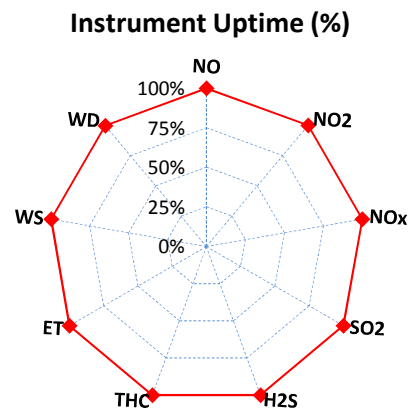
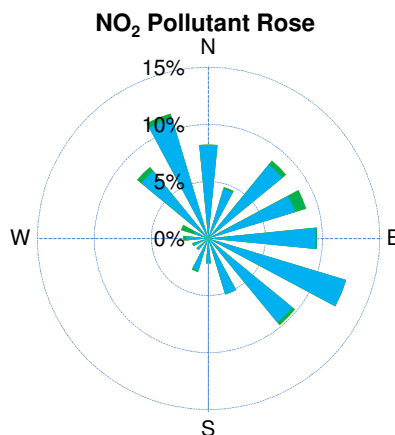
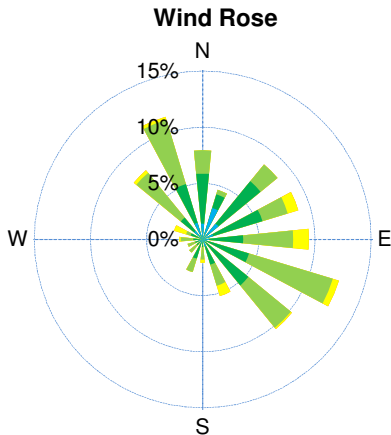
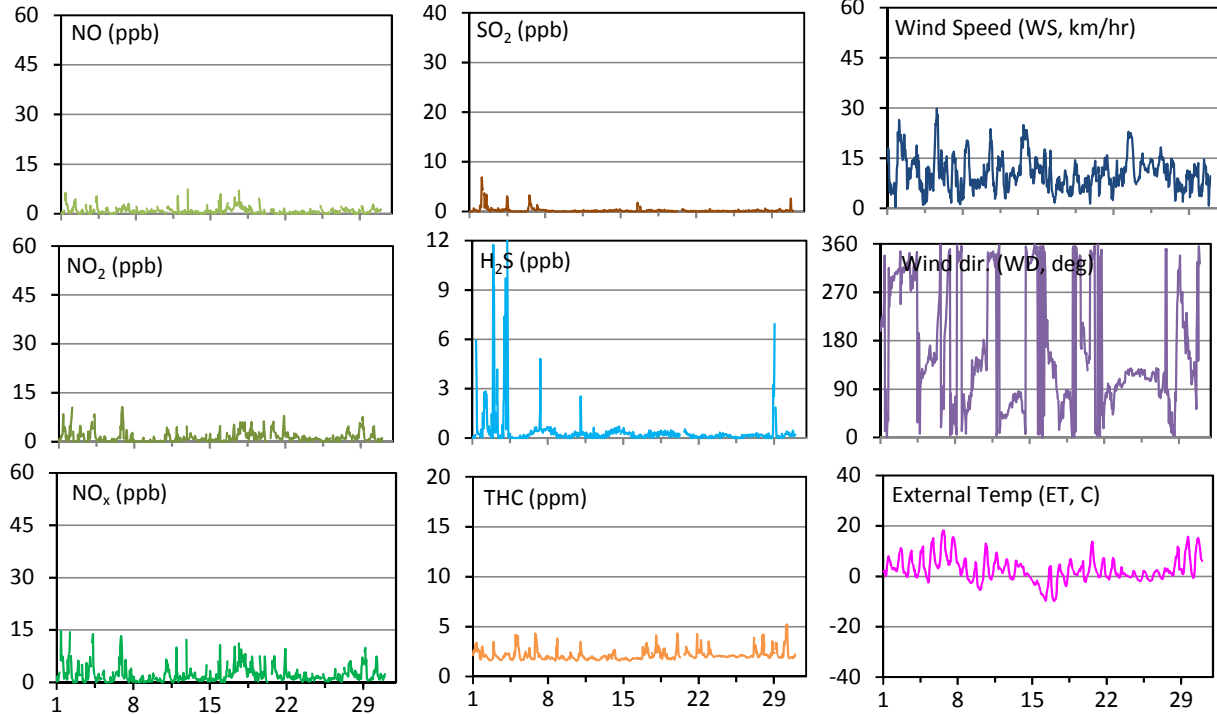


