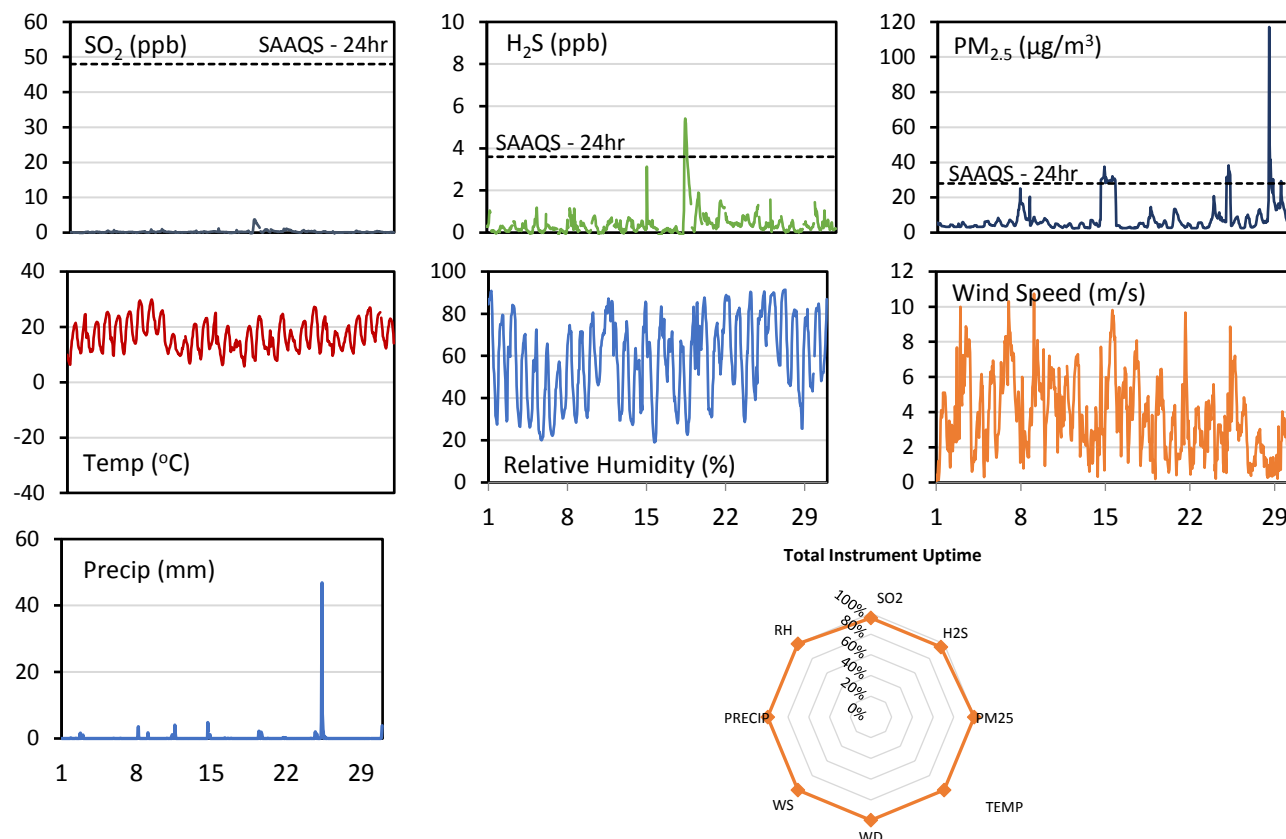


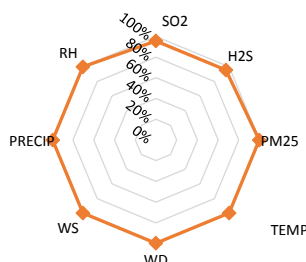
WYAMZ Kindersley Station - June 2016 Summary Report

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	96%	1.7	Jun-18	48	0	3.8	Jun-18 02:00	172	0
H ₂ S	ppb	0.4	96%	2.1	Jun-18	3.6	0	5.4	Jun-18 01:00	11	0
PM _{2.5}	µg/m ³	7.6	100%	30.3	Jun-15	28	1	117.1	Jun-28 22:00	-	-

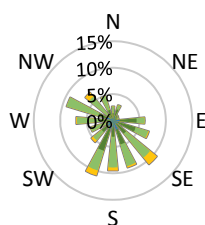
SAAQS: Saskatchewan Ambient Air Quality Standards



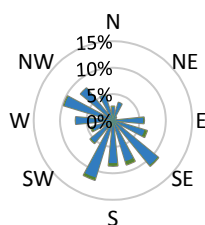
Total Instrument Uptime



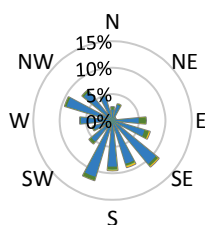
Wind Rose



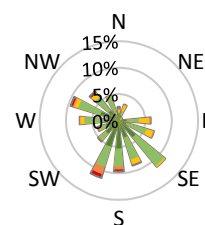
SO₂ Pollutant Rose



H₂S Pollutant Rose



H₂S 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
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

