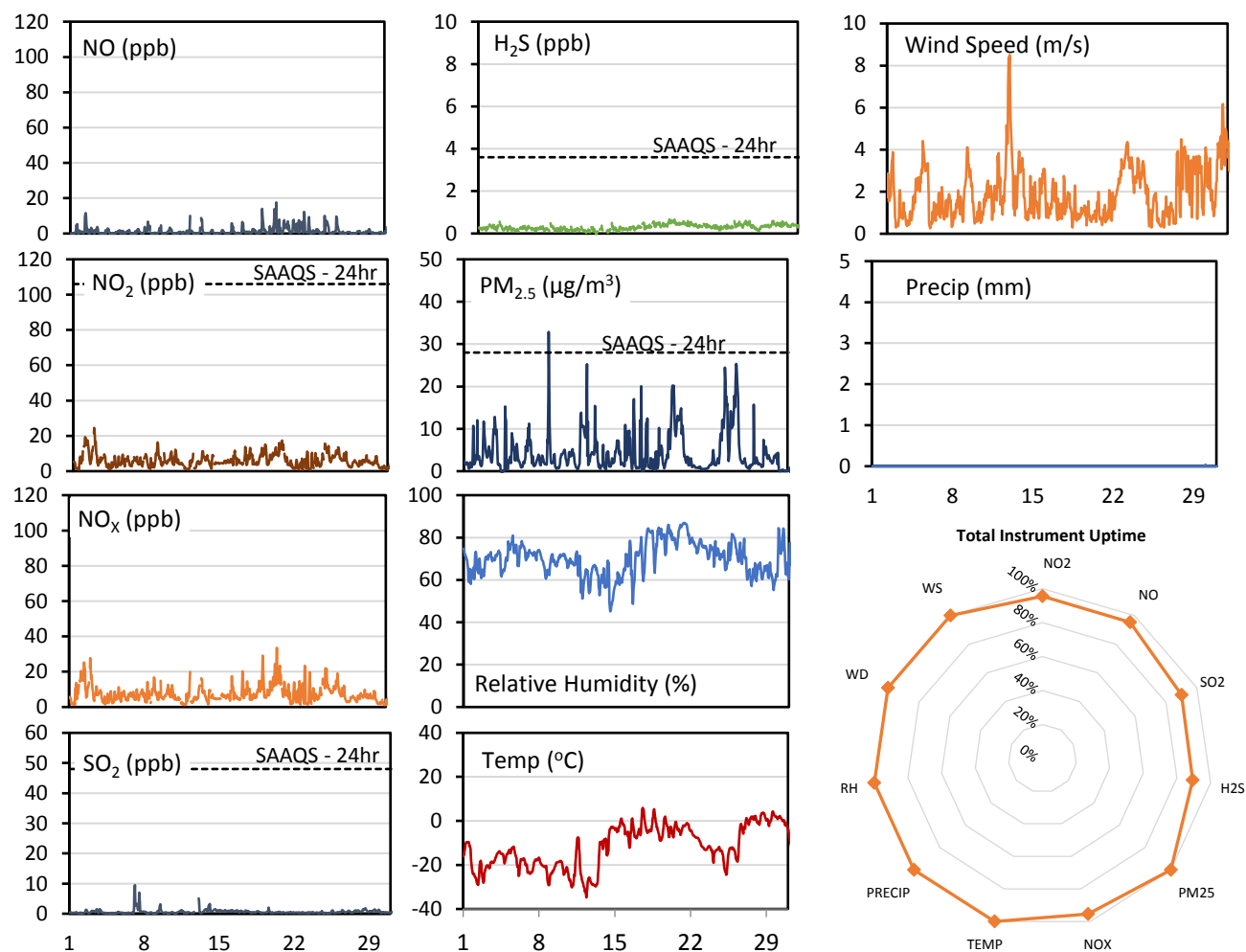
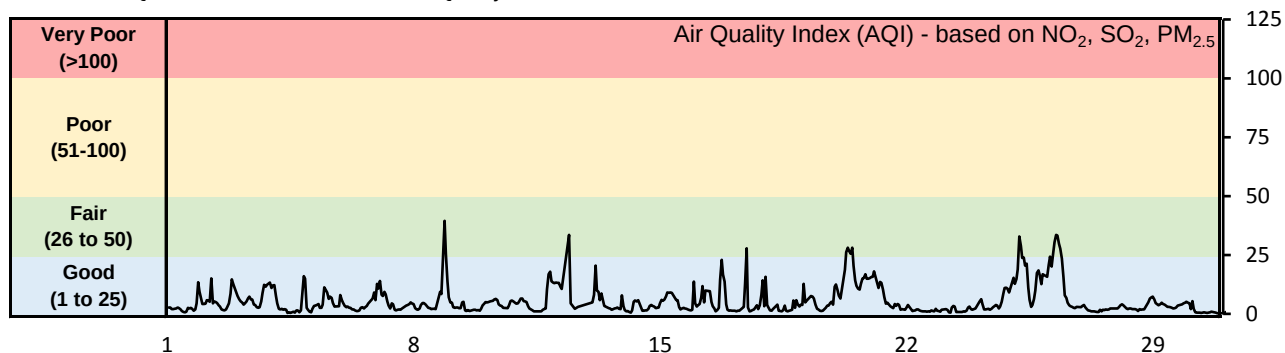
Monthly Update