Husky Energy East Station - April 2017 Summary Report

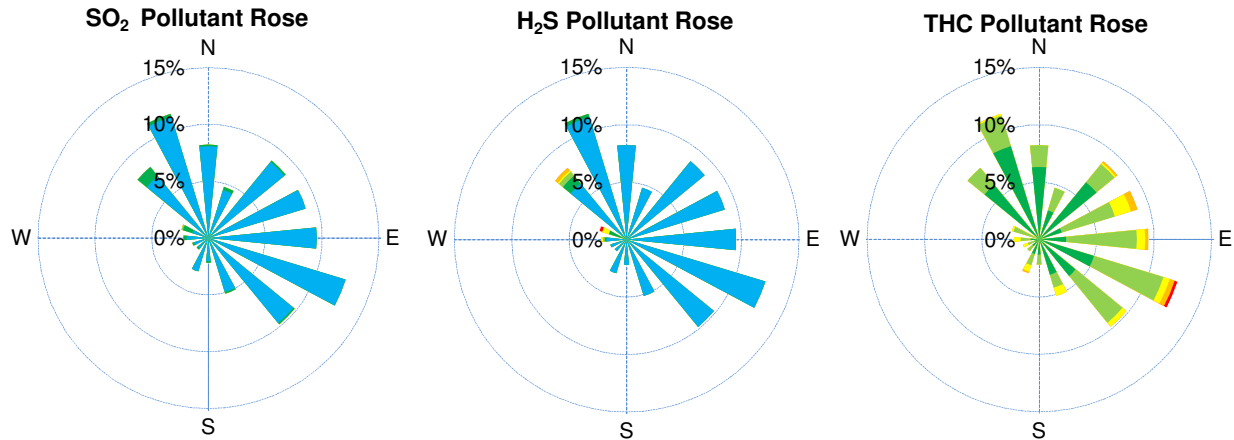
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Uptime	Maximum		SAAQS Standards	Exceed Days	Maximum		SAAQS Standards	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.9	100.0%	2.7	Apr-17	-	-	7.4	Apr-12 21:00	-	-
NO ₂	ppb	1.4	100.0%	3.1	Apr-18	106	0	10.7	Apr-06 21:00	159	0
NO _x	ppb	2.2	100.0%	5.2	Apr-17	-	-	14.7	Apr-01 10:00	-	-
SO ₂	ppb	0.2	100.0%	1.9	Apr-2	48	0	6.9	Apr-02 04:00	172	0
H ₂ S	ppb	0.4	100.0%	1.7	Apr-2	3.6	0	13.7	Apr-04 06:00	11.0	2
THC	ppm	2.1	100.0%	2.6	Apr-1	-	-	5.2	Apr-30 06:00	-	-

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 - April 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, with the exception of two H₂S exceedance events. Refer to the exceedance summary table for details.
- *All compliance parameters are above 90% operational. There are no operational issues to report.
- *The wind instrument was upgraded to a 5305 Model, it was reinstalled on April 20.

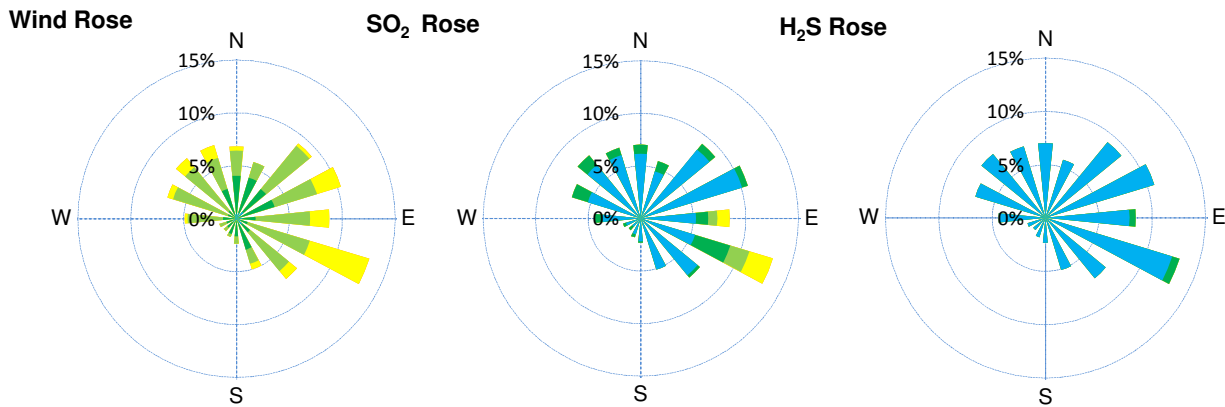
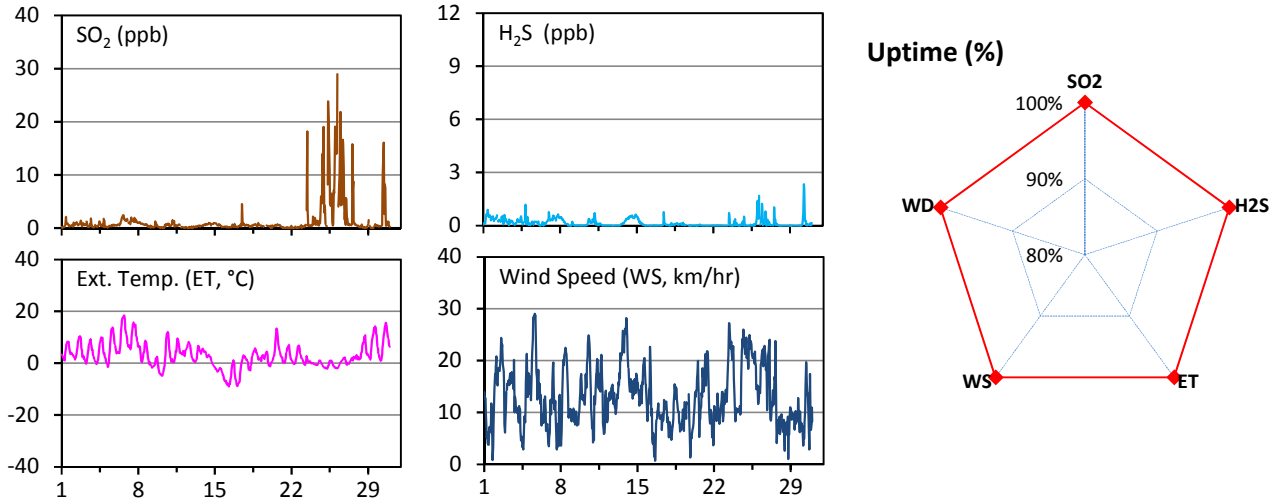
Exceedance Summary

