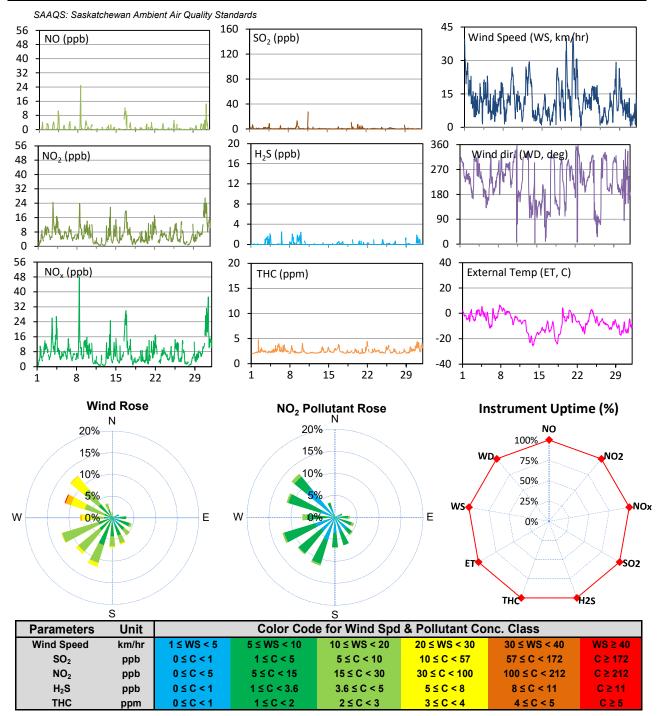
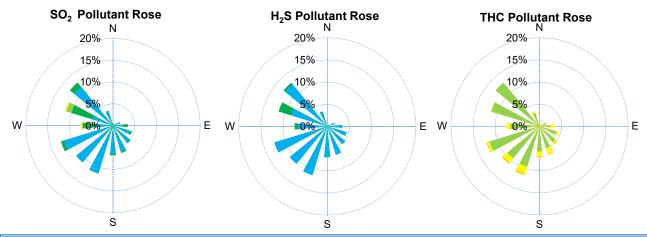
## Husky Oil Operations Limited East Station - December 2020 Summary Report

Pollu	Pollutants Month Records			24-Hour Records				1-Hour Records			
Name	Conc. Avg.		Uptime	Maximum		SAAQS	Exceed	Maximum		SAAQS	Exceed
Ivallic	Unit	Conc.	Optime	Conc.	Time	Standards	Days	Conc.	Time	Standards	Hours
NO	ppb	0.8	100.0%	4.3	Dec-16	-	-	25.0	Dec-08 13:00	-	-
NO <sub>2</sub>	ppb	6.5	100.0%	16.7	Dec-31	106	0	27.0	Dec-31 03:00	159	0
NOx	ppb	7.4	100.0%	19.6	Dec-31	-	-	48.2	Dec-08 13:00	-	-
SO <sub>2</sub>	ppb	0.7	100.0%	3.2	Dec-9	48	0	27.5	Dec-11 14:00	172	0
H <sub>2</sub> S	ppb	0.1	100.0%	0.9	Dec-9	3.6	0	2.5	Dec-06 14:00	11.0	0
THC	ppm	2.5	100.0%	3.3	Dec-31	-	-	4.7	Dec-02 08:00	-	-



# Husky Oil Operations Limited East Station - December 2020 Summary Report



#### **Monthly Update**

\*Air monitoring data has been validated. Data may change after validation process.

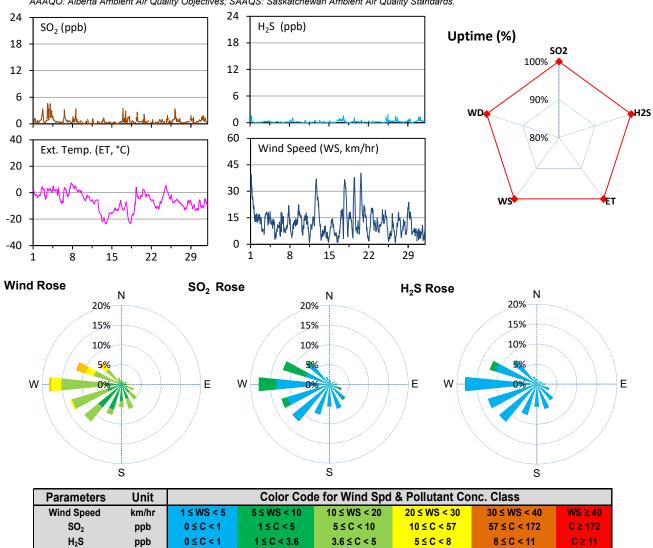
\*All compliance parameters were within the Saskatchewan Ambient Air Quality Standards.