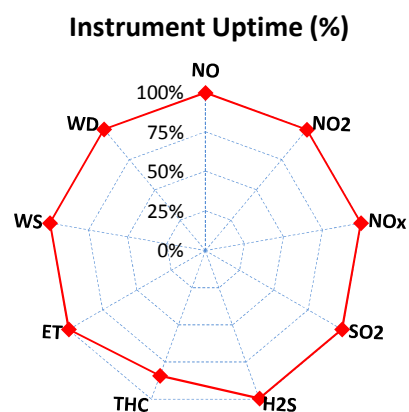
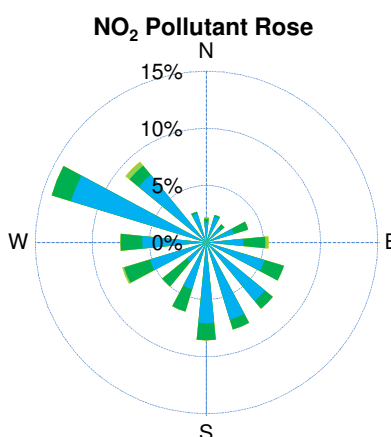
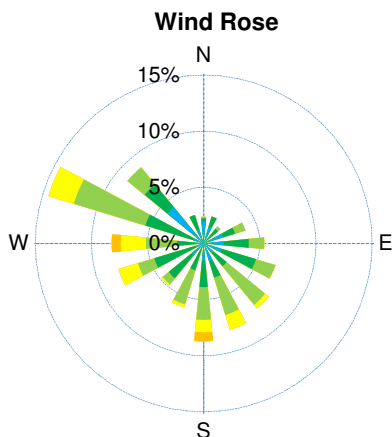
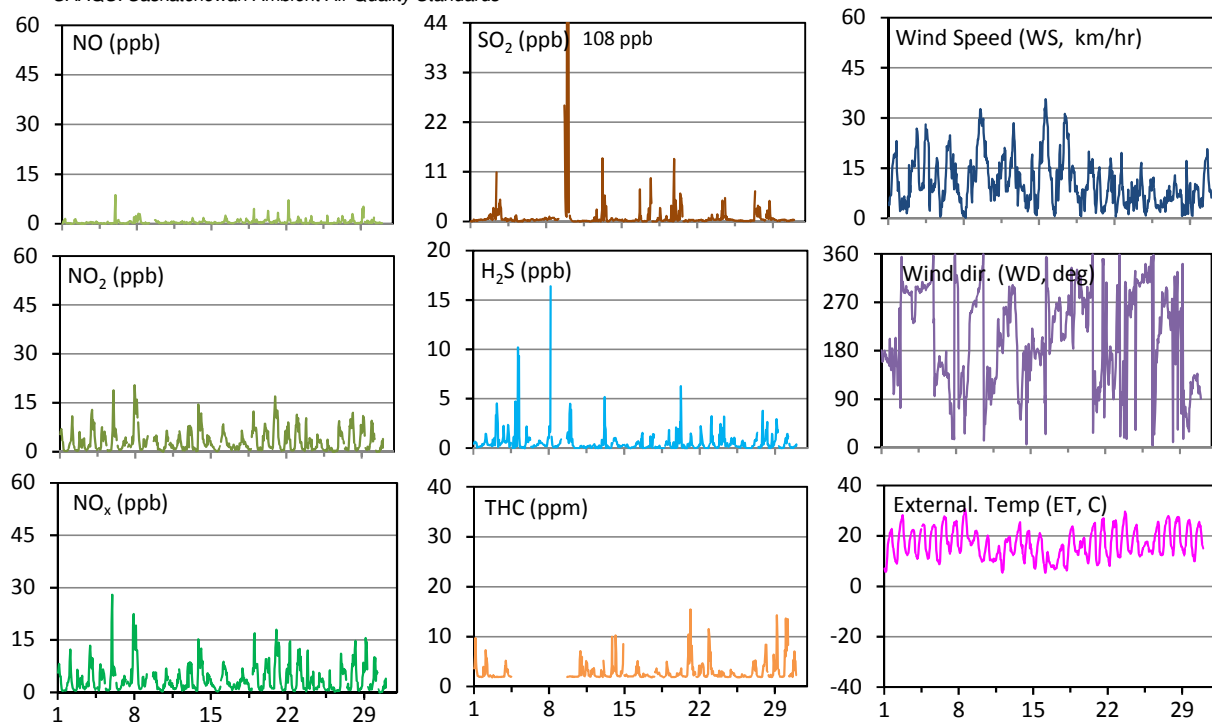
Exceedance Summary (24- Hour Average - Exceedances Highlighted)

Exceedance Day	SO ₂ ppb	PM _{2.5} µg/m ³	H ₂ S ppb	Temp °C	WD deg	WS m/s
Jun-15	0.1	30.3	0.2	13.5	193.6	6.9