1-hour Exceedance Information			Summary of Other Parameters During Exceedance						
Pollutant	Conc. ppb	Exceedance Time mmm-dd hh:mm	WS km/hr	WD deg	ET C	SO ₂ ppb	H ₂ S ppb	NO ₂ ppb	THC ppm
H ₂ S	13.7	Apr-04 06:00	7.4	292	0.5	0.5	13.7	7.8	2.2
H ₂ S	11.7	Apr-02 23:00	6.7	290	1.3	0.4	11.7	3.6	3.5

Husky Energy West Station - April 2017 Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
				Maximum		AAAQO / SAAQS	Exceed Days	Maximum		AAAQO / SAAQS	Exceed Hours
				Conc.	Time			Conc.	Time		
SO ₂	ppb	0.5	100.0%	10.5	Apr-26	48 / 48	0 / 0	29.0	Apr-26 05:00	172 / 172	0 / 0
H ₂ S	ppb	0.2	100.0%	0.4	Apr-26	3 / 3.6	0 / 0	2.0	Apr-30 07:00	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 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

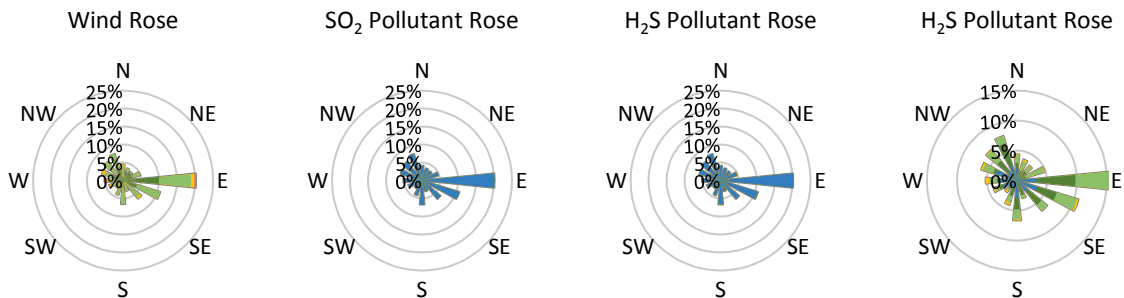
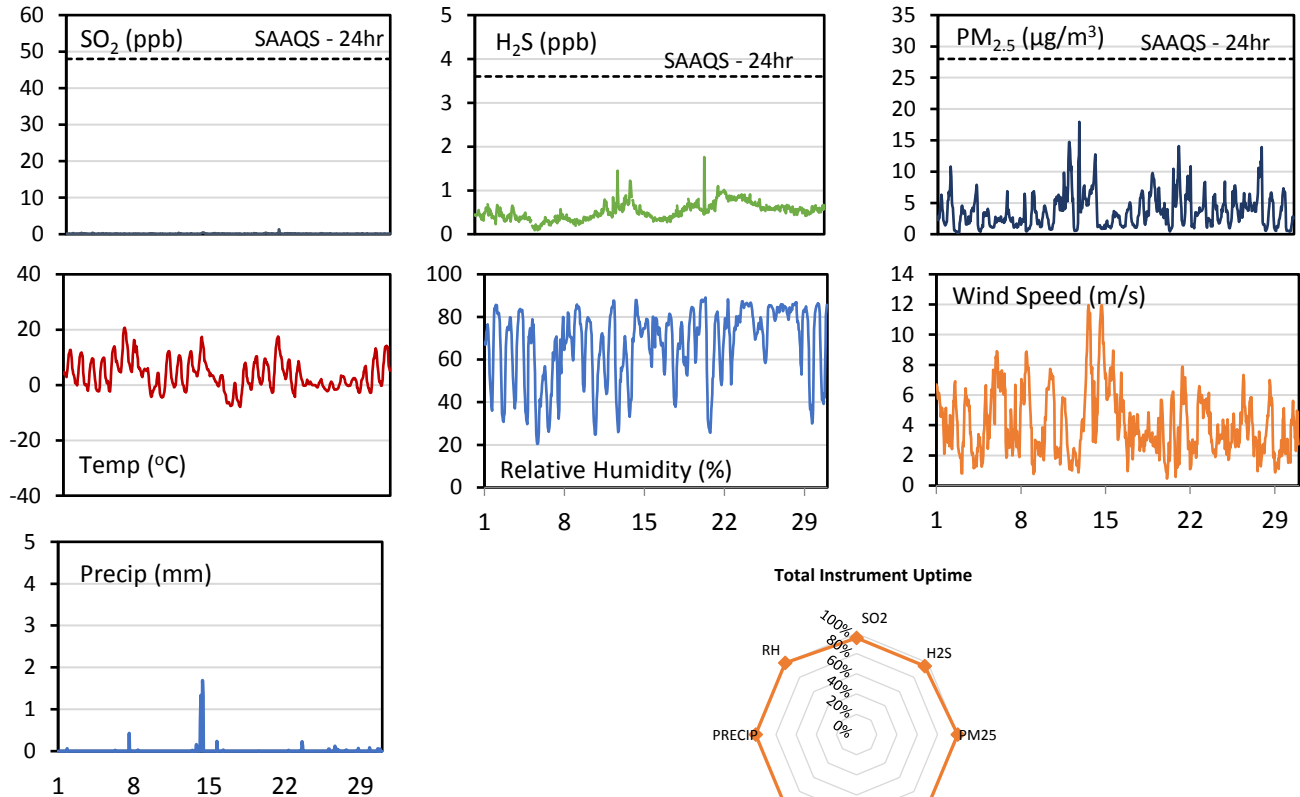
Monthly Update