- Achieved >98% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily Internal Zeroes and Spans

WYAMZ Maidstone Station - January 2017 Summary Report

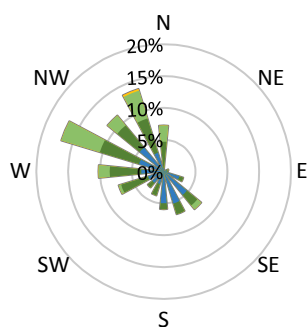
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	1.4	95%	3.7	Jan-20	-	-	17.6	Jan-20 16:00	-	-
NO ₂	ppb	6.0	96%	12.8	Jan-02	106	0	24.5	Jan-03 00:00	159	0
NO _x	ppb	7.3	95%	15.4	Jan-20	-	-	33.5	Jan-20 16:00	-	-
SO ₂	ppb	0.6	90%	2.7	Jan-07	48	0	9.5	Jan-07 03:00	172	0
H ₂ S	ppb	0.3	89%	0.5	Jan-19	3.6	0	0.7	Jan-18 23:00	11	0
PM _{2.5}	µg/m ³	4.2	100%	12.4	Jan-20	28	0	32.9	Jan-08 21:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards

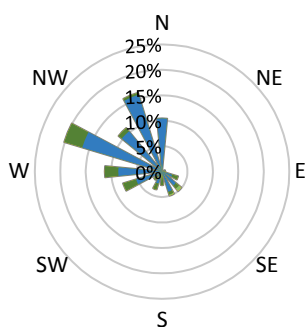


WYAMZ Maidstone Station - January 2017 Summary Report

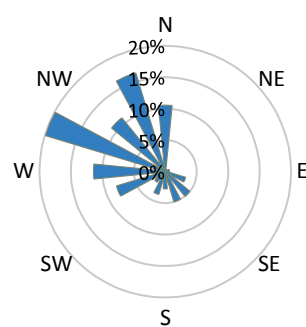
Wind Rose



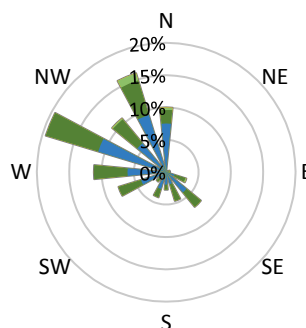
SO₂ Pollutant Rose



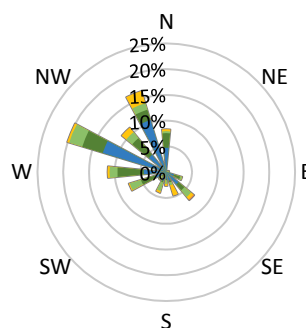
H₂S Pollutant Rose



NO₂ Pollutant Rose



PM_{2.5} Pollutant Rose



Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class					
Wind Speed	m/s	$0.3 \leq WS < 1.4$	$1.4 \leq WS < 3.1$	$3.1 \leq WS < 7.8$	$7.8 \leq WS < 10.8$	$10.8 \leq WS < 13.6$	$WS \geq 13.6$
SO ₂	ppb	$0 \leq C < 1$	$1 \leq C < 5$	$5 \leq C < 10$	$10 \leq C < 57$	$57 \leq C < 172$	$C \geq 172$
NO ₂	ppb	$0 \leq C < 5$	$5 \leq C < 15$	$15 \leq C < 30$	$30 \leq C < 100$	$100 \leq C < 212$	$C \geq 212$
H ₂ S	ppb	$0 \leq C < 1$	$1 \leq C < 3.6$	$3.6 \leq C < 5$	$5 \leq C < 8$	$8 \leq C < 10.8$	$C \geq 10.8$
PM _{2.5}	$\mu\text{g}/\text{m}^3$	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$