\*All compliance parameters were 100% operational. There are no operational issues to report.

#### Husky Oil Operations Limited West Station - December 2020 Summary Report

Pollutants Month Records			24-Hour Records				1-Hour Records				
Nama	Conc.	Avg.	Uptime	Max	imum	AAAQO	Exceed	M	aximum	AAAQO	Exceed
Name	Unit	Conc.	Opume	Conc.	Time	/ SAAQS	Days	Conc.	Time	/ SAAQS	Hours
SO <sub>2</sub>	ppb	0.6	100.0%	1.6	Dec-3	48 / 48	0/0	4.6	Dec-03 15:00	172 / 172	0/0
H <sub>2</sub> S	ppb	0.0	100.0%	0.6	Dec-17	3 / 3.6	0/0	2.0	Dec-25 12:00	10 / 11.0	0/0

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



<sup>\*</sup>Air monitoring data has been validated. Data may change after validation process.

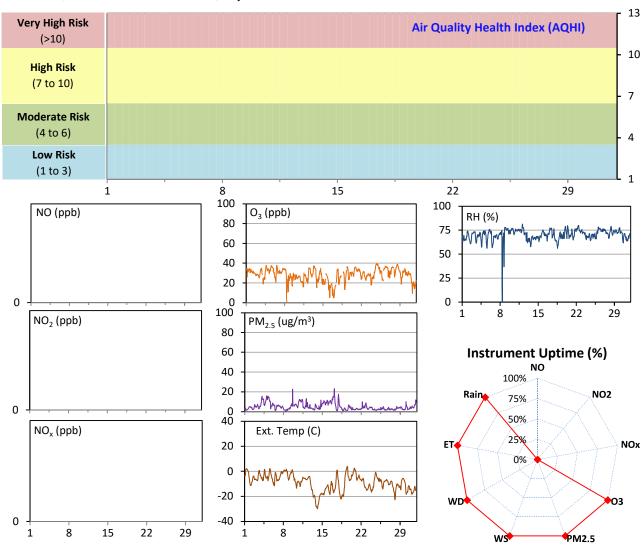
<sup>\*</sup>All compliance parameters were within the Alberta Ambient Air Quality Objectives and the Saskatchewan Ambient Air Quality Standards.

<sup>\*</sup>All compliance parameters were 100% operational. There are no operational issues to report.

### WYAMZ Clavet Station - December 2020 Summary Report

Pollutants Month Records			24-Hour Records				1-Hour Records				
Name	Conc.	Avg.	Uptime	Maximum		SAAQS	Exceed	Maximum		SAAQS	Exceed
INAIIIE	Unit	Conc.		Conc.	Time	Objective	Days	Conc.	Time	Objective	Hours
NO	ppb	#VALUE!	0.0%	< 0.1	#N/A	-	-	< 0.1	-	-	-
$NO_2$	ppb	#VALUE!	0.0%	< 0.1	#N/A	106	0	< 0.1	-	159	0
NOx	ppb	#VALUE!	0.0%	< 0.1	#N/A	-	-	< 0.1	-	-	-
O <sub>3</sub>	ppb	28	99.7%	35	Dec-26	-	-	39	Dec-24 20:00	82	0
PM <sub>2.5</sub>	ug/m3	5	100.0%	11	Dec-4	28	0	23	Dec-17 03:00	-	-

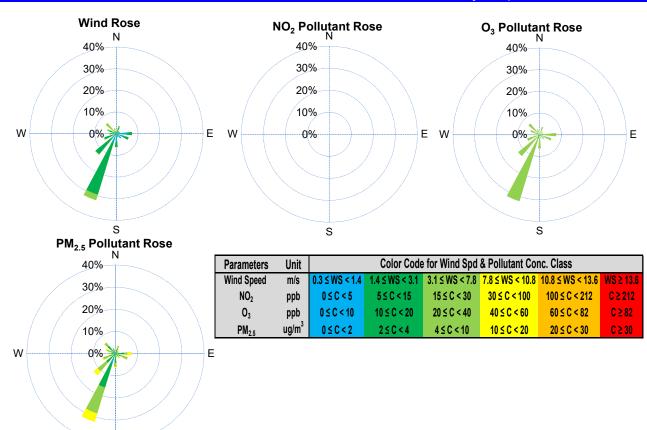
SAAQS: Saskatchewan Ambient Air Quality Standards



- \*All 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 were greater than 90% operational for the month with the exception of NO, NO2 and NOx. The analyzer was shutdown on Nov 18.
- \* Two hours of data flagged as "analyzer failure" for O3 due to instrumentation issues.
- \* Station was calibrated on Dec 18.