Husky Energy East Station - June 2016 Summary Report

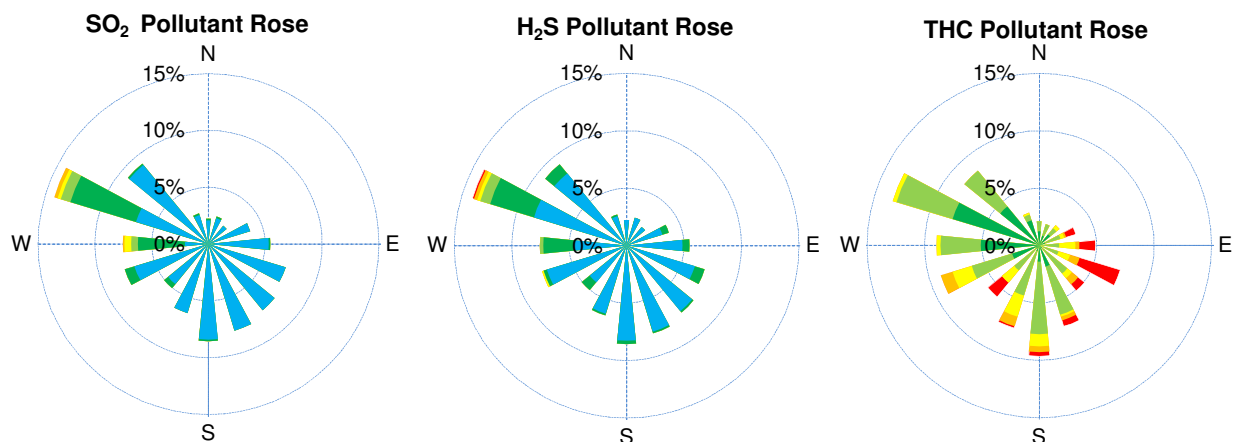
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Uptime	Maximum		SAAQS Standards	Exceed Days	Maximum		SAAQS Standards	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.6	99.7%	1.0	Jun-22	-	-	8.7	Jun-06 00:00	-	-
NO ₂	ppb	3.2	99.7%	5.5	Jun-20	106	0	20.4	Jun-07 23:00	159	0
NO _x	ppb	3.8	99.7%	6.1	Jun-20	-	-	28.0	Jun-06 00:00	-	-
SO ₂	ppb	1.2	99.7%	7.7	Jun-10	48	0	108.0	Jun-10 00:00	172	0
H ₂ S	ppb	0.6	99.6%	1.6	Jun-5	3.6	0	16.4	Jun-08 05:00	11.0	1
THC	ppm	2.9	84.2%	5.0	Jun-30	-	-	15.5	Jun-21 04:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



Parameters	Unit	Color Code for Wind Spd & Pollutant Conc. Class					
Wind Speed	km/hr	$1 \leq WS < 5$	$5 \leq WS < 10$	$10 \leq WS < 20$	$20 \leq WS < 30$	$30 \leq WS < 40$	$WS \geq 40$
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	$0 \leq C < 1$	$1 \leq C < 3.6$	$3.6 \leq C < 5$	$5 \leq C < 8$	$8 \leq C < 10.8$	$C \geq 10.8$
THC	ppm	$0 \leq C < 1$	$1 \leq C < 2$	$2 \leq C < 3$	$3 \leq C < 4$	$4 \leq C < 5$	$C \geq 5$

Husky Energy East Station - June 2016 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 one 1-hour H₂S exceedance. Refer to the Exceedance Summary table for details.

*All compliance parameters are above 90% operational, with the exception of the THC analyzer. The THC analyzer failed to automatically re-light the FID following a power disruption at the station on June 4. The analyzer was manually re-lit, however temperature alarms persisted. The filter and detector temperature sensors were malfunctioning, and were replaced on June 9. The As Found Span completed during the monthly calibration on June 9 failed to meet the calibration criteria, and data recorded since the power failure on June 4 was invalidated. All analyzers were affected by this power disruption, with 2-3 hours of data for all parameters flagged out as "power failure".

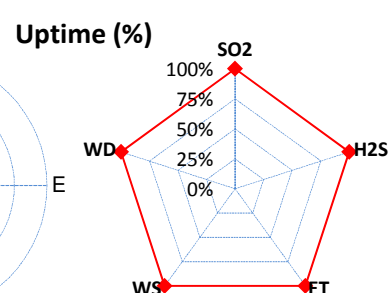
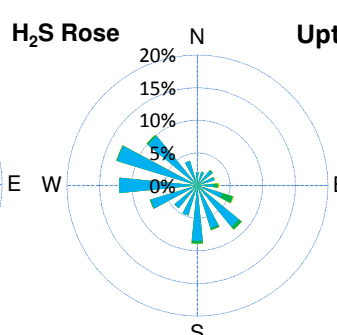
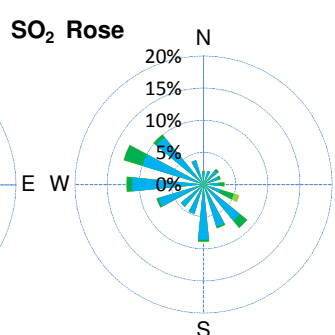
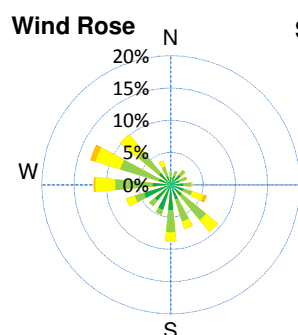
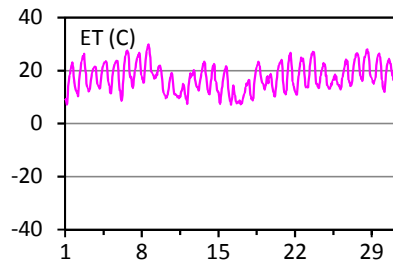
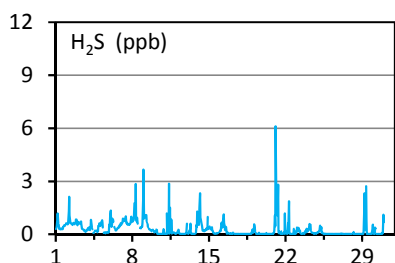
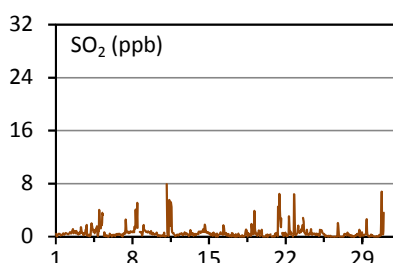
Exceedance Summary