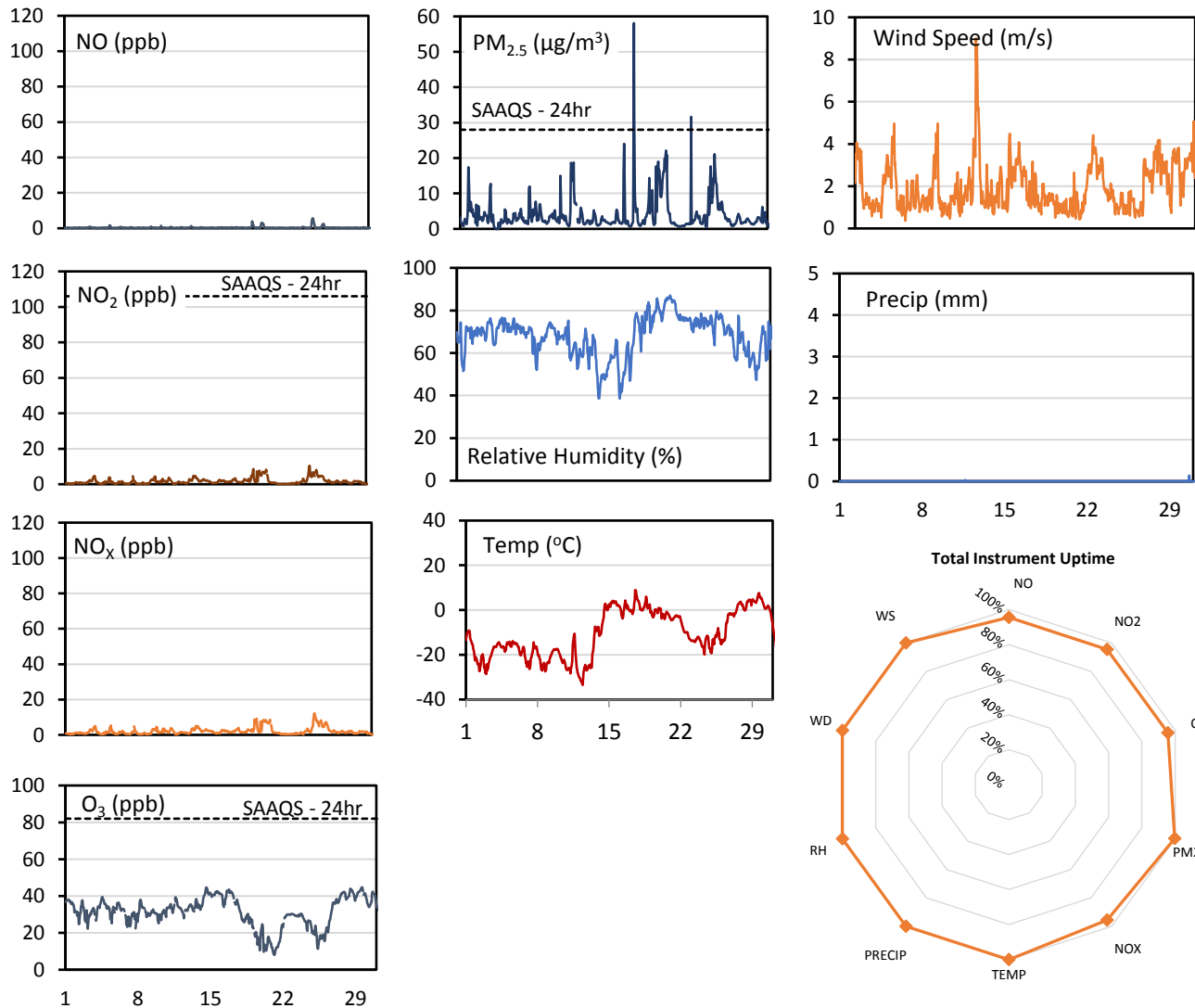
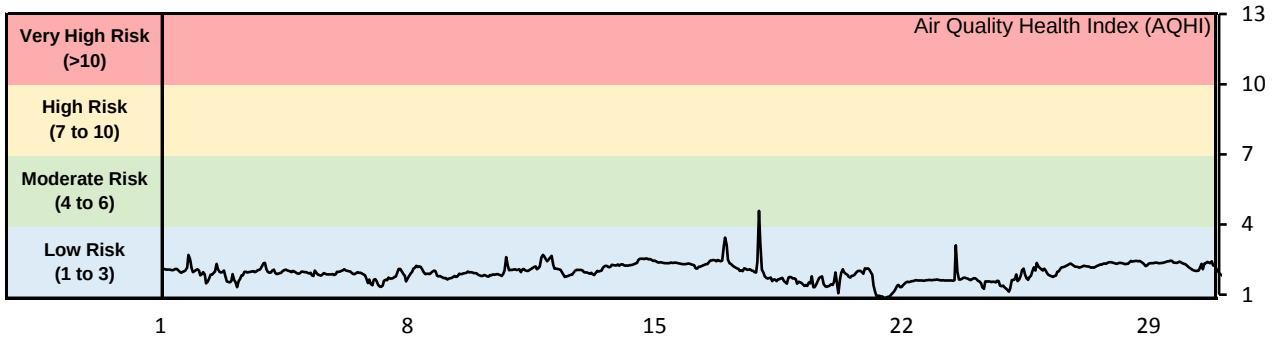
Monthly Update

- Achieved >99% of scheduled uptime for all parameters
- NO/NO₂/NO_x downtime of 4% results from routine daily Internal Zeroes and Spans
- SO₂/H₂S downtime of 8% results from routine daily Internal Zeroes and Spans
- Additional SO₂/H₂S downtime due to operational issues

