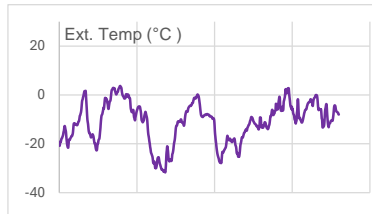
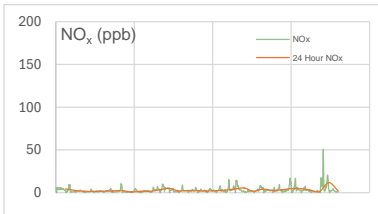
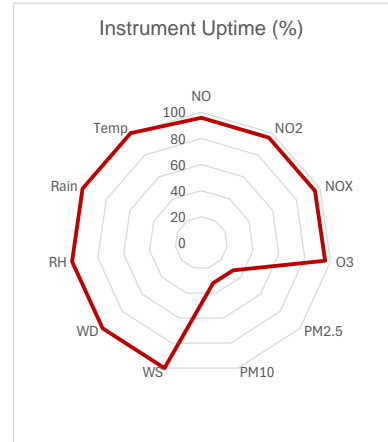
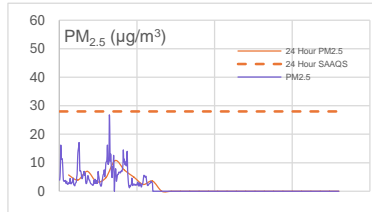
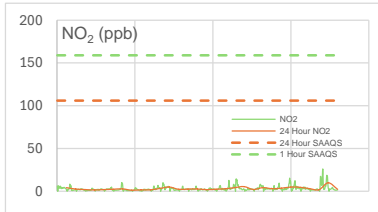
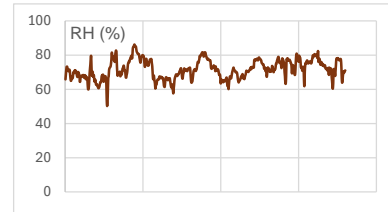
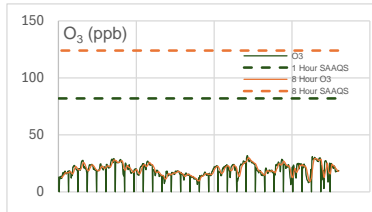
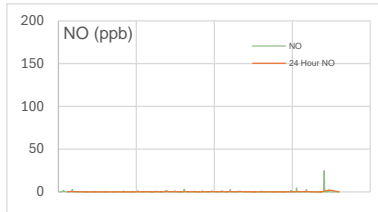
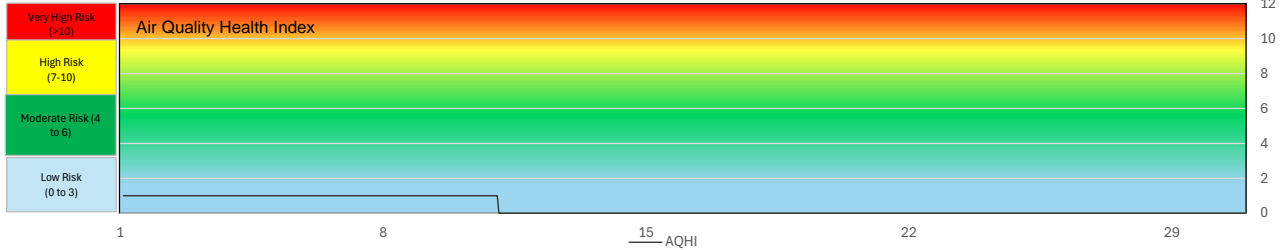


SESAA Esterhazy Station - December 2024 Summary Report

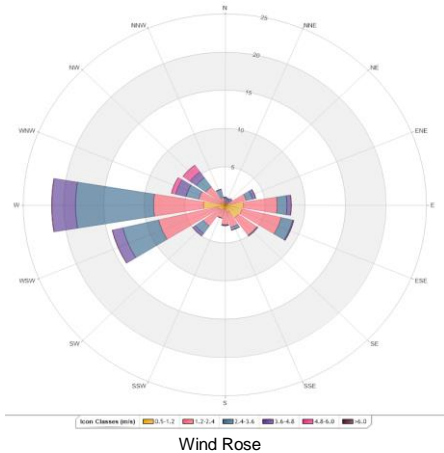
Pollutants		Month Records		24 Hour Records				1 Hour Records			
Name	Unit	Average Concentration	Uptime	Maximum		SAAQS Objective*	Exceed Days	Maximum		SAAQS Objective	Exceed Hours
				Conc.	Date			Conc.	Date and Time		
NO	ppb	0.2	95.8%	2.0	29-Dec	-	-	24.8	12/29/2024 10:00 AM	-	-
NO ₂	ppb	3	95.8%	9.9	29-Dec	106	0	26.1	12/29/2024 10:00 AM	159	0
NO _x	ppb	3	95.8%	11.8	29-Dec	-	-	50.8	12/29/2024 10:00 AM	-	-
O ₃	ppb	19.8	95.8%	30.0	21-Dec	124 (8-Hour)	0	31.9	12/21/2024 5:00 AM	82	0
PM _{2.5}	µg/m ³	5.4	32.1%	10.8	6-Dec	28	0	26.8	12/6/2024 9:00 AM	-	-

SAQS: Saskatchewan Ambient Air Quality Standards

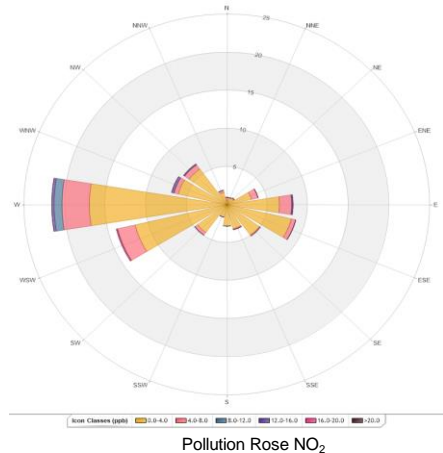


Exceedance Summary										
24-hour Exceedance Information			Summary of other Parameters during Exceedance							
Pollutant	Date	Conc.	WS	WD	Precip.	NO	NO ₂	NO _x	O ₃	PM _{2.5}

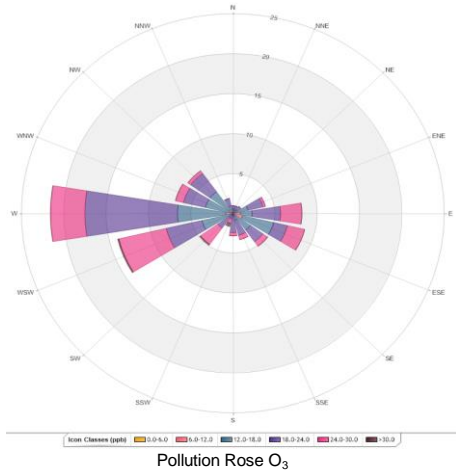
SESAA Esterhazy Station - December 2024 Summary Report