- *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 - April 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	0.2	96%	0.2	Apr-20	48	0	1.4	Apr-20 17:00	172	0
H ₂ S	ppb	0.5	96%	0.9	Apr-22	3.6	0	1.8	Apr-20 17:00	11	0
PM _{2.5}	µg/m ³	3.7	100%	6.9	Apr-12	28	0	18.0	Apr-12 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

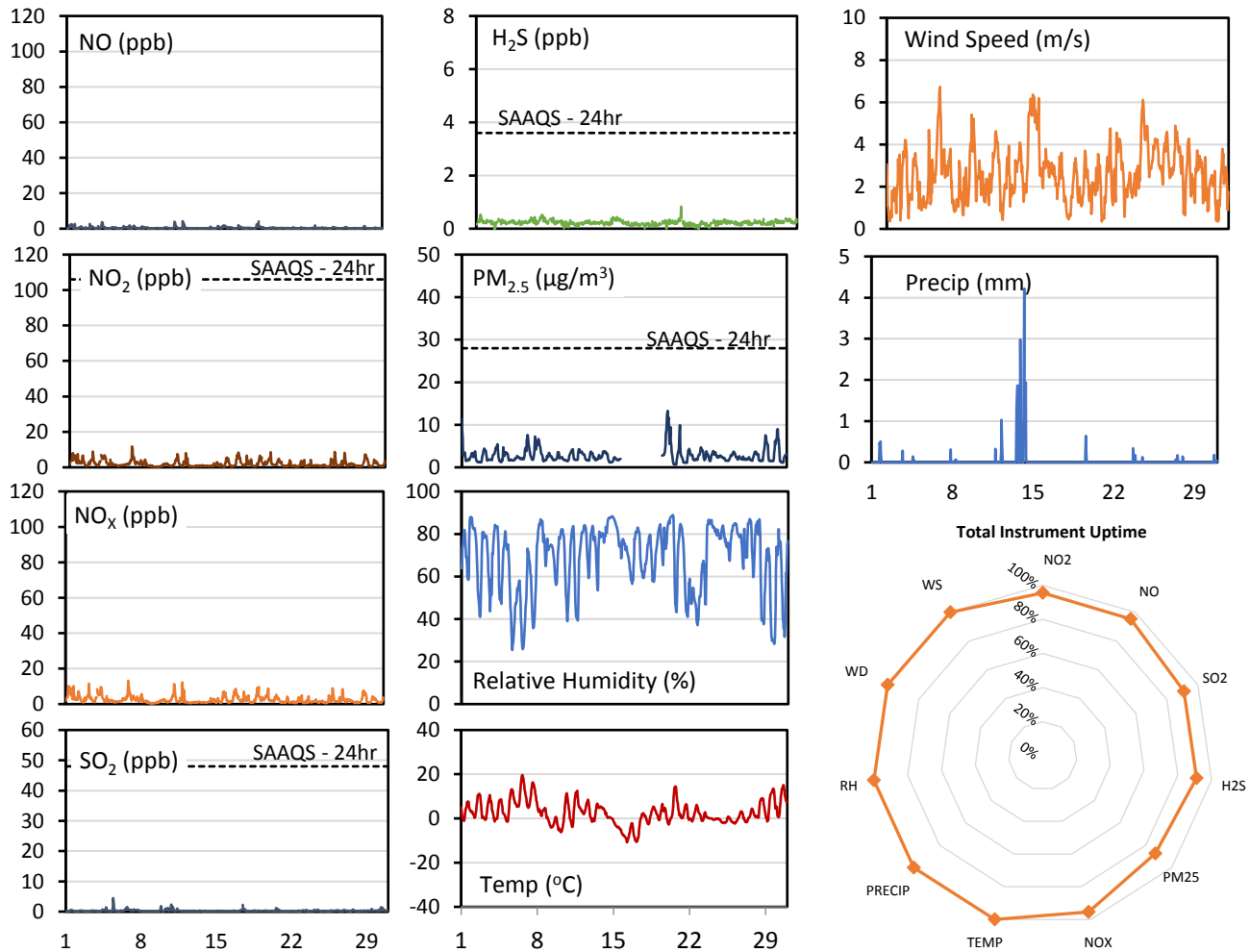
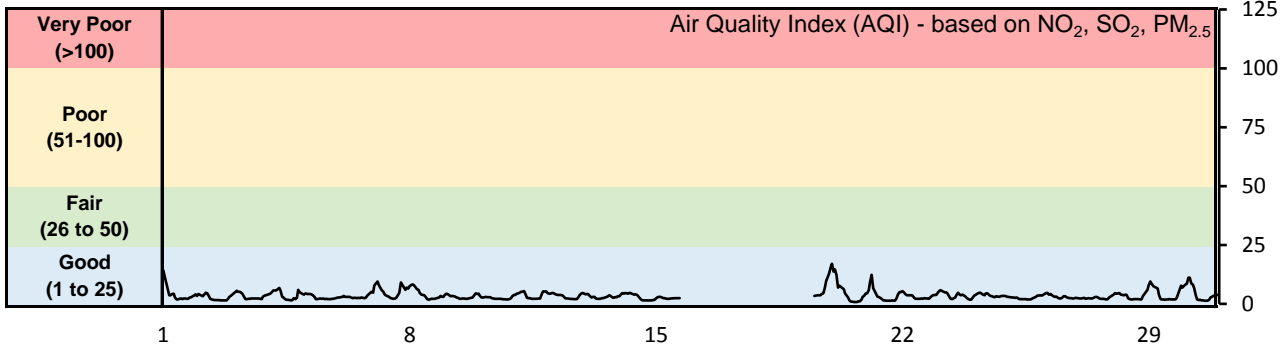
Monthly Update