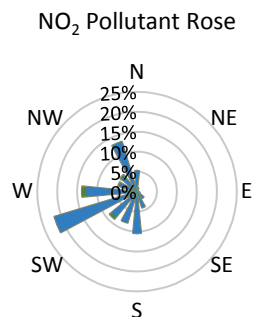
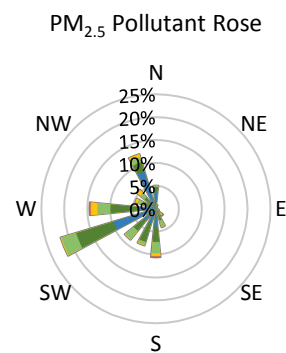
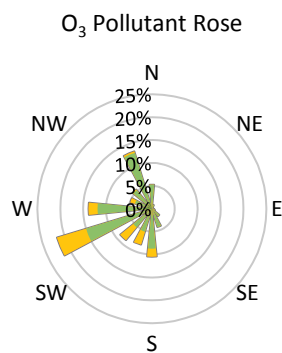
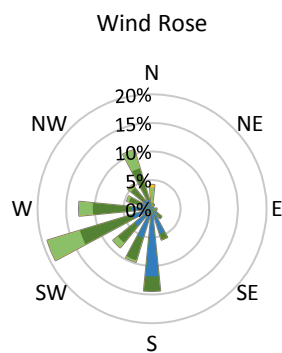
WYAMZ Meadow Lake Station - January 2017 Summary Report

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	0.4	96%	1.6	Jan-25	-	-	5.7	Jan-25 12:00	-	-
NO ₂	ppb	1.7	96%	5.4	Jan-20	106	0	10.4	Jan-25 09:00	159	0
NO _x	ppb	2.1	96%	6.8	Jan-25	-	-	12.1	Jan-25 09:00	-	-
O ₃	ppb	31.5	96%	42.0	Jan-29	-	-	44.8	Jan-29 15:00	82	0
PM _{2.5}	µg/m ³	3.9	100%	12.4	Jan-20	28	0	58.1	Jan-17 23:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



WYAMZ Meadow Lake Station - January 2017 Summary Report



Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class					
Wind Speed	m/s	$0.3 \leq WS < 1.4$	$1.4 \leq WS < 3.1$	$3.1 \leq WS < 7.8$	$7.8 \leq WS < 10.8$	$10.8 \leq WS < 13.6$	$WS \geq 13.6$
O ₃	ppb	$0 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 40$	$40 \leq C < 60$	$60 \leq C < 82$	$C \geq 82$
NO ₂	ppb	$0 \leq C < 5$	$5 \leq C < 15$	$15 \leq C < 30$	$30 \leq C < 100$	$100 \leq C < 212$	$C \geq 212$
PM _{2.5}	$\mu\text{g}/\text{m}^3$	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$