# WYAMZ Clavet Station - December 2020 Summary Report

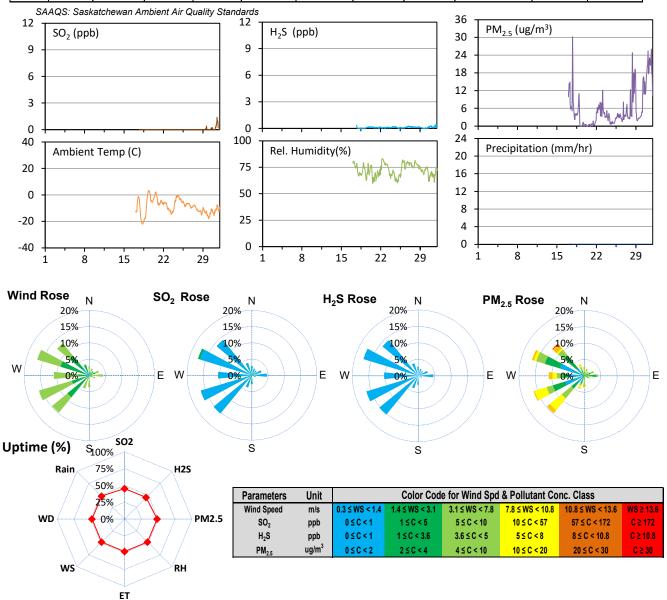




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## WYAMZ Kerrobert Station - December 2020 Summary Report

Pollutants Month Records			24-Hour Records				1-Hour Records				
Name	Conc. Avg. Lintima		Uptime	Maximum		SAAQS	Exceed	Maximum		SAAQS	Exceed
ivallie	Unit	Conc.	Optime	Conc. Time		Objective	Days	Conc.	Time	Objective	Hours
SO <sub>2</sub>	ppb	< 0.1	45.3%	0.4	Dec-31	48	0	1.4	Dec-31 12:00	172	0
H <sub>2</sub> S	ppb	0.1	45.3%	0.2	Dec-27	3.6	0	0.5	Dec-31 21:00	11	0
PM <sub>2.5</sub>	ug/m3	6	48.4%	21	Dec-31	28	0	30	Dec-17 18:00	-	-



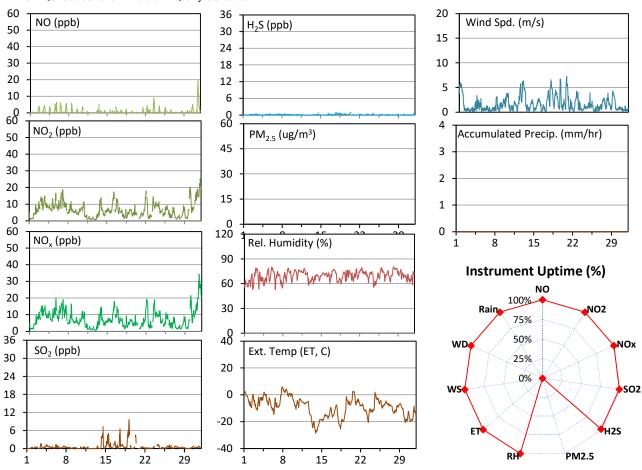
- \*All data has been slope, intercept, and baseline corrected. Data may change after validation process.
- \*All compliance parameters were within the Saskatchewan Ambient Air Quality Standards.
- \*All compliance parameters were less than 90% operational.
- \* The station was restarted on Dec 17. Data following the calibration is valid.



#### WYAMZ Maidstone Station - December 2020 Summary Report

Pollutants Month Records			Records		24-Hour	Records		1-Hour Records			
Name	Conc.	Avg.	Avg. Uptime		Maximum		Exceed	Maximum		SAAQS	Exceed
Ivallie	Unit	Conc.	Optime	Conc.	Time	Objective	Days	Conc.	Time	Objective	Hours
NO	ppb	0.8	100.0%	4.8	Dec-31	-		19.6	Dec-31 13:00	-	-
$NO_2$	ppb	6.5	100.0%	17.4	Dec-31	106	0	25.1	Dec-31 19:00	159	0
NOx	ppb	7.4	100.0%	22.2	Dec-31	-	-	34.4	Dec-31 13:00	-	-
SO <sub>2</sub>	ppb	0.5	98.9%	2.1	Dec-19	48	0	9.6	Dec-19 04:00	172	0
H <sub>2</sub> S	ppb	0.1	98.9%	0.4	Dec-18	3.6	0	1	Dec-20 10:00	11	0
$PM_{2.5}$	ug/m3	-	0.0%	-	-	28	-	-	-	-	-