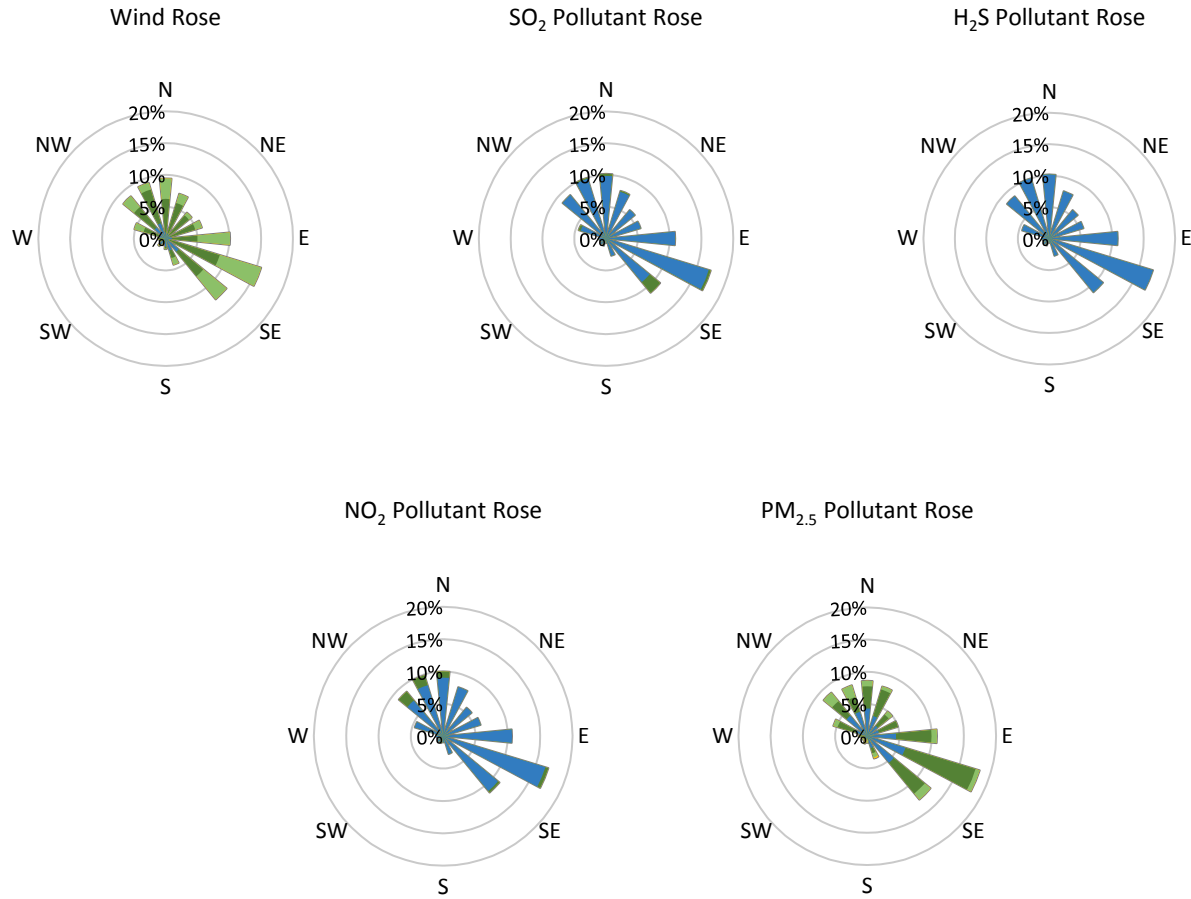
- Achieved >99% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily Internal Zeroes and Spans