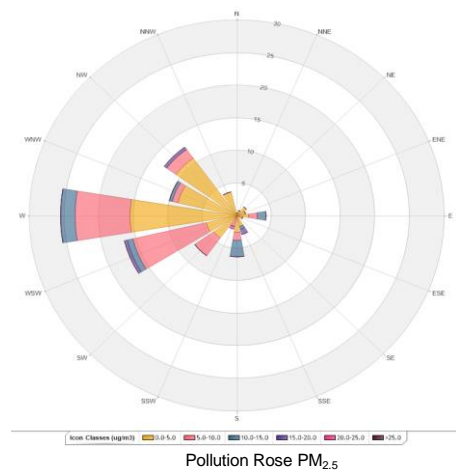
Wind Rose



Pollution Rose NO₂



Pollution Rose O₃



Pollution Rose PM_{2.5}

Parameters	Unit	Color Code for Wind Speed and Pollutant Concentration Class						
Wind Speed	m/s	0.5 -W- 1.2	1.2 -W- 2.4	2.4 -W- 3.6	3.6 -W- 4.8	4.8 -W- 6.0	W > 6.0	
NO ₂	ppb	0.0-C-4.0	4.0-C-8.0	8.0-C-12.0	12.0-C-16.0	16.0-C-20.0	C > 20.0	
O ₃	ppb	0.0-C-6.0	6.0-C-12.0	12.0-C-18.0	18.0-C-24.0	24.0-C-30.0	C > 30.0	
PM _{2.5}	µg/m ³	0.0-C-5.0	5.0-C-10.0	10.0-C-15.0	15.0-C-20.0	20.0-C-25.0	C > 25.0	

* All data has been zero baseline corrected, if any. Data may change after final validation process.

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

* All compliance parameters were more than 90% operational for the month with the exception PM_{2.5}. The monitor appears to working however data was not accessible remotely.

* 30 hours of data were flagged for all gas analyzers due to daily IZS checks, resulting in the loss of one hour of data each day.

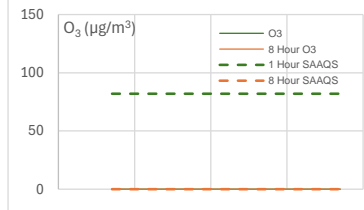
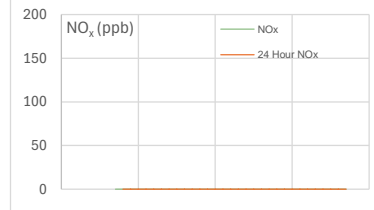
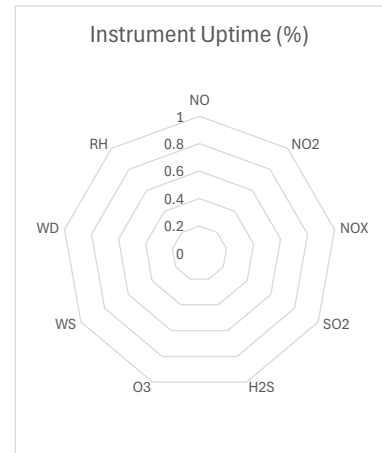
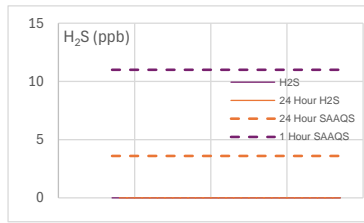
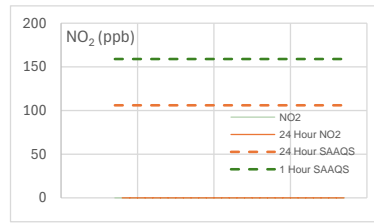
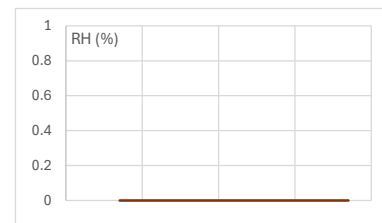
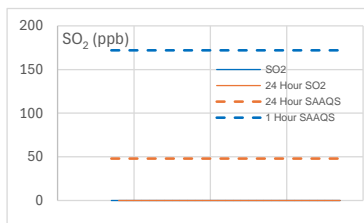
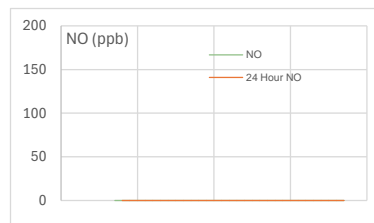
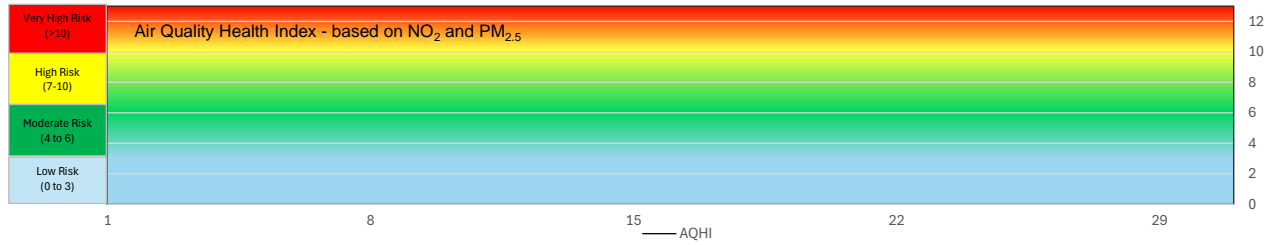
* 505 hours of data flagged as "analyzer failure" for PM_{2.5} due to missing and flatlined data.



SESAA Glen Ewen Station - December 2024 Summary Report

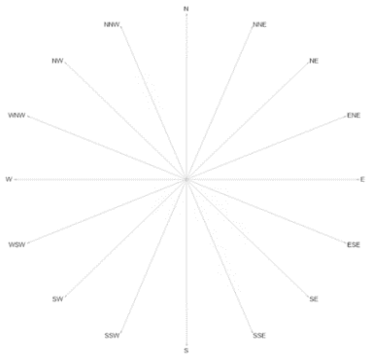
Pollutants		Month Records		24 Hour Records				1 Hour Records			
Name	Unit	Average Concentration	Uptime	Maximum		SAAQS Objective*	Exceed Days	Maximum		SAAQS Objective	Exceed Hours
				Conc.	Date			Conc.	Date and Time		
NO	ppb	No Data	0.0%	0.00	-	-	-	No Data	N/A	-	-
NO ₂	ppb	No Data	0.0%	0.00	-	106	0	No Data	N/A	159	0
NO _x	ppb	No Data	0.0%	0.00	-	-	-	No Data	N/A	-	-
SO ₂	ppb	No Data	0.0%	0.00	-	48	0	No Data	N/A	172	0
H ₂ S	ppb	No Data	0.0%	0.00	-	3.6	0	No Data	N/A	11	0
O ₃	ppb	No Data	0.0%	0.00	-	124 (8 hours)	0	No Data	N/A	82	0