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	16.4	Jun-08 05:00	0.1	295	13.9	0.5	16.4	10.5	-

Husky Energy West Station - June 2016 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	0.6	100.0%	1.6	Jun-11	48 / 48	0 / 0	7.9	Jun-11 04:00	172 / 172	0 / 0
H ₂ S	ppb	0.3	100.0%	0.9	Jun-8	3 / 3.6	0 / 0	6.0	Jun-21 03:00	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 < 10.8	C ≥ 10.8

Monthly Update

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

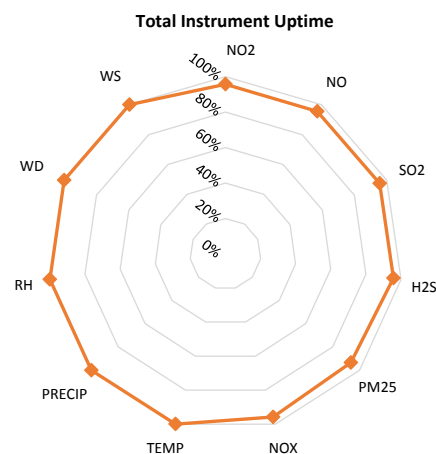
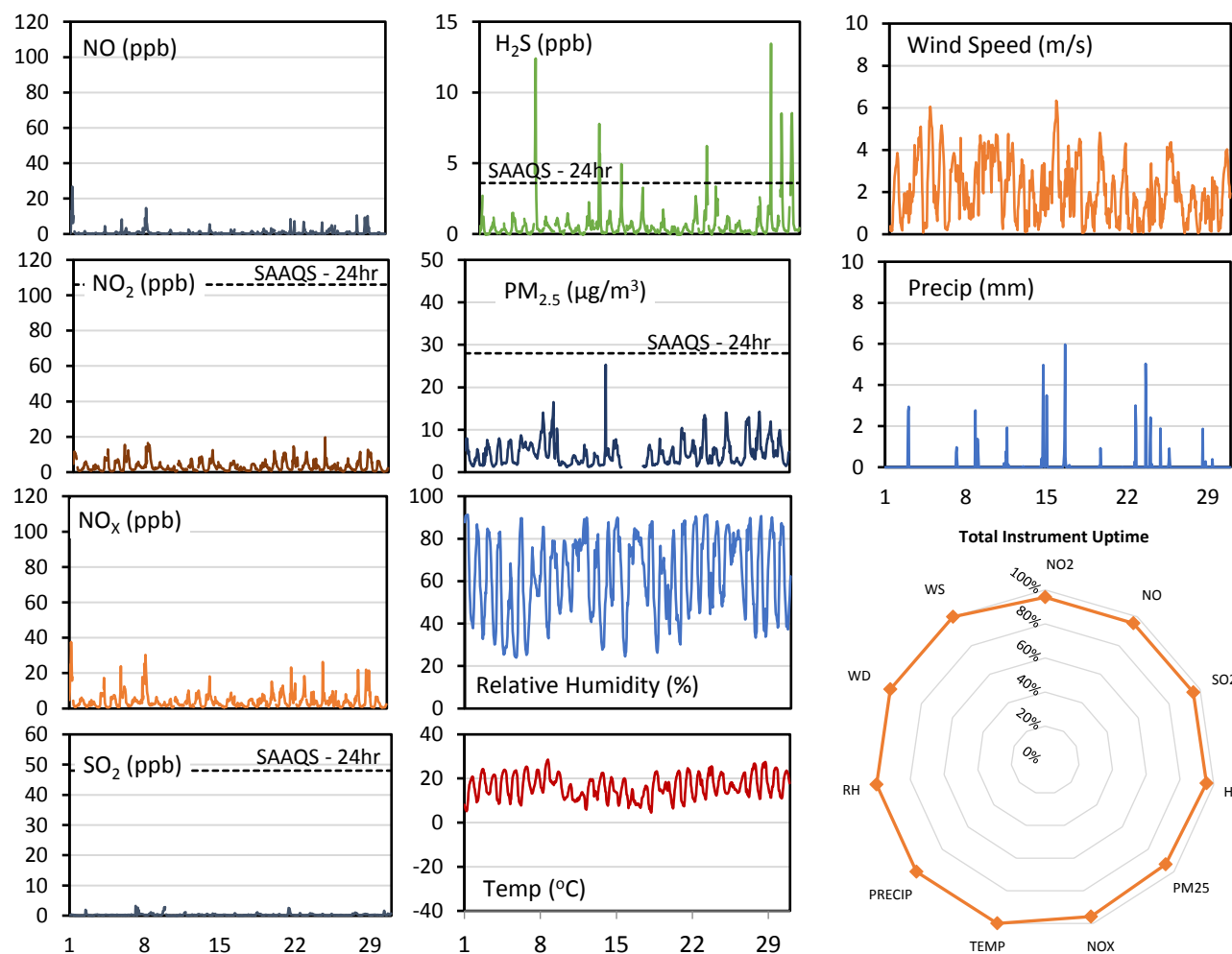
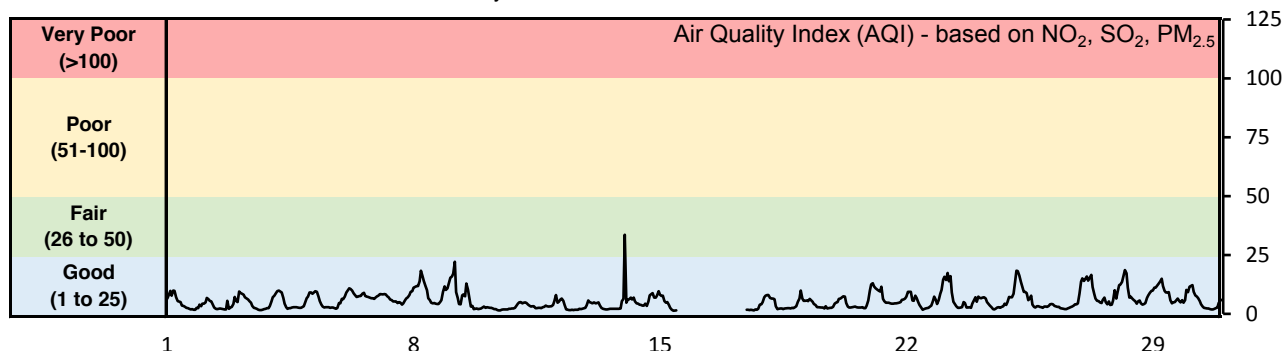
*All compliance parameters were within the Alberta Ambient Air Quality Objectives and the Saskatchewan Ambient Air Quality Standards