WYAMZ Maidstone Station - April 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	0.5	95%	1.0	Apr-01	-	-	4.2	Apr-12 01:00	-	-
NO ₂	ppb	2.0	96%	4.2	Apr-01	106	0	11.8	Apr-06 22:00	159	0
NO _x	ppb	2.5	95%	5.3	Apr-01	-	-	13.2	Apr-06 22:00	-	-
SO ₂	ppb	0.3	91%	0.7	Apr-10	48	0	4.5	Apr-05 10:00	172	0
H ₂ S	ppb	0.2	91%	0.3	Apr-07	3.6	0	0.8	Apr-20 04:00	11	0
PM _{2.5}	µg/m ³	2.8	87%	5.5	Apr-19	28	0	13.3	Apr-20 00:00	-	-

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 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 < 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

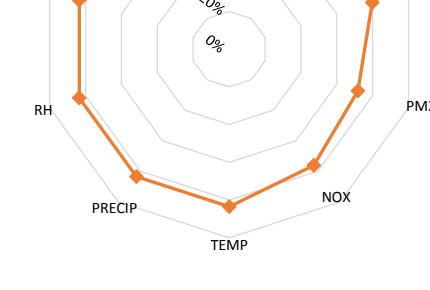
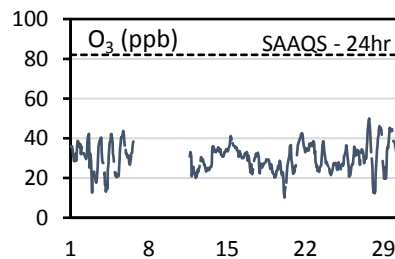
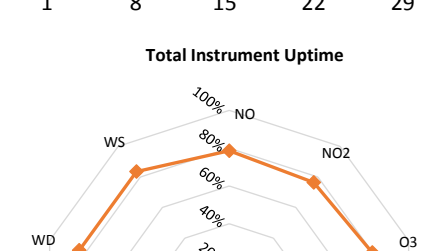
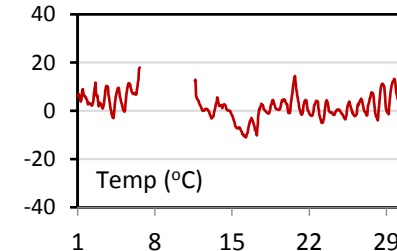
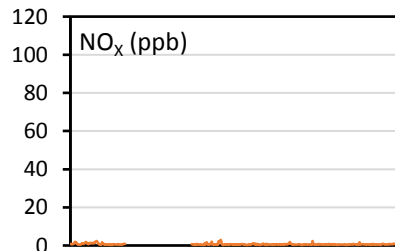
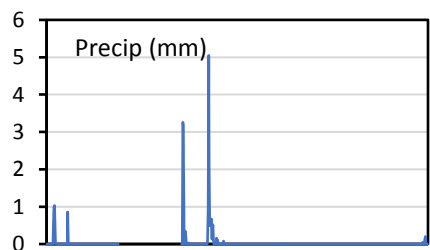
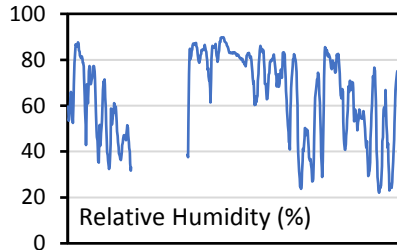
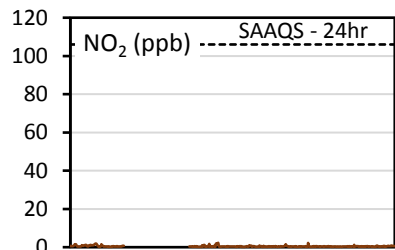
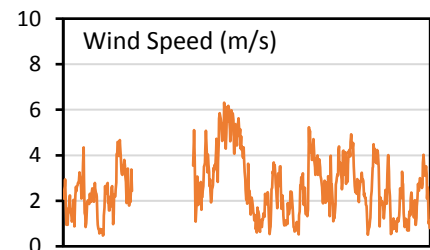
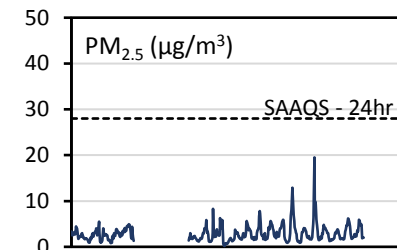
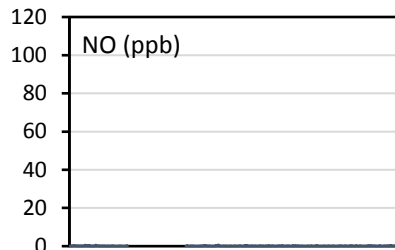
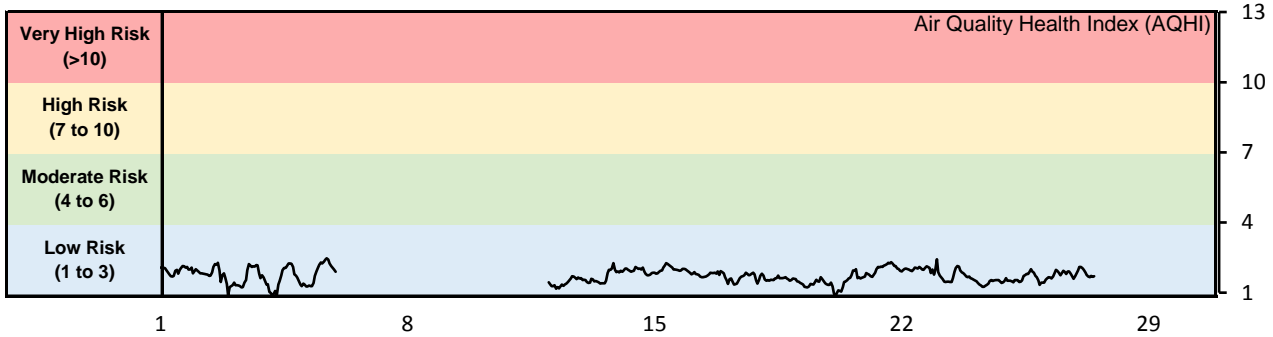
Monthly Update