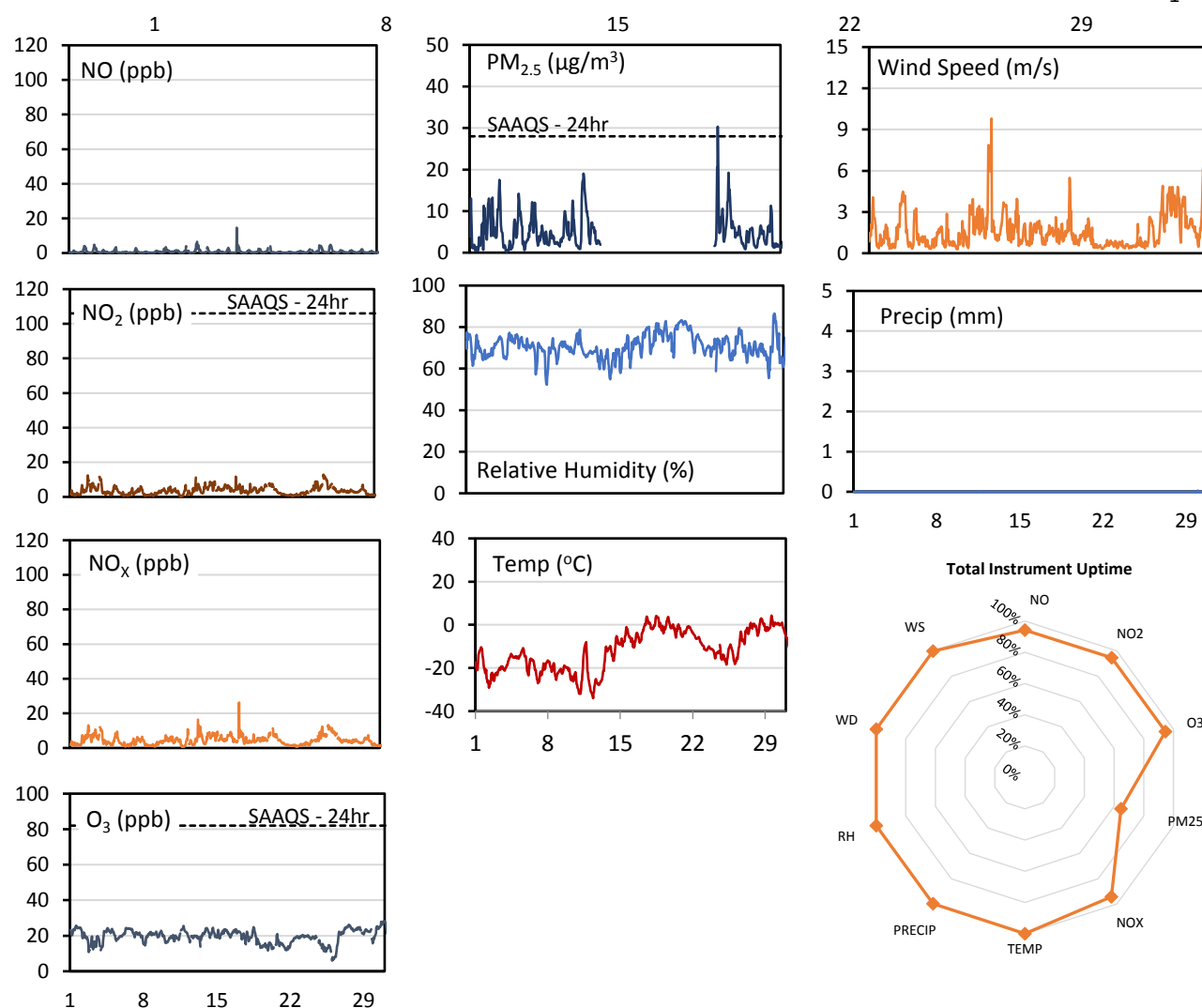
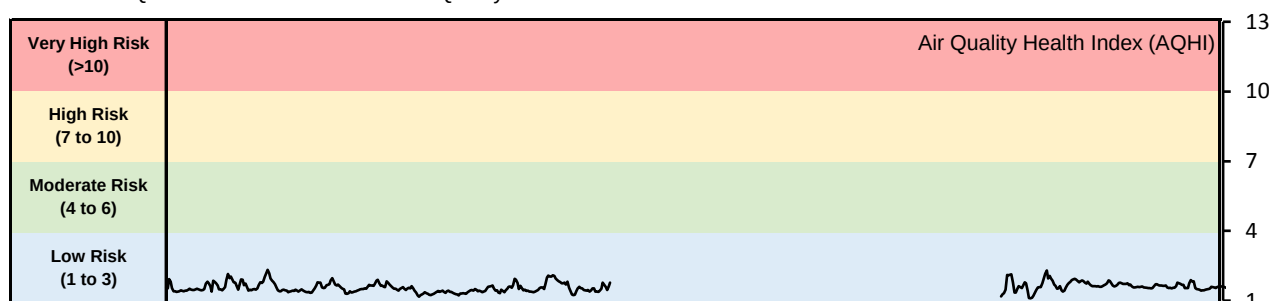
Monthly Update

- Achieved >99% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily Internal Zeroes and Spans