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

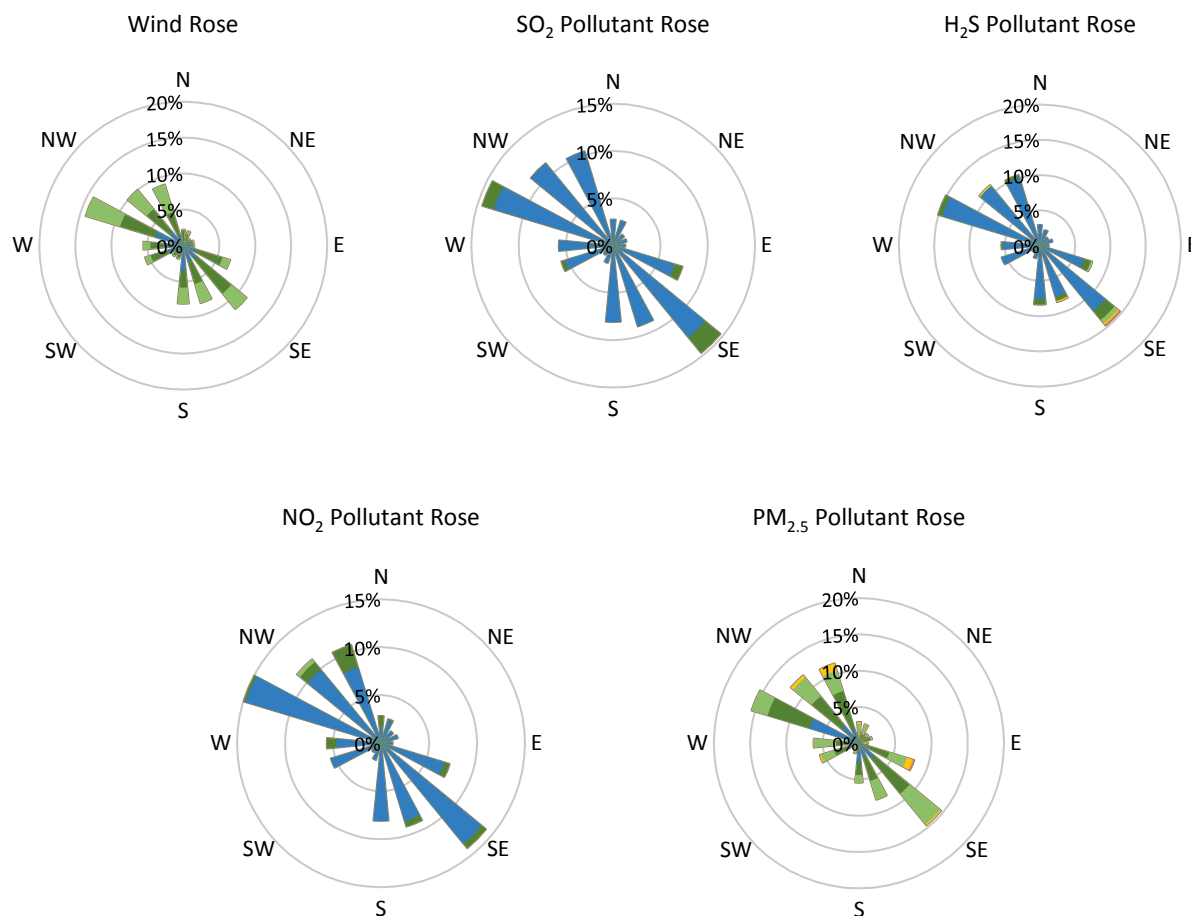
WYAMZ Maidstone Station - June 2016 Summary Report

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	0.9	96%	4.2	Jun-01	-	-	26.7	Jun-01 04:00	-	-
NO ₂	ppb	3.3	96%	6.0	Jun-08	106	0	19.7	Jun-24 23:00	159	0
NO _x	ppb	4.2	96%	8.3	Jun-08	-	-	37.6	Jun-01 04:00	-	-
SO ₂	ppb	0.3	96%	0.7	Jun-09	48	0	3.2	Jun-07 04:00	172	0
H ₂ S	ppb	0.6	96%	1.9	Jun-30	3.6	0	13.4	Jun-28 07:00	11	2
PM _{2.5}	µg/m ³	4.5	93%	7.4	Jun-08	28	0	25.3	Jun-14 00:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