- Achieved >99% of scheduled uptime for all parameters except SO₂/H₂S (95%) and PM_{2.5} (87%)
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Particulate downtime due to operational issues

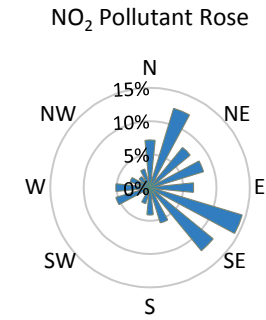
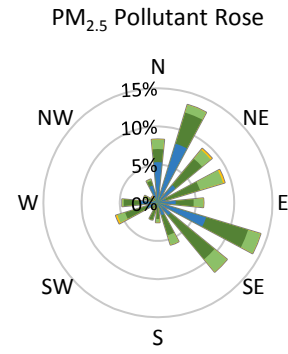
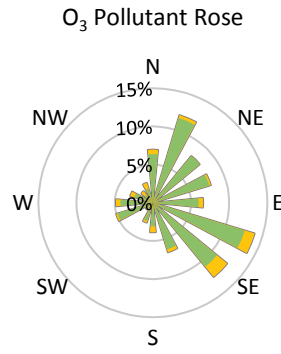
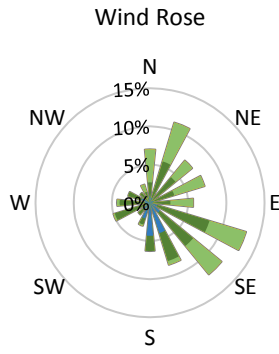
WYAMZ Meadow Lake Station - April 2017 Summary Report

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	0.2	79%	0.3	Apr-02	-	-	0.7	Apr-14 15:00	-	-
NO ₂	ppb	0.5	76%	1.0	Apr-03	106	0	2.3	Apr-14 16:00	159	0
NO _x	ppb	0.7	76%	1.3	Apr-03	-	-	2.9	Apr-14 16:00	-	-
O ₃	ppb	30.5	80%	36.2	Apr-15	-	-	50.0	Apr-27 17:00	82	0
PM _{2.5}	µg/m ³	2.9	72%	4.6	Apr-23	28	0	19.5	Apr-23 00:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



WYAMZ Meadow Lake Station - April 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}	$\mu\text{g}/\text{m}^3$	$0 \leq C < 2$	$2 \leq C < 4$	$4 \leq C < 10$	$10 \leq C < 20$	$20 \leq C < 30$	$C \geq 30$	

