



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**270 QUEEN QUAY**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA XR 4 SAE 15W40 (--- LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0910650</b>	WC0794996	WC0555451
Sample Date		Client Info		<b>09 Apr 2024</b>	24 Apr 2023	13 Apr 2021
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>2</b>	3	2
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>3	<b>1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	1
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

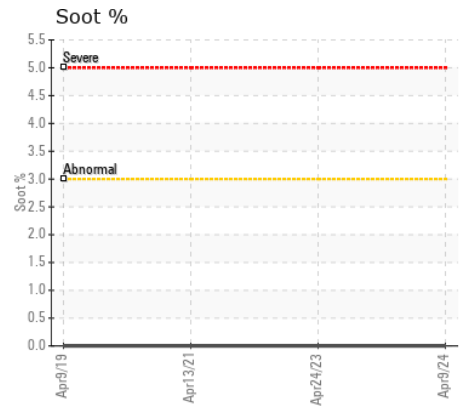
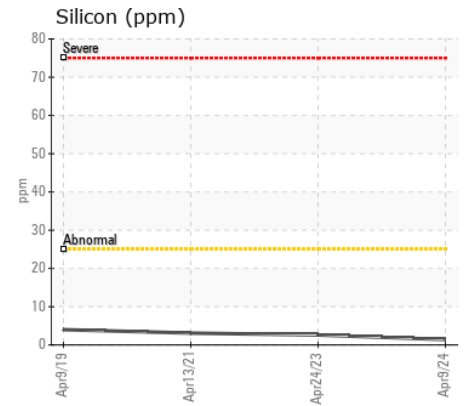
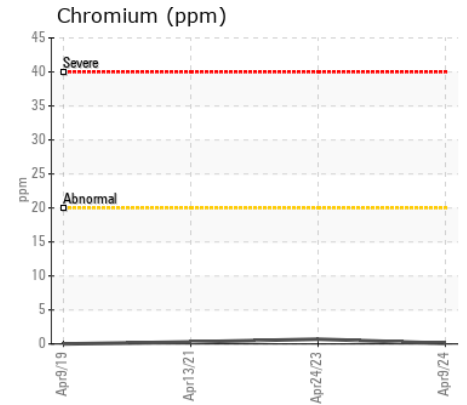
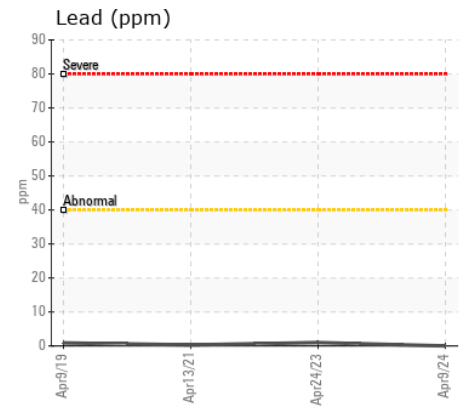
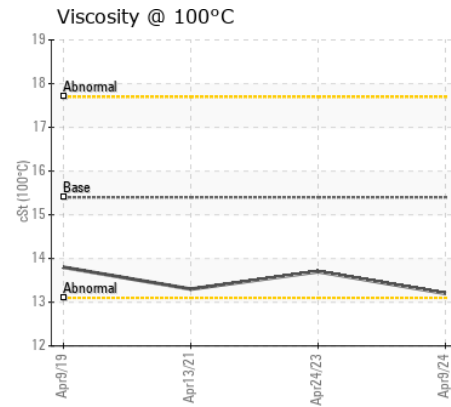
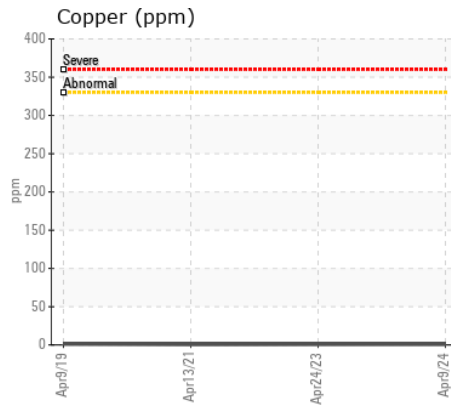
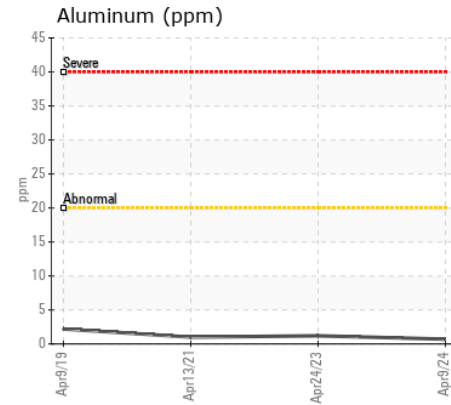
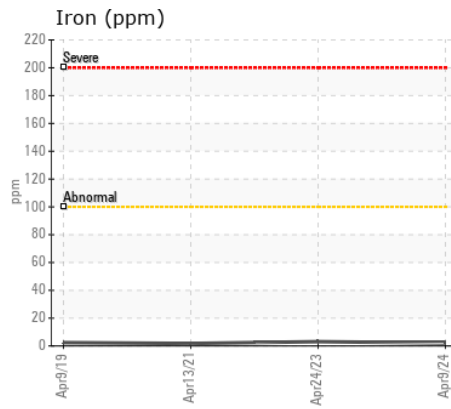
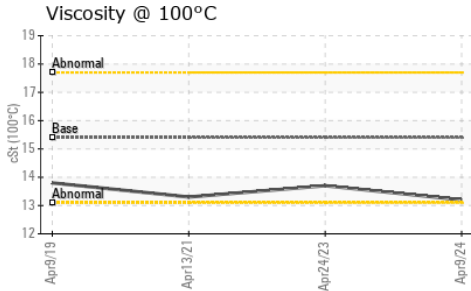
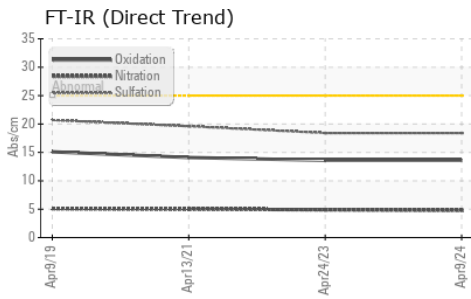
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>1</b>	3	3
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>4.8</b>	4.9	5.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.4</b>	18.4	19.6
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	2
Boron	ppm	ASTM D5185(m)	1	<b>1</b>	2	22
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	1	<b>59</b>	58	60
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	10	<b>1002</b>	944	945
Calcium	ppm	ASTM D5185(m)	3032	<b>1066</b>	1081	1112
Phosphorus	ppm	ASTM D5185(m)	1054	<b>1035</b>	1057	984
Zinc	ppm	ASTM D5185(m)	1332	<b>1206</b>	1153	1238
Sulfur	ppm	ASTM D5185(m)	3985	<b>2733</b>	2658	2865
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.6</b>	13.6	14.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.2</b>	13.7	13.3



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0910650  
**Lab Number** : 02633018  
**Unique Number** : 5774171  
**Test Package** : MOB 1

**Received** : 03 May 2024  
**Tested** : 03 May 2024  
**Diagnosed** : 03 May 2024 - Wes Davis

**NORTHERN GENERATOR CO. LTD.**  
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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 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.