WYAMZ Maidstone Station - June 2016 Summary Report



Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class						
Wind Speed	m/s	$0.3 \leq WS < 1.4$	$1.4 \leq WS < 3.1$	$3.1 \leq WS < 7.8$	$7.8 \leq WS < 10.8$	$10.8 \leq WS < 13.6$	$WS \geq 13.6$	
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}	µg/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 except PM_{2.5} (93.5%)
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- All compliance parameters are above 90% data validity

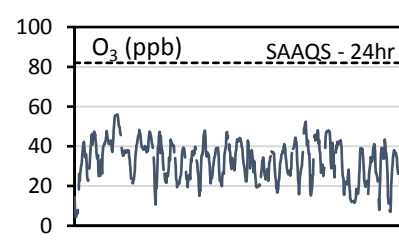
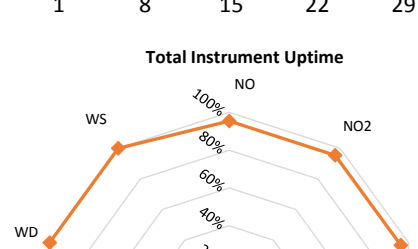
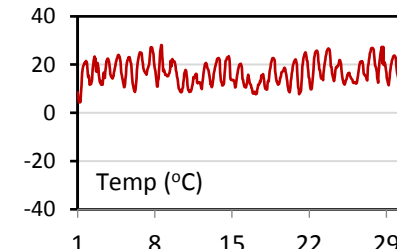
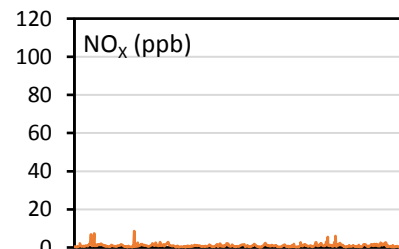
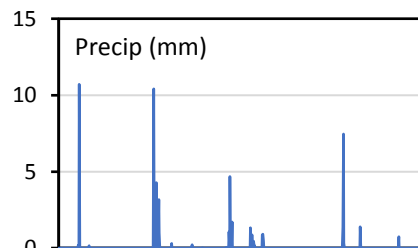
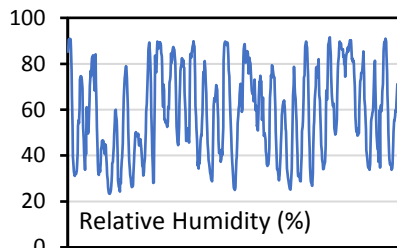
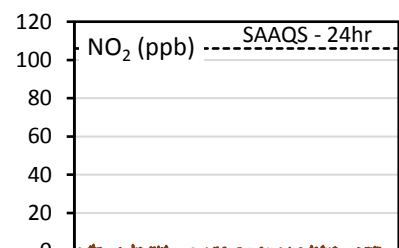
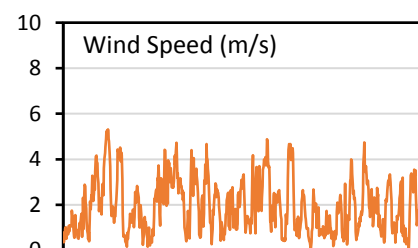
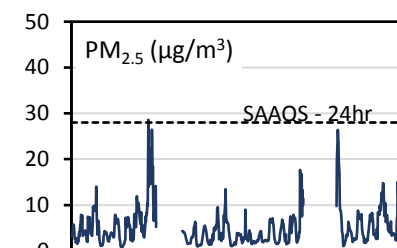
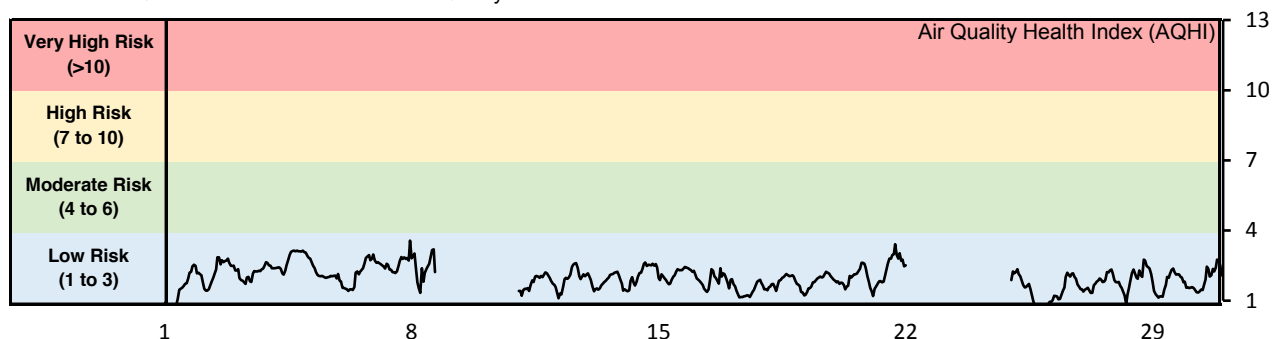
Exceedance Summary (1- Hour Average - Exceedances Highlighted)

Exceedance Time	AQI	NO ₂ ppb	NO ppb	SO ₂ ppb	PM _{2.5} µg/m ³	NO _x ppb	H ₂ S ppb	Temp °C	WD deg	WS m/s
Jun-06 06:00	9.9	9.1	2.2	0.0	7.9	11.3	12.4	7.8	139.5	0.6
Jun-28 07:00	11.2	11.4	10.5	0.2	8.9	21.8	13.4	14.0	343.0	0.3