SAAQS: Saskatchewan Ambient Air Quality Standards

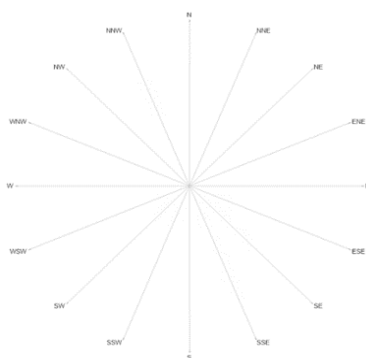


SESAA Glen Ewen Station - December 2024 Summary Report

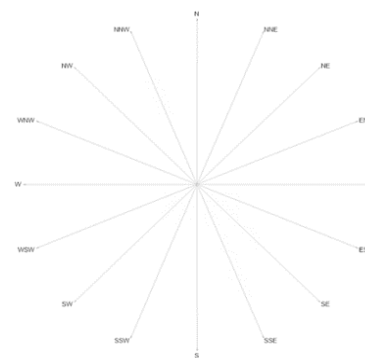
Exceedance Summary										
24-hour Exceedance Information			Summary of other Parameters during Exceedance							
Pollutant	Date	Conc.	WS	WD	H ₂ S	NO	NO ₂	NO _x	SO ₂	O ₃



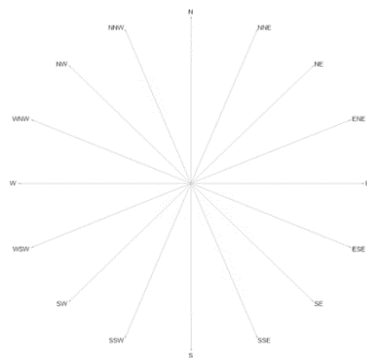
Wind Rose



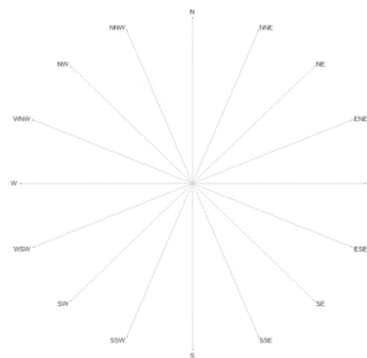
NO₂ Pollution Rose



SO₂ Pollution Rose



H₂S Pollution Rose



O₃ Pollution Rose

Parameters	Unit	Color Code for Wind Speed and Pollutant Conc. Class							
Wind Speed	m/s	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NO ₂	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO ₂	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H ₂ S	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
O ₃	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Monthly Update

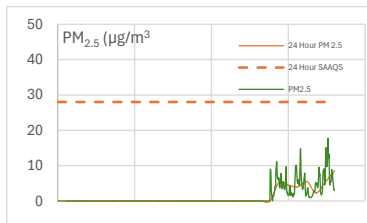
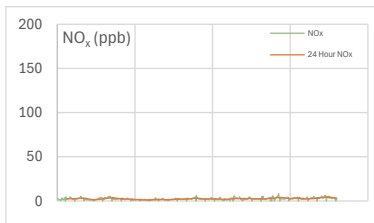
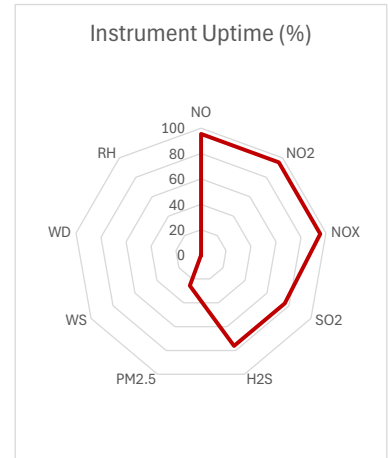
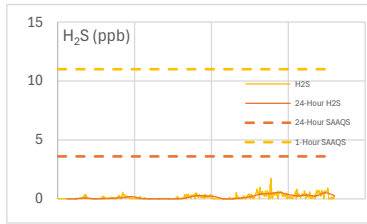
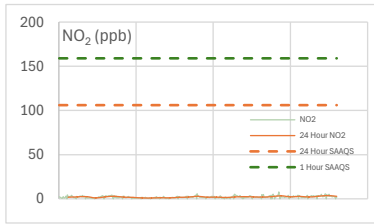
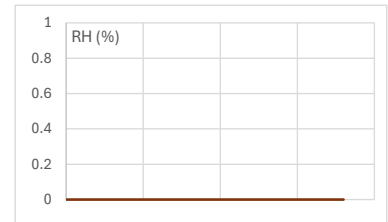
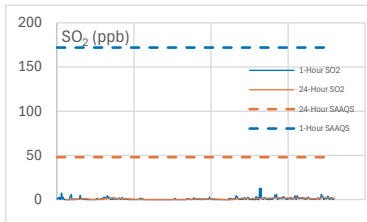
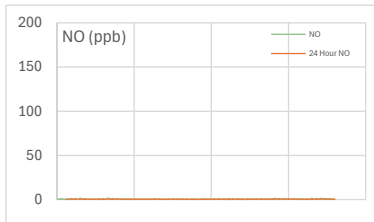
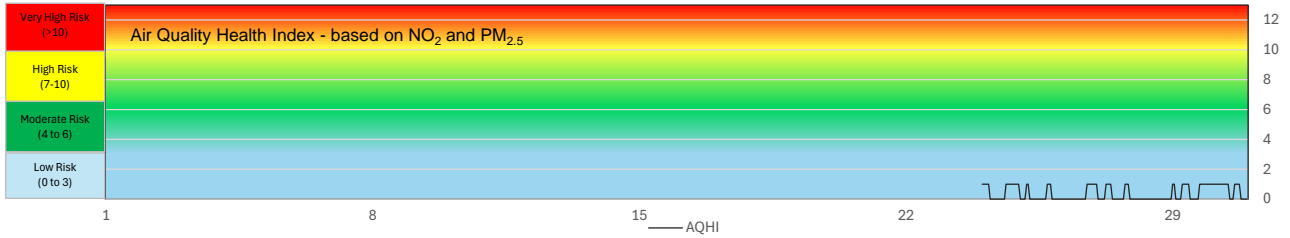
* No data was available during the month due to operational issues with the modem however the analyzer appear to be operating.



