**WEAR** CONTAMINATION **FLUID CONDITION** 

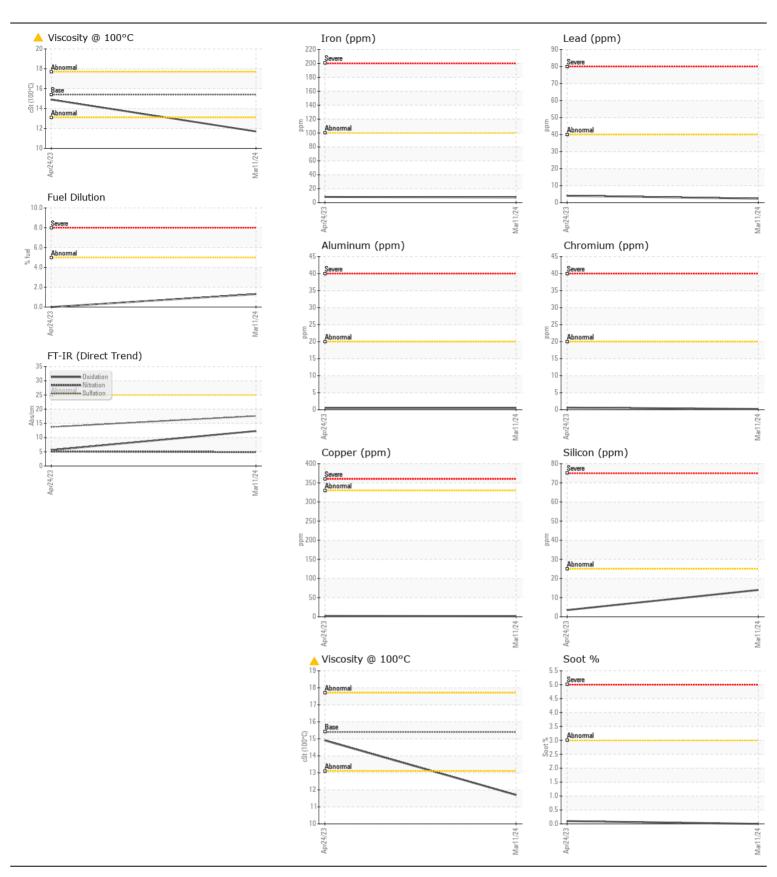
**NORMAL NORMAL ABNORMAL** 

Machine Id

## 2255 ROSEBANK

Component
Diesel Engine

PETRO CANADA XR 4 SAE 15W40 ( LTR)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0910602	WC0794988	
	Sample Date		Client Info		11 Mar 2024	24 Apr 2023	
	Machine Age	hrs	Client Info		0	0	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		N/A	N/A	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				ABNORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>100	7	8	
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		, <1	<1	
	Nickel	ppm	ASTM D5185(m)		0	0	
	Titanium	ppm	ASTM D5185(m)	77	0	<1	
	Silver	ppm	( /	>3	0	0	
	Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	
	Lead	ppm	ASTM D5185(m)	>40	2	4	
	Copper	ppm	ASTM D5185(m)		2	2	
	Tin	ppm		>15	1	2	
	Vanadium	ppm	ASTM D5185(m)	710	0	0	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	14	4	
Light fuel dilution occurring. No other contaminants were detected in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1	<1	
	Fuel	%	ASTM D7593*	>5	1.3	<1.0	
	Water			>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	ASTM D7844*	>3	0	0.1	
	Nitration	Abs/cm	ASTM D7624*	>20	4.9	5.1	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	17.6	13.7	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		1	<1	
Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	1	12	<1	
	Barium	ppm	ASTM D5185(m)	1	0	0	
	Molybdenum	ppm	ASTM D5185(m)	1	39	0	
	Manganese	ppm	ASTM D5185(m)		0	<1	
	Magnesium	ppm	ASTM D5185(m)	10	878	1338	
	Calcium	ppm	ASTM D5185(m)	3032	1227	218	
	Phosphorus	ppm	ASTM D5185(m)	1054	952	1164	
	Zinc	ppm	ASTM D5185(m)	1332	1118	1280	
	Sulfur	ppm	ASTM D5185(m)	3985	4156	9614	
	Oxidation	Abs/.1mm	ASTM D7414*	>25	12.3	5.6	
	Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<u> </u>	14.9	





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Unique Number : 5774175

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0910602 Lab Number : 02633022

Received **Tested** 

: 03 May 2024 Diagnosed

: 06 May 2024 : 06 May 2024 - Kevin Marson Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

NORTHERN GENERATOR CO. LTD. 80 ASHBRIDGE CIRCLE,, UNIT #1 & 2 WOODBRIDGE, ON CA L4L 3R5

Contact: Selome Afework selome@northerngenerator.com T: (905)264-9744

Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

To discuss this sample report, contact Customer Service at 1-800-268-2131.

F: (905)264-9714