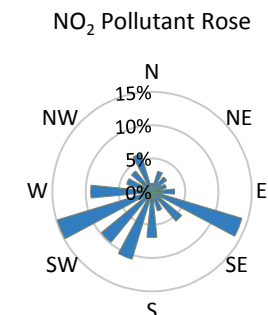
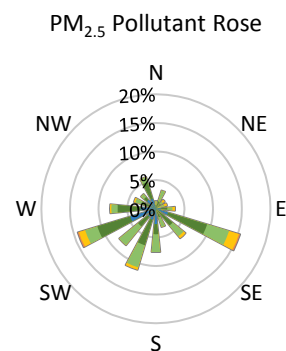
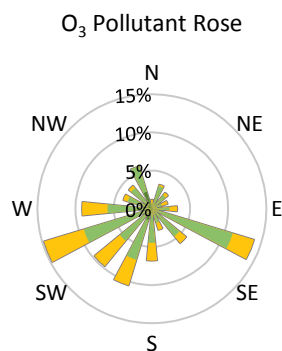
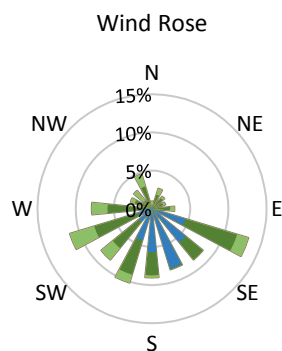
WYAMZ Meadow Lake Station - June 2016 Summary Report

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	0.2	95%	0.7	Jun-06	-	-	5.5	Jun-06 11:00	-	-
NO ₂	ppb	0.7	96%	1.2	Jun-08	106	0	3.3	Jun-02 19:00	159	0
NO _x	ppb	1.0	95%	1.8	Jun-02	-	-	8.6	Jun-06 10:00	-	-
O ₃	ppb	32.6	96%	47.8	Jun-04	-	-	56.0	Jun-04 20:00	82	0
PM _{2.5}	µg/m ³	5.0	82%	14.3	Jun-08	28	0	28.6	Jun-07 23:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



WYAMZ Meadow Lake Station - June 2016 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	

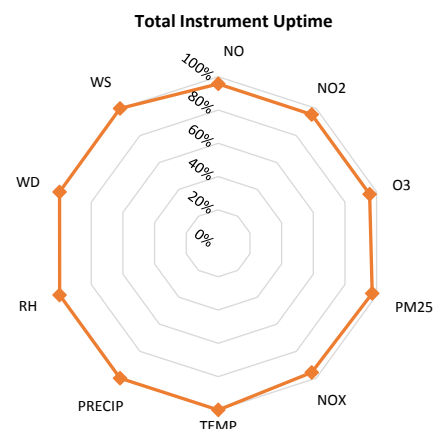
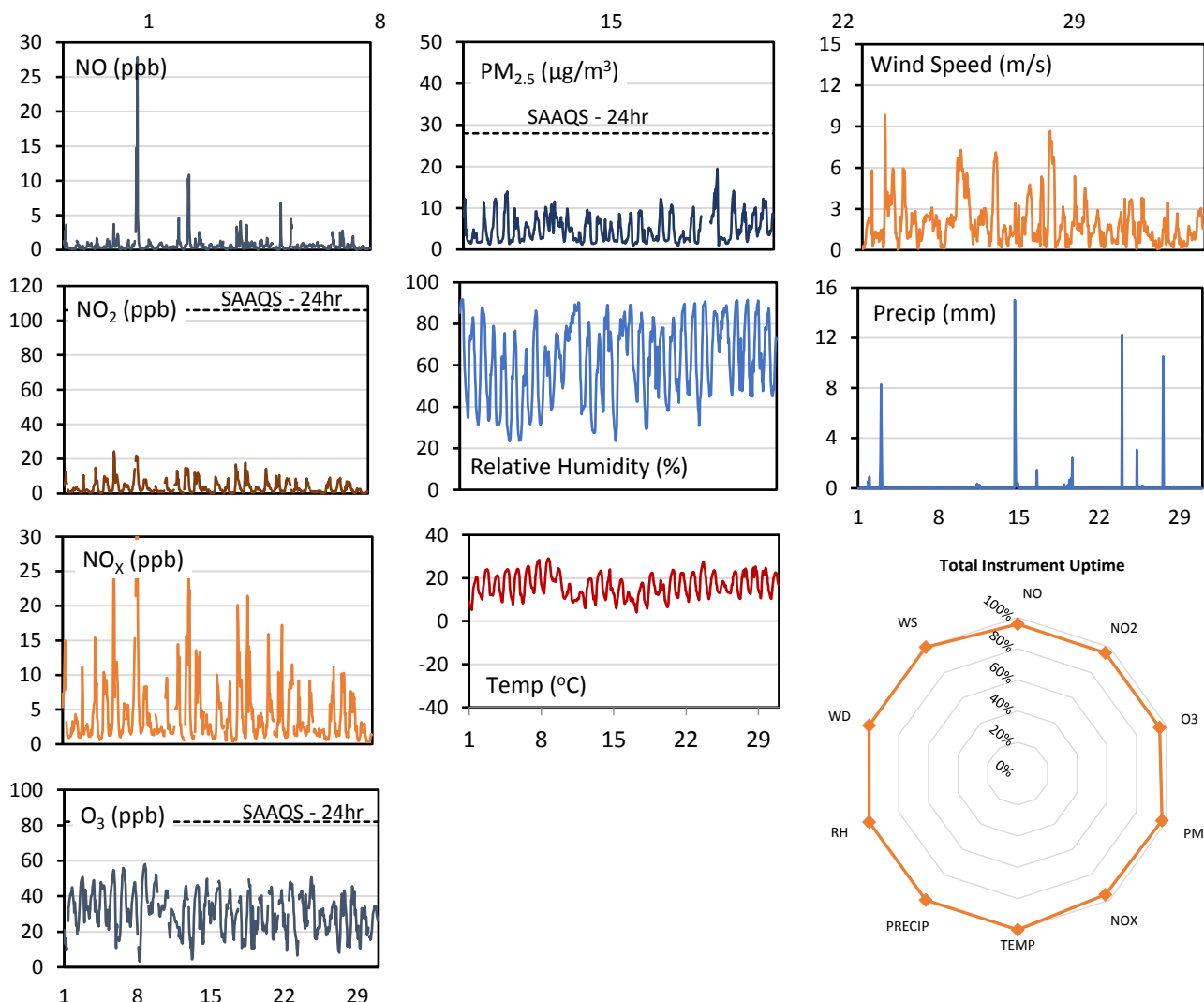
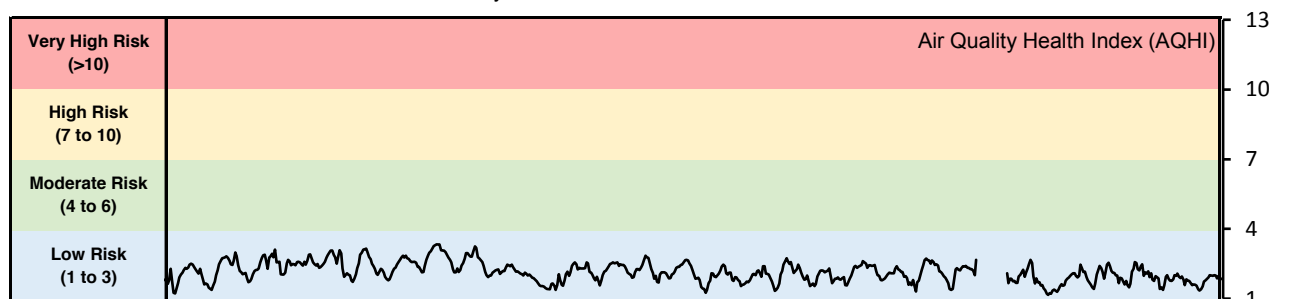
Monthly Update