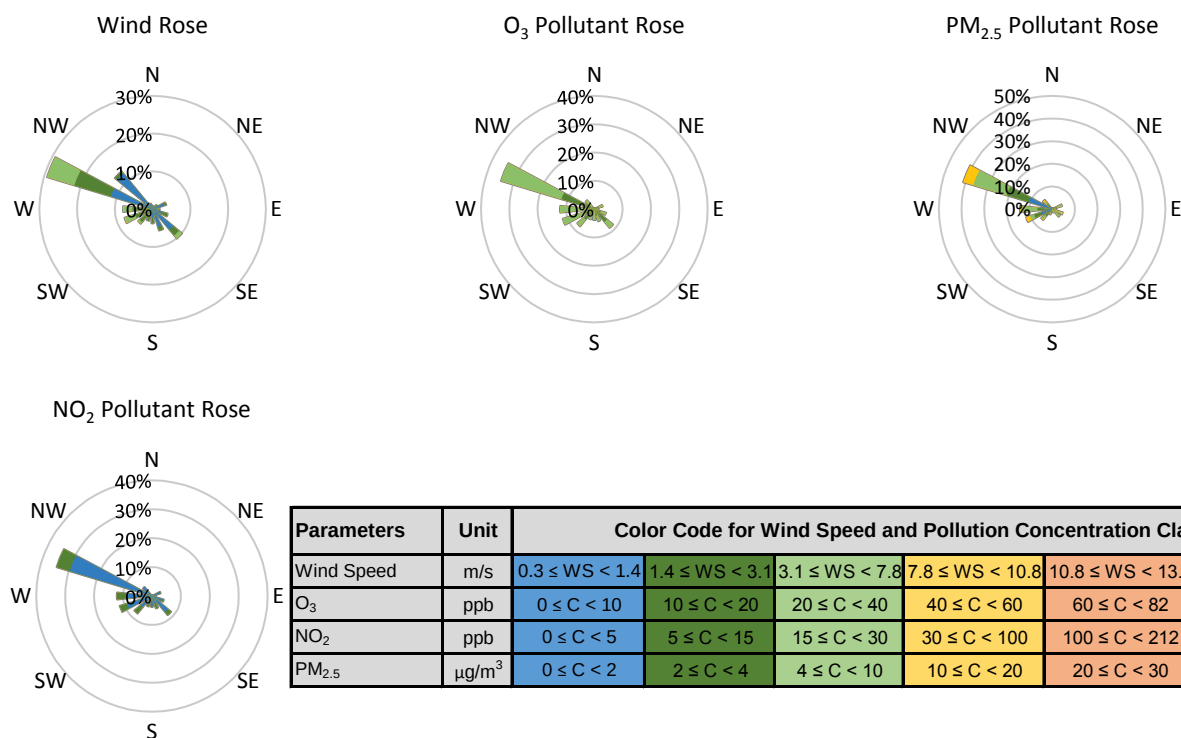
WYAMZ Unity Station - January 2017 Summary Report

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	94%	1.7	Jan-17	-	-	14.6	Jan-17 09:00	-	-
NO ₂	ppb	3.6	95%	8.0	Jan-26	106	0	12.9	Jan-26 00:00	159	0
NO _x	ppb	4.4	94%	9.5	Jan-26	-	-	26.2	Jan-17 09:00	-	-
O ₃	ppb	19.7	95%	24.5	Jan-30	-	-	28.2	Jan-30 22:00	82	0
PM _{2.5}	µg/m ³	5.0	65%	9.9	Jan-24	28	0	30.3	Jan-24 23:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



WYAMZ Unity Station - January 2017 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 ₃	ppb	0 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 40	40 ≤ C < 60	60 ≤ C < 82	C ≥ 82	
NO ₂	ppb	0 ≤ C < 5	5 ≤ C < 15	15 ≤ C < 30	30 ≤ C < 100	100 ≤ C < 212	C ≥ 212	
PM _{2.5}	µg/m ³	0 ≤ C < 2	2 ≤ C < 4	4 ≤ C < 10	10 ≤ C < 20	20 ≤ C < 30	C ≥ 30	

Monthly Update

- Achieved >98% of scheduled uptime for all parameters except PM_{2.5} (64.7%)
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Downtime for PM_{2.5} due to operation issues. Repair completed Jan. 24