SESAA Oxbow Station - December 2024 Summary Report

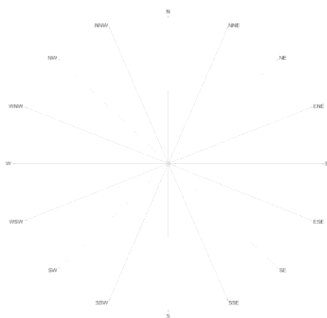
Pollutants		Month Records		24 Hour Records				1 Hour Records			
Name	Unit	Average Concentration	Uptime	Maximum		SAAQS Objective	Exceed Days	Maximum		SAAQS Objective	Exceed Hours
				Conc.	Date			Conc.	Date and Time		
NO	ppb	0.5	95.4%	0.7	6-Dec	-	-	1.8	12/3/2024 12:00 PM	-	-
NO ₂	ppb	2.1	95.4%	3.7	29-Dec	106	0	7.8	12/24/2024 6:00 PM	159	0
NO _x	ppb	2.5	95.4%	4.3	29-Dec	-	-	8.2	12/24/2024 6:00 PM	-	-
SO ₂	ppb	1.1	76.2%	2.2	29-Dec	48	0	13	12/22/2024 10:00 PM	172	0
H ₂ S	ppb	0.2	76.2%	0.5	24-Dec	3.6	0	1.7	12/24/2024 3:00 AM	11	0
PM _{2.5}	µg/m ³	4.7	25.7%	8.6	30-Dec	28	0	17.8	12/30/2024 7:00 AM	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards

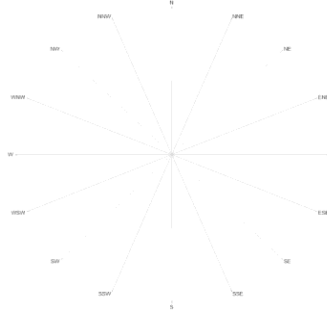


SESAA Oxbow Station - December 2024 Summary Report

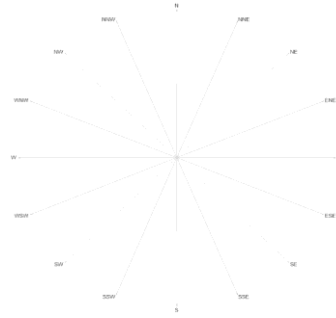
Exceedance Summary										
24-hour Exceedance Information			Summary of other Parameters during Exceedance							
Pollutant	Date	Conc.	WS	WD	H ₂ S	NO	NO ₂	NO _x	SO ₂	PM _{2.5}



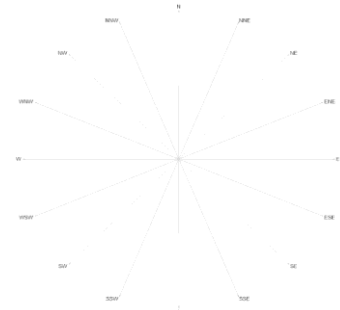
Wind Rose



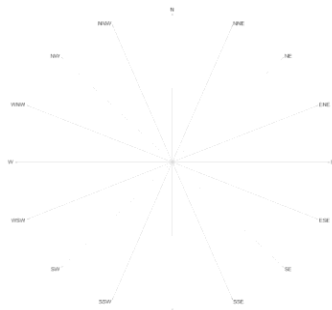
NO₂ Pollution Rose



SO₂ Pollution Rose



H₂S Pollution Rose



PM_{2.5} Pollution Rose

Parameters	Unit	Color Code for Wind Speed and Pollutant Concentration Class							
Wind Speed	m/s	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NO ₂	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SO ₂	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
H ₂ S	ppb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PM _{2.5}	µg/m ³	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Monthly Update

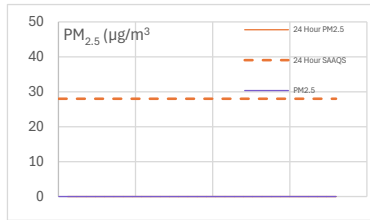
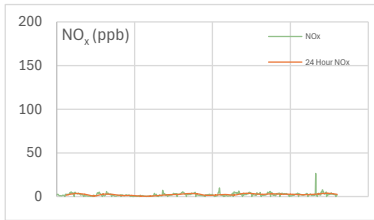
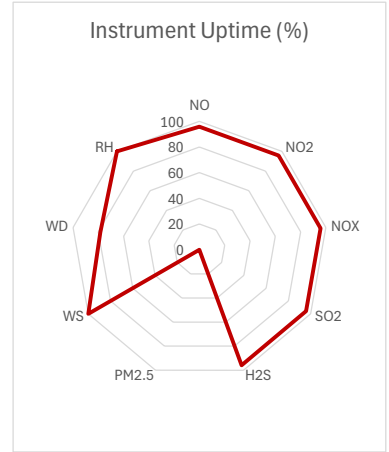
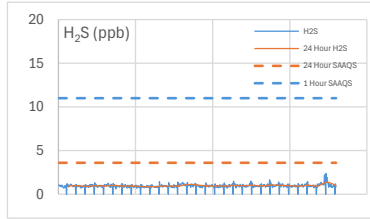
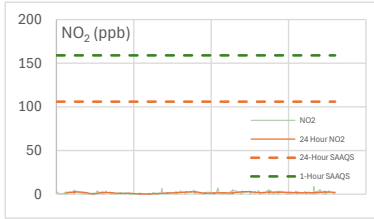
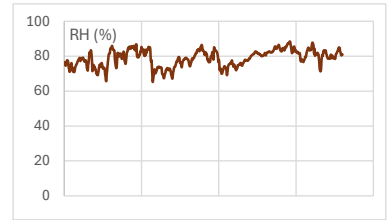
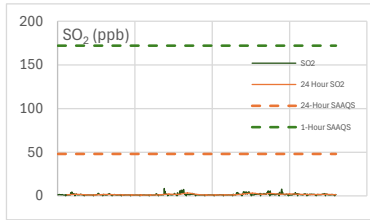
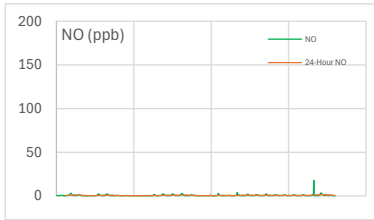
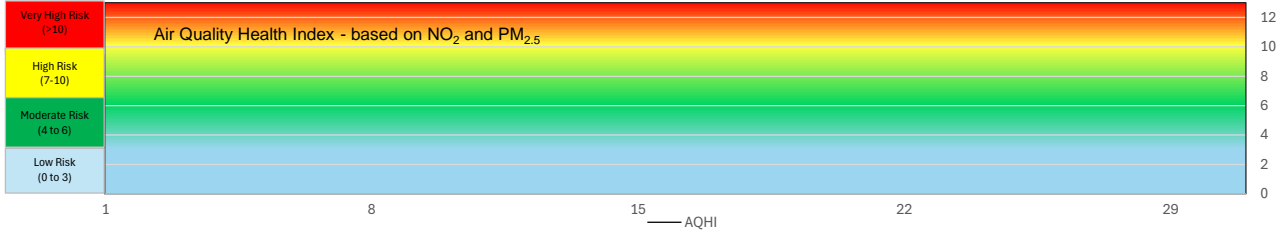
- * All data has been zero baseline corrected. Data may change after final validation process.
- * All compliance parameters were within the Saskatchewan Ambient Air Quality Standards.
- * All compliance parameters were less than 90% operational for the month, except for the NO_x.
- * 720 hours of data flagged as "analyzer failure" for WS/WD due to missing data. Sensor removed on October 31, 2024 for maintenance.
- * 553 hours of data flagged as "analyzer failure" for PM_{2.5} due to missing and flatlined data.
- * 177 hours of data flagged as "analyzer failure" for H₂S and SO₂ due to missing and flatlined data.
- * H₂S span failures were intermittently observed at Clavet during periods of extreme cold, indicating that seasonal ambient temperature fluctuations appear to be affecting analyzer performance. As temperatures returned to positive ranges, spans normalized. Data recorded during these failures were flagged but not invalidated.
- * 30 hours of data were flagged for NO_x gas analyzer due to daily IZS checks, resulting in the loss of one hour of data each day.