- Achieved >99% of scheduled uptime for all parameters except PM_{2.5} (88%)
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- Downtime for PM_{2.5} due to pump failure

WYAMZ Unity Station - June 2016 Summary Report

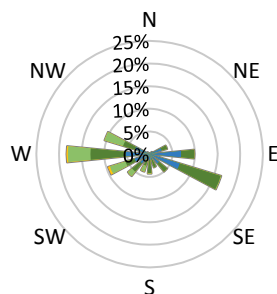
Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc. Unit	Avg. Conc.	Total Uptime	Maximum		SAAQS Standard	Exceed Days	Maximum		SAAQS Standard	Exceed Hours
				Conc.	Time			Conc.	Time		
NO	ppb	0.7	96%	3.1	Jun-08	-	-	27.9	Jun-08 06:00	-	-
NO ₂	ppb	3.6	96%	8.4	Jun-08	106	0	24.3	Jun-05 23:00	159	0
NO _x	ppb	4.3	96%	11.5	Jun-08	-	-	48.4	Jun-08 06:00	-	-
O ₃	ppb	31.2	96%	39.8	Jun-09	-	-	58.1	Jun-08 17:00	82	0
PM _{2.5}	µg/m ³	4.9	97%	8.7	Jun-25	28	0	19.5	Jun-25 13:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards

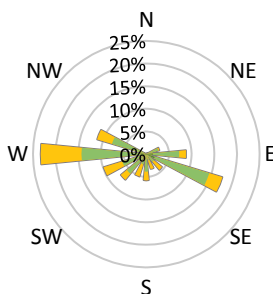


WYAMZ Unity Station - June 2016 Summary Report

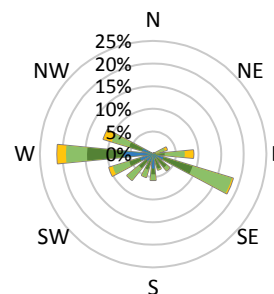
Wind Rose



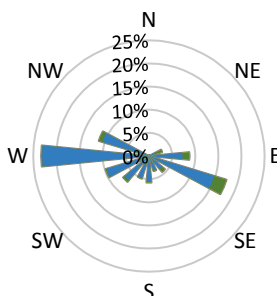
O₃ Pollutant Rose



PM_{2.5} Pollutant Rose



NO₂ Pollutant Rose



Parameters	Unit	Color Code for Wind Speed and Pollution Concentration Class					
Wind Speed	m/s	$0.3 \leq WS < 1.4$	$1.4 \leq WS < 3.1$	$3.1 \leq WS < 7.8$	$7.8 \leq WS < 10.8$	$10.8 \leq WS < 13.6$	$WS \geq 13.6$
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 except PM_{2.5} (97%)
- Downtime of 4% results from routine daily Internal Zeroes and Spans
- All compliance parameters are above 90% data validity