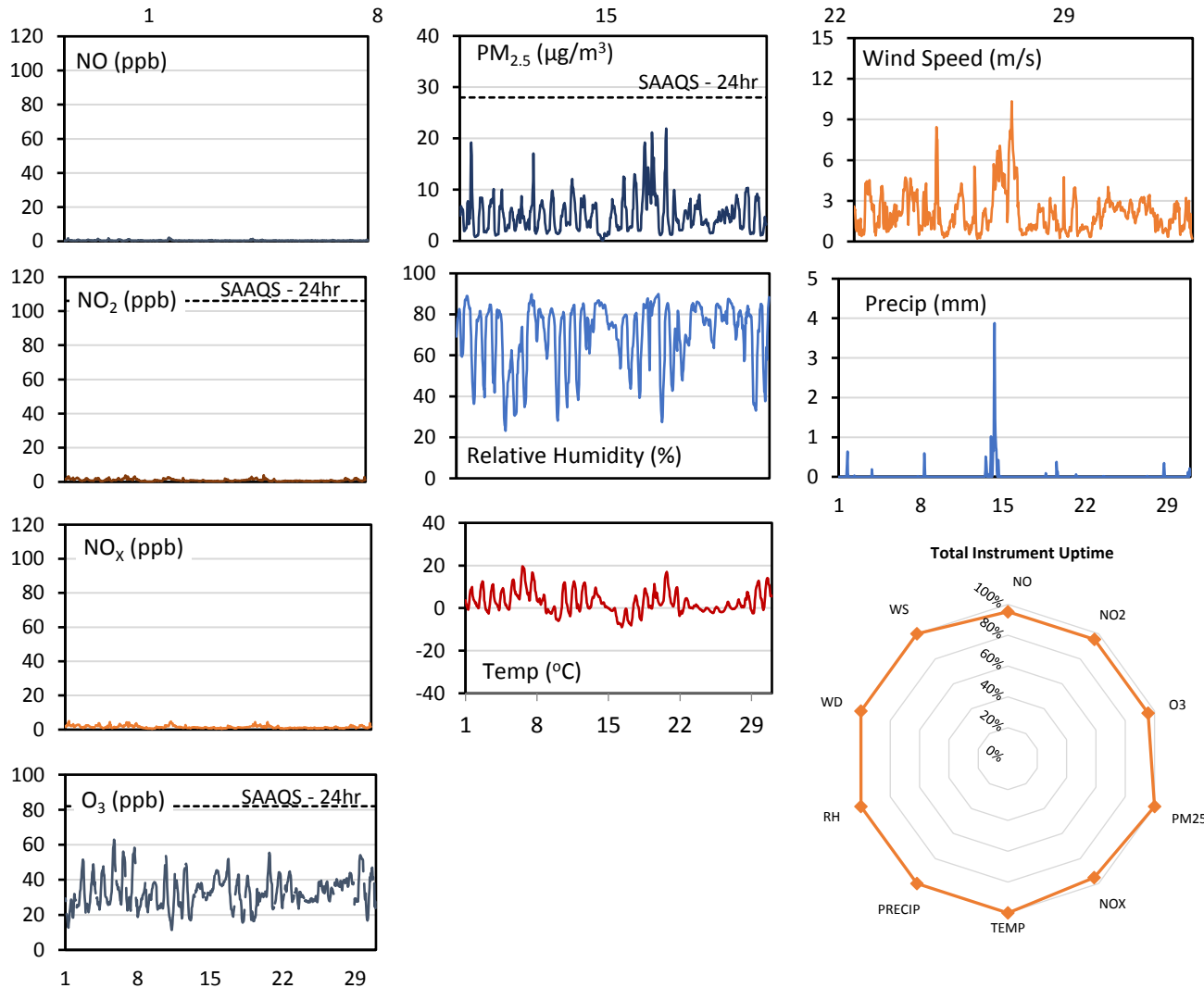
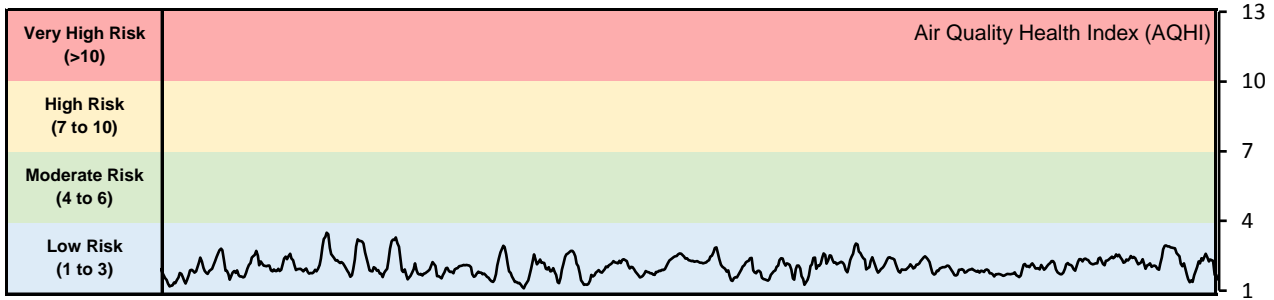
Monthly Update

- Achieved 71-83% of scheduled uptime for all parameters
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Downtime due to operational issues

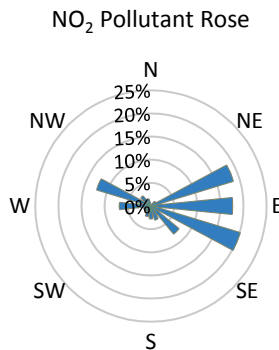
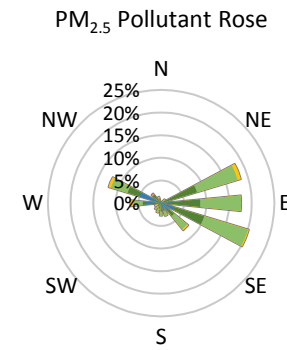
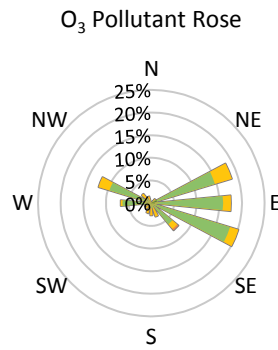
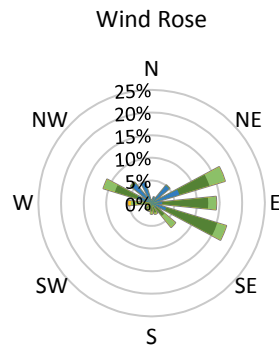
WYAMZ Unity Station - April 2017 Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
				Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.5	95%	0.9	Apr-11	-	-	2.1	Apr-11 09:00	-	-
NO ₂	ppb	1.0	96%	2.0	Apr-07	106	0	3.9	Apr-20 20:00	159	0
NO _x	ppb	1.5	95%	2.7	Apr-11	-	-	5.0	Apr-01 09:00	-	-
O ₃	ppb	33.0	96%	40.0	Apr-29	-	-	62.9	Apr-05 17:00	82	0
PM _{2.5}	µg/m ³	5.0	100%	12.5	Apr-19	28	0	21.9	Apr-21 04:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



WYAMZ Unity Station - April 2017 Summary Report



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