SESAA Stoughton Station - December 2024 Summary Report

Pollutants		Month Records		24 Hour Records				1 Hour Records			
Name	Unit	Average Concentration	Uptime	Maximum		SAAQS Objective	Exceed Days	Maximum		SAAQS Objective	Exceed Hours
				Conc.	Date			Conc.	Date and Time		
NO	ppb	0.5	95.8%	1.2	29-Dec	-	-	17.8	12/28/2024 5:00 PM	-	-
NO ₂	ppb	1.7	95.8%	2.9	20-Dec	106	0	8.7	12/28/2024 5:00 PM	159	0
NO _x	ppb	2.2	95.8%	3.8	29-Dec	-	-	26.5	12/28/2024 5:00 PM	-	-
SO ₂	ppb	1.6	95.8%	3.3	14-Dec	48	0	8.5	12/12/2024 12:00 PM	172	0
H ₂ S	ppb	1.0	95.8%	1.4	29-Dec	3.6	0	2.4	12/29/2024 10:00 PM	11	0
PM _{2.5}	µg/m ³	No Data	0.0%	0.0	-	28	0	No Data	16/10/2024 21:00	-	-

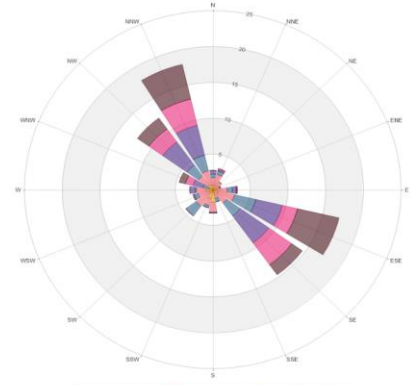
SAAQS: Saskatchewan Ambient Air Quality Standards



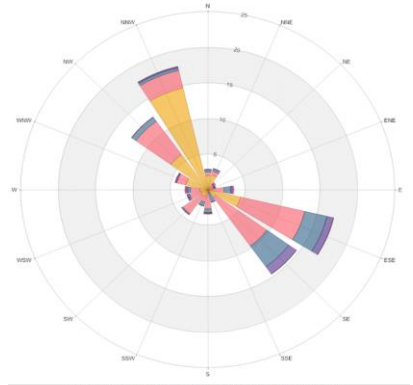
SESAA Stoughton Station - December 2024 Summary Report

Exceedance Summary

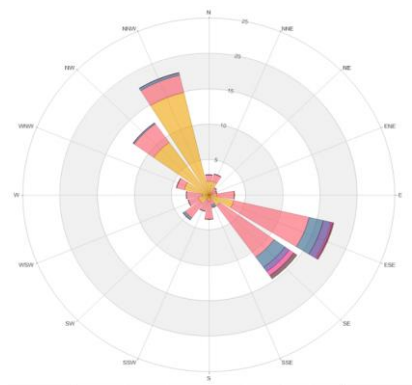
24-hour Exceedance Information			Summary of other Parameters during Exceedance							
Pollutant	Date	Conc.	WS	WD	H ₂ S	NO	NO ₂	NO _x	SO ₂	PM _{2.5}



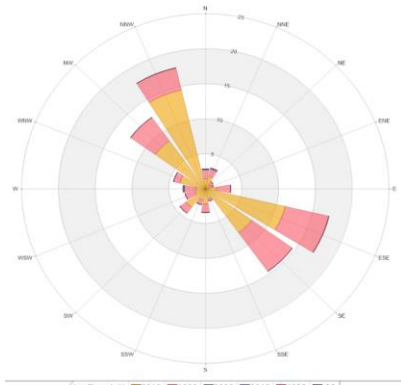
Wind Rose



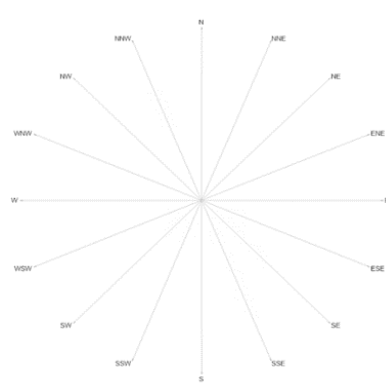
NO₂ Pollution Rose



SO₂ Pollution Rose



H₂S Pollution Rose



PM_{2.5} Pollution Rose

Parameters	Unit	Color Code for Wind Speed and Pollutant Concentration Class						
Wind Speed	m/s	0.5 -W- 1.2	1.2 -W- 2.4	2.4 -W- 3.6	3.6 -W- 4.8	4.8 -W- 6.0	W > 6.0	
NO ₂	ppb	0.5 -C- 1.2	1.2 -C- 2.4	2.4 -C- 3.6	3.6 -C- 4.8	4.8 -C- 6.0	C > 6.0	
SO ₂	ppb	0.5 -C- 1.2	1.2 -C- 2.4	2.4 -C- 3.6	3.6 -C- 4.8	4.8 -C- 6.0	C > 6.0	
H ₂ S	ppb	0.0-C-1.0	1.0-C-2.0	2.0-C-3.0	3.0-C-4.0	4.0-C-5.0	C > 5.0	
PM _{2.5}	µg/m ³	N/A	N/A	N/A	N/A	N/A	N/A	

Monthly Update

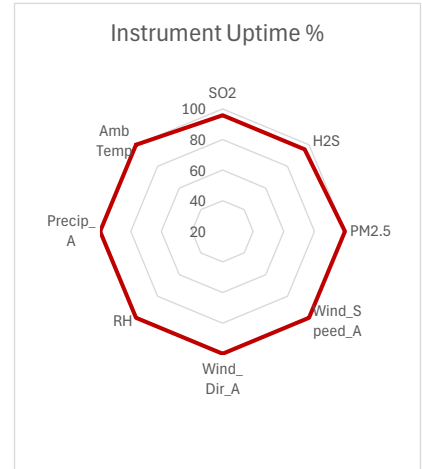
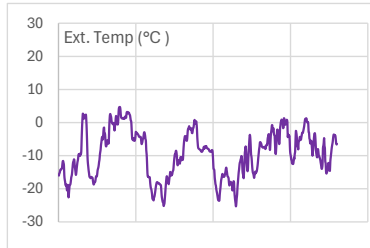
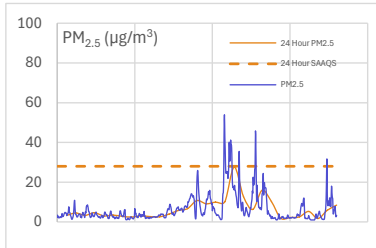
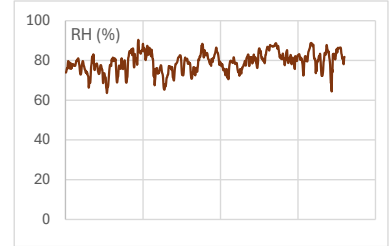
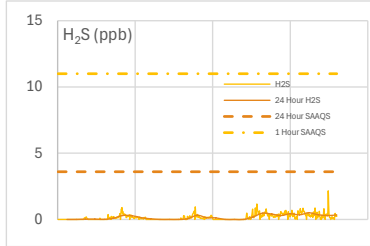
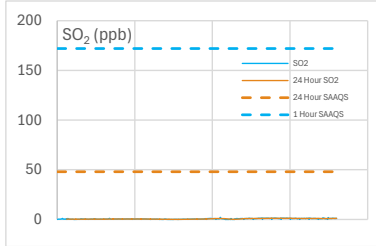
- * All data has been zero baseline corrected, if any. Data may change after final validation process.
- * All compliance parameters were within the Saskatchewan Ambient Air Quality Standards.
- * All compliance parameters were more than 90% operational for the month except for PM_{2.5}.
- * 720 hours of data flagged as "analyzer failure" for PM_{2.5} due to missing data.
- * 30 hours of data were flagged for all gas analyzers due to daily IZS checks, resulting in the loss of one hour of data each day.
- * H₂S span failures were observed when external temperatures dropped to high negatives, suggesting that seasonal temperature may affect analyzer performance. The spans normalized as temperatures rose. Data during failures were flagged but not invalidated.