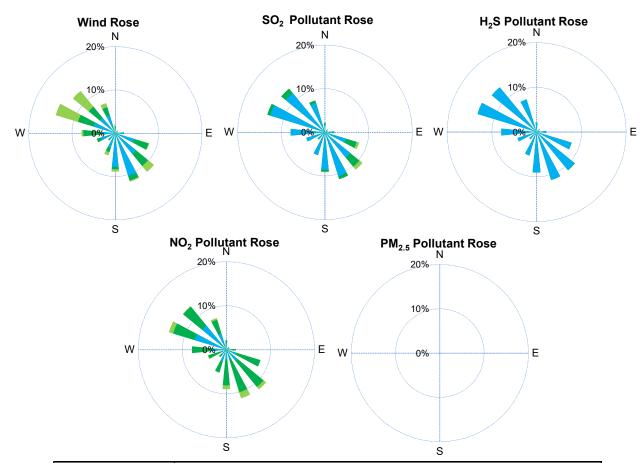
SAAQS: Saskatchewan Ambient Air Quality Standards



- \* All 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 were greater than 90% operational with the exception of PM2.5. PM2.5 is not operational.
- \* 8 hours of data was flagged as "analyzer failure" for SO2 and H2S due to instrumentation issues.
- \* Station was calibrated on Dec 20.



# WYAMZ Maidstone Station - December 2020 Summary Report



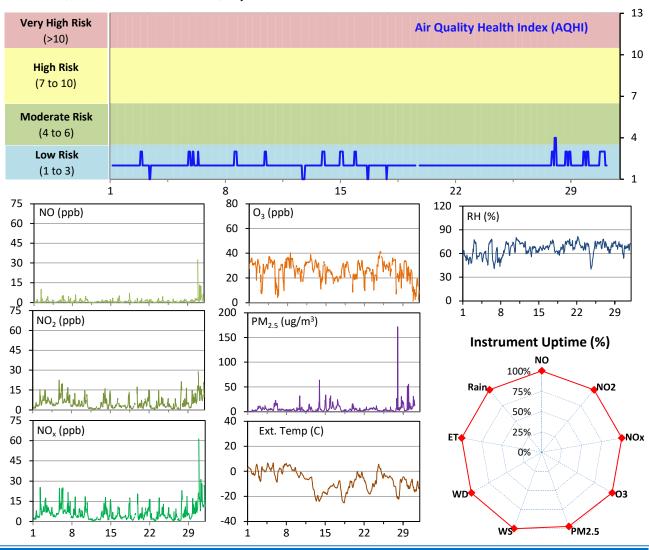
Parameters	Unit		Color Code for Wind Spd & Pollutant Conc. Class								
Wind Speed	m/s	0.3 ≤ WS < 1.4	1.4 ≤ WS < 3.1	3.1 ≤ WS < 7.8	7.8 ≤ WS < 10.8	10.8 ≤ WS < 13.6	WS ≥ 13.6				
SO <sub>2</sub>	ppb	0 ≤ C < 1	1 ≤ C < 5	5 ≤ C < 10	10 ≤ C < 57	57 ≤ C < 172	C ≥ 172				
NO <sub>2</sub>	ppb	0 ≤ C < 5	5 ≤ 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				



## WYAMZ Meadow Lake City Station - December 2020 Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc.	Avg.	Uptime	Maximum		SAAQS Exceed		Maximum		SAAQS	Exceed
INAIIIE	Unit	Conc.	Optime	Conc.	Time	Objective	Days	Conc.	Time	Objective	Hours
NO	ppb	1.0	100.0%	3.9	Dec-30	-	-	32.5	Dec-30 20:00	-	-
$NO_2$	ppb	5.0	100.0%	12.2	Dec-31	106	0	29.0	Dec-30 20:00	159	0
NOx	ppb	6.1	100.0%	16.0	Dec-31	-	-	61.4	Dec-30 20:00	-	-
O <sub>3</sub>	ppb	26	100.0%	34	Dec-8	-	-	41	Dec-24 20:00	82	0
PM <sub>2.5</sub>	ug/m3	6	97.2%	17	Dec-28	28	0	172	Dec-28 00:00	-	-

SAAQS: Saskatchewan Ambient Air Quality Standards



- \*All 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 were greater than 90% operational.
- \* 21 hours of data flagged as "analyzer failure" for PM2.5 due to analyzer flatlining.
- \* Station was calibrated on Dec 21.



# WYAMZ Meadow Lake City Station - December 2020 Summary Report