SESAA Torquay Station - December 2024 Summary Report

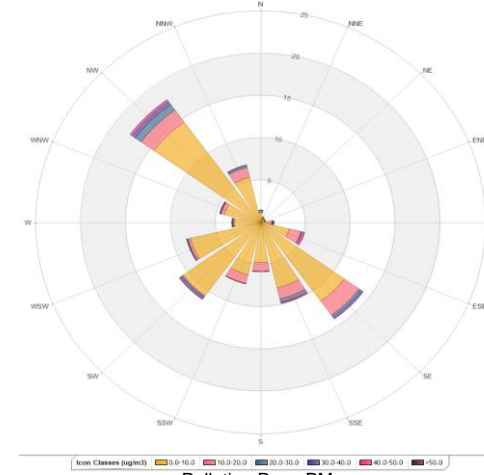
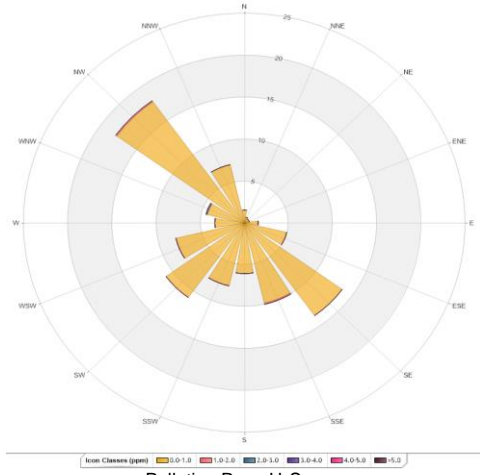
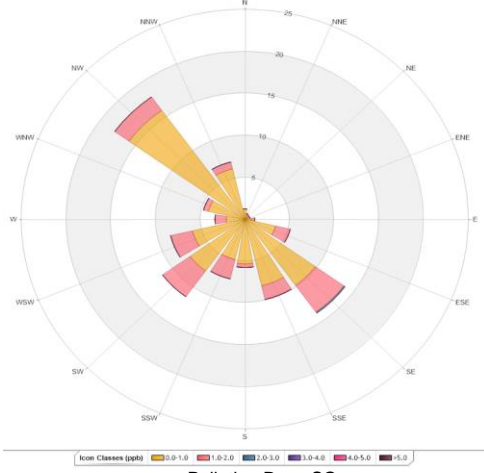
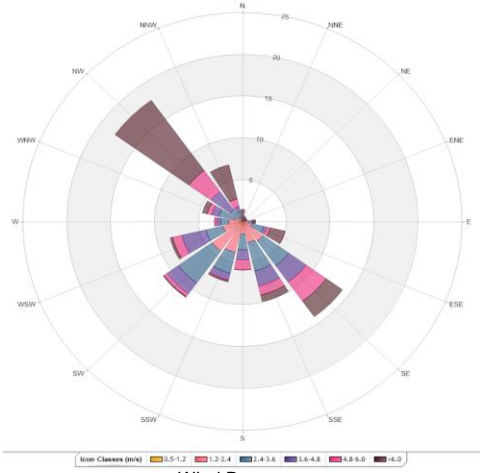
Pollutants		Month Records		24 Hour Records				1 Hour Records			
Name	Unit	Average Concentration	Uptime	Maximum		SAAQS Objective	Exceed Days	Maximum		SAAQS Objective	Exceed Hours
				Conc.	Date			Conc.	Date and Time		
SO ₂	ppb	0.6	95.8%	1.2	25-Dec	48	0	2.1	12/18/2024 12:00	172	0
H ₂ S	ppb	0.2	95.8%	0.5	27-Dec	3.6	0	2.2	12/30/2024 02:00	11	0
PM _{2.5}	µg/m ³	6.3	100.0%	27.6	19-Dec	28	0	53.9	12/18/2024 23:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



Exceedance Summary								
24-hour Exceedance Information			Summary of other Parameters during Exceedance					
Pollutant	Date	Conc.	WS	WD	Precip.	SO ₂	H ₂ S	PM _{2.5}

SESAA Torquay Station - December 2024 Summary Report



Parameters	Unit	Color Code for Wind Speed and Pollutant Concentration Class						
Wind Speed	m/s	0.5 -W- 1.2	1.2 -W- 2.4	2.4 -W- 3.6	3.6 -W- 4.8	4.8 -W- 6.0	W > 6.0	
SO ₂	ppb	0.0-C-1.0	1.0-C-2.0	2.0-C-3.0	3.0-C-4.0	4.0-C-5.0	C > 5.0	
H ₂ S	ppb	0.0-C-1.0	1.0-C-2.0	2.0-C-3.0	3.0-C-4.0	4.0-C-5.0	C > 5.0	
PM _{2.5}	µg/m ³	0.0-C-10.0	10.0-C-20.0	20.0-C-30.0	30.0-C-40.0	40.0-C-50.0	C > 50.0	

Monthly Update

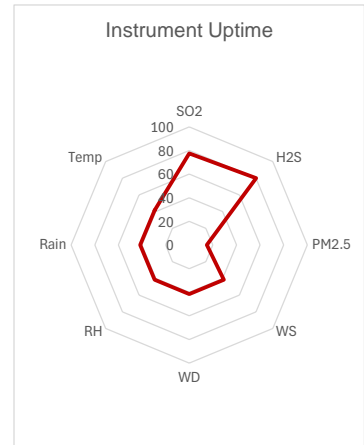
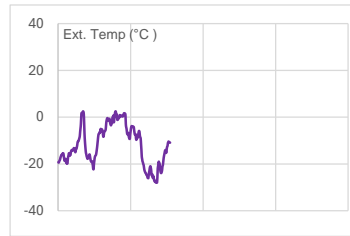
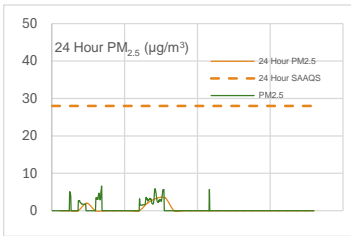
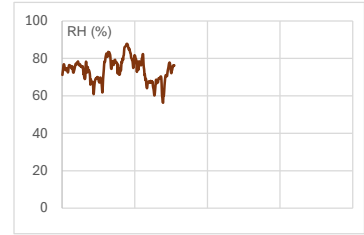
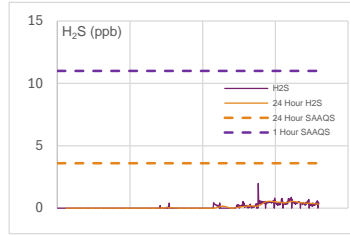
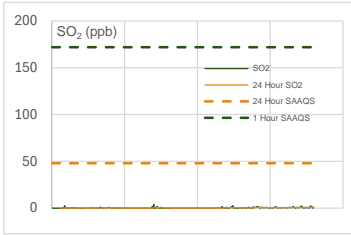
- * All data has been zero baseline corrected, if any. Data may change after final validation process.
- * All compliance parameters were within the Saskatchewan Ambient Air Quality Standards.
- * All compliance parameters were more than 90% operational for the month.
- * 30 hours of data were flagged due to daily IZS checks, resulting in the loss of one hour of data each day.
- * H₂S span failures were observed when external temperatures dropped to high negatives, suggesting that seasonal temperature may affect analyzer performance. The spans normalized as temperatures rose. Data during failures were flagged but not invalidated.



SESAA Wauchope Station - December 2024 Summary Report

Pollutants		Month Records		24 Hour Records				1 Hour Records			
Name	Unit	Average Concentration	Uptime	Maximum		SAAQS Objective	Exceed Days	Maximum		SAAQS Objective	Exceed Hours
				Conc.	Date			Conc.	Date and Time		
SO ₂	ppb	0.4	77.6%	1.0	24-Dec	48	0	4.1	12/12/2024 4:00 PM	172	0
H ₂ S	ppb	0.2	80.1%	0.5	27-Dec	3.6	0	1.98	12/24/2024 1:00 AM	11	0
PM _{2.5}	µg/m ³	3	14.9%	3.4	13-Dec	28	0	6.6	12/6/2024 5:00 PM	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards

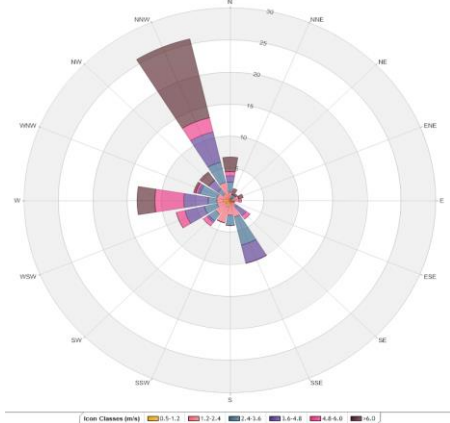


Exceedance Summary (24-Hour Average)								
24-hour Exceedance Information			Summary of other Parameters during Exceedance					
Pollutant	Date	Conc.	WS	WD	Precip.	SO ₂	H ₂ S	PM _{2.5}

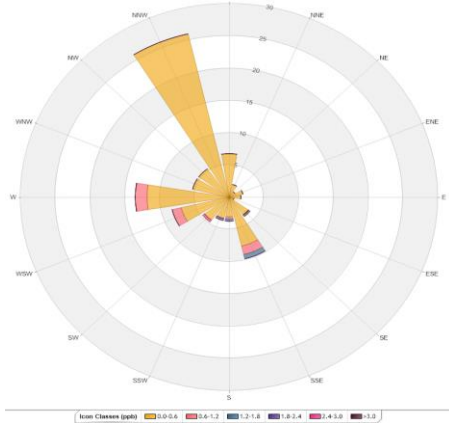
SESAA Wauchope Station - December 2024 Summary Report

Exceedance Summary (1-Hour Average)

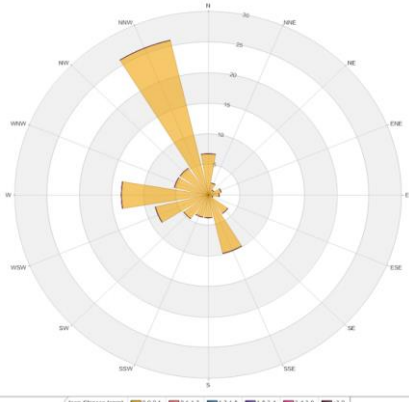
1-hour Exceedance Information				Summary of Other Parameters During Exceedance					
Pollutant	Date	Time	Conc.	WS	WD	Precip.	SO ₂	H ₂ S	PM _{2.5}



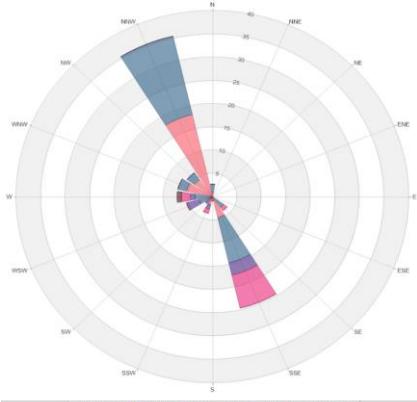
Wind Rose



Pollution Rose SO₂



Pollution Rose H₂S



Pollution Rose PM_{2.5}

Parameters	Unit	Color Code for Wind Speed and Pollutant Concentration Class							
Wind Speed	m/s	0.5 -W- 1.2	1.2 -W- 2.4	2.4 -W- 3.6	3.6 -W- 4.8	4.8 -W- 6.0	W > 6.0		
SO ₂	ppb	0.0-C-0.6	0.6-C-1.2	1.2-C-1.8	1.8-C-2.4	2.4-C-3.0	C > 3.0		
H ₂ S	ppb	0.0-C-0.6	0.6-C-1.2	1.2-C-1.8	1.8-C-2.4	2.4-C-3.0	C > 3.0		
PM _{2.5}	µg/m ³	0.5 -C- 1.2	1.2 -C- 2.4	2.4 -C- 3.6	3.6 -C- 4.8	4.8 -C- 6.0	C > 6.0		

Monthly Update

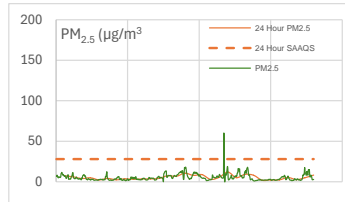
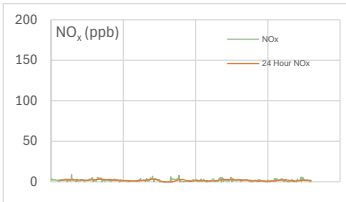
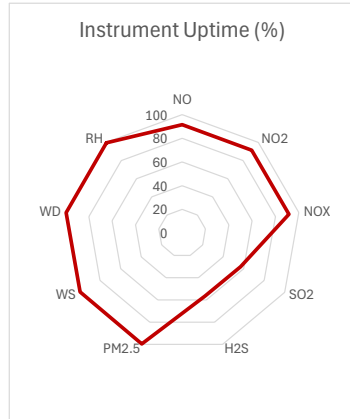
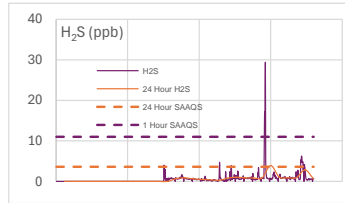
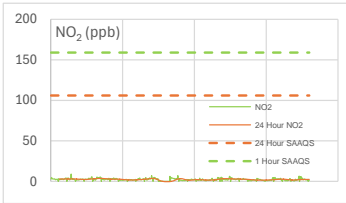
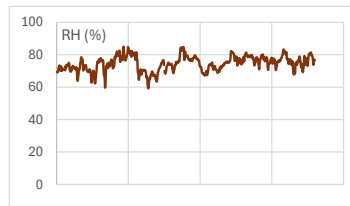
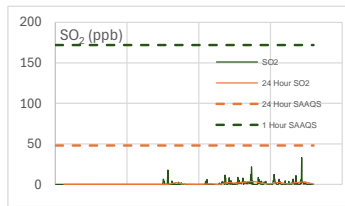
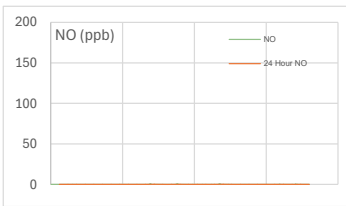
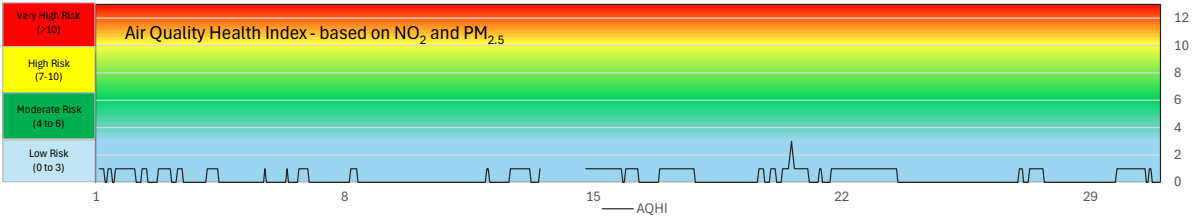
- * All data has been zero baseline corrected, if any. Data may change after final validation process.
- * All compliance parameters were within the Saskatchewan Ambient Air Quality Standards.
- * All compliance parameters were less than 90% operational for the month.
- * 435 hours of data flagged as "analyzer failure" for WS/WD due to missing data.
- * 633 hours of data flagged as "analyzer failure" for PM_{2.5} due to missing and flatlined data.
- * 148 hours of data flagged as "analyzer failure" for H₂S due to missing and flatlined data.
- * 167 hours of data flagged as "analyzer failure" for SO₂ due to missing and flatlined data.
- * H₂S span failures were observed when external temperatures dropped to high negatives, suggesting that seasonal temperature may affect analyzer performance. The spans normalized as temperatures rose. Data during failures were flagged but not invalidated.



SESAA Weyburn Station - December 2024 Summary Report

Pollutants		Month Records		24 Hour Records				1 Hour Records			
Name	Unit	Average Concentration	Uptime	Maximum		SAAQS Objective	Exceed Days	Maximum		SAAQS Objective	Exceed Hours
				Conc.	Date			Conc.	Date and Time		
NO	ppb	0.0	91.5%	0.1	20-Dec	-	-	0.9	12/12/2024 14:00	-	-
NO ₂	ppb	2.5	91.4%	3.6	6-Dec	106	0	9.0	12/3/2024 09:00	159	0
NO _x	ppb	1.8	91.5%	3.0	12-Dec	-	-	8.7	12/3/2024 09:00	-	-
SO ₂	ppb	1.3	57.0%	3.6	23-Dec	48	0	33.1	12/29/2024 15:00	172	0
H ₂ S	ppb	1.0	56.6%	3.9	25-Dec	3.6	1	29.4	12/25/2024 09:00	11	3
PM _{2.5}	µg/m ³	5.3	99.6%	12.0	20-Dec	28	0	60.2	12/20/2024 13:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



SESAA Weyburn Station - December 2024 Summary Report

Exceedance Summary (24-Hours Average)

24-hours Exceedance Information			Summary of other Parameters during Exceedance							
Pollutant	Date	Conc.	WS	WD	H ₂ S	NO	NO ₂	NOx	SO ₂	PM _{2.5}
H ₂ S	25-Dec	3.9	2.2	215	3.9	0.0	1.7	0.9	0.8	2.3

Exceedance Summary (1-Hour Average)

1-hour Exceedance Information				Summary of Other Parameters During Exceedance					
Pollutant	Date	Time	Conc.	WS	WD	Precip.	SO ₂	NO ₂	PM _{2.5}
H ₂ S	25-Dec	7:00	17.1	1.0	170.0	0.0	2.6	2.5	2.1
H ₂ S	26-Dec	8:00	14.1	0.9	169.0	0.0	0.7	2.2	2.3
H ₂ S	27-Dec	9:00	29.4	1.1	170.0	0.0	2.2	2.1	2.1



Parameters	Unit	Color Code for Wind Speed and Pollutant Concentration Class						
Wind Speed	m/s	0.5 -W- 1.2	1.2 -W- 2.4	2.4 -W- 3.6	3.6 -W- 4.8	4.8 -W- 6.0	W > 6.0	
NO ₂	ppb	0.0-C-2.0	2.0-C-4.0	4.0-C-6.0	6.0-C-8.0	8.0-C-10.0	C > 10.0	
SO ₂	ppb	0.0-C-6.0	6.0-C-12.0	12.0-C-18.0	18.0-C-24.0	24.0-C-30.0	C > 30.0	
H ₂ S	ppb	0.0-C-4.0	4.0-C-8.0	8.0-C-12.0	12.0-C-16.0	16.0-C-20.0	C > 20.0	
PM _{2.5}	µg/m ³	0.0-C-10.0	10.0-C-20.0	20.0-C-30.0	30.0-C-40.0	40.0-C-50.0	C > 50.0	

Monthly Update

- * All data has been zero baseline corrected, if any. Data may change after final validation process.
- * All compliance parameters were within the Saskatchewan Ambient Air Quality Standards.
- * All compliance parameters were more than 90% operational for the month except for H₂S and SO₂.
- * 323 hours of data flagged as "analyzer failure" for H₂S due to missing and flatlined data.
- * 320 hours of data flagged as "analyzer failure" for H₂S and SO₂ due to missing and flatlined data.
- * One hour of data were flagged for all gas analyzers due to daily IZS checks, resulting in the loss of one hour of data each day.

