



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**4000 SPADINA**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA XR 4 SAE 15W40 (--- GAL)**

## RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. 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		WC0910648	WC0515766	---
Sample Date		Client Info		26 Apr 2024	09 Apr 2021	---
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				NORMAL	NORMAL	---

## WEAR

All component wear rates are normal.

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

## CONTAMINATION

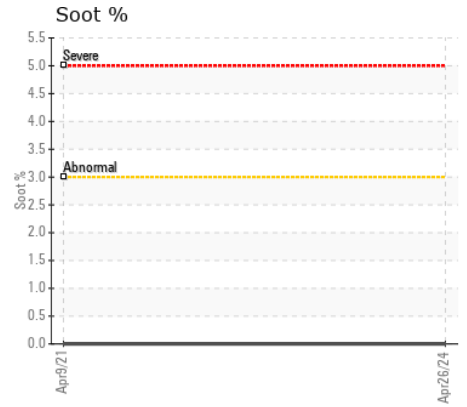
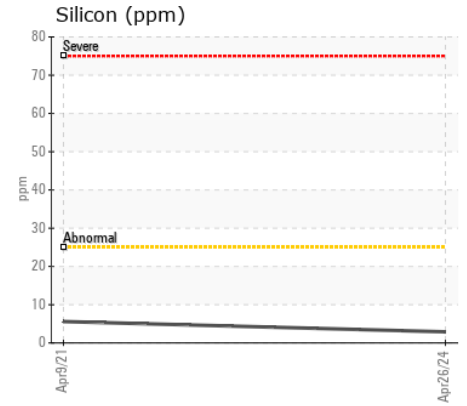
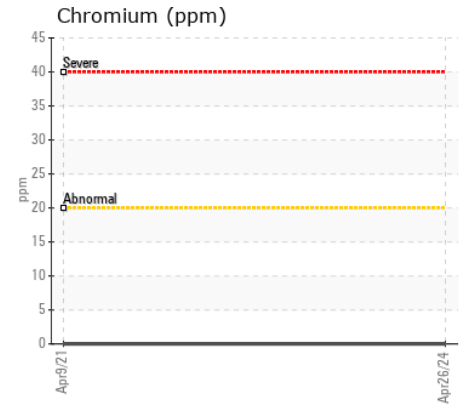
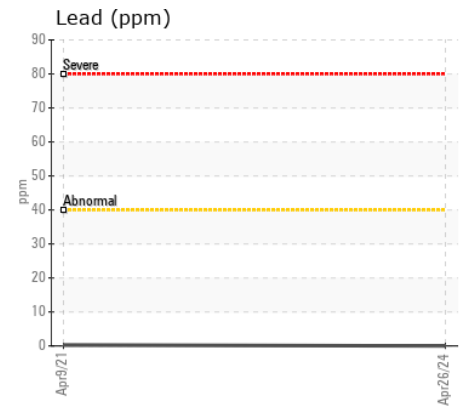
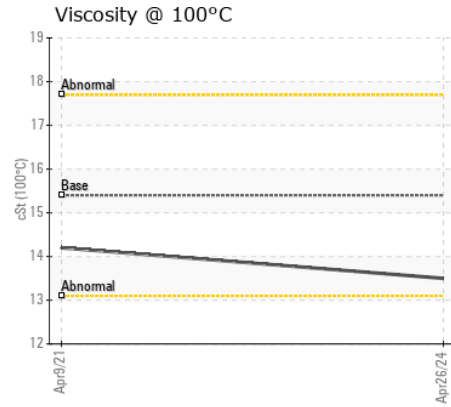
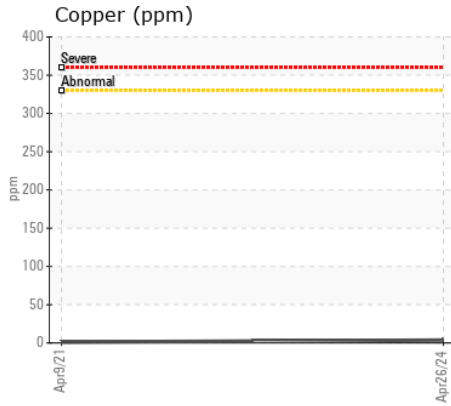
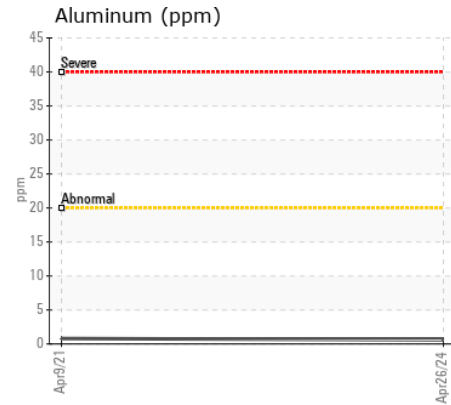
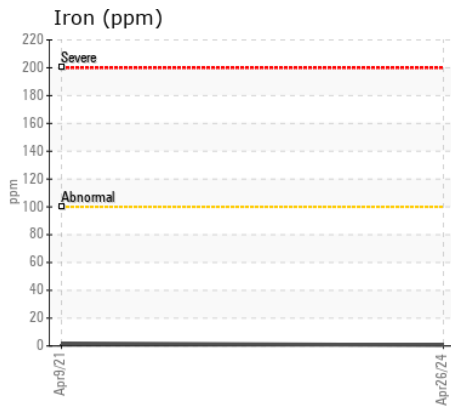
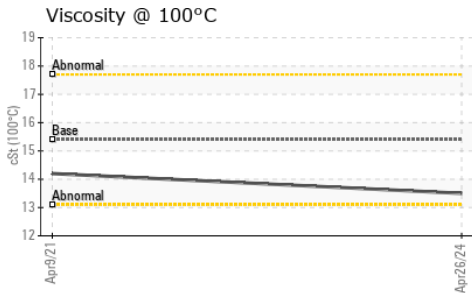
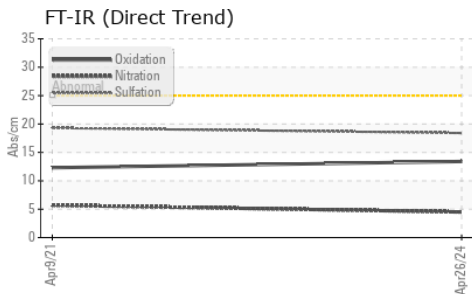
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	6	---
Potassium	ppm	ASTM D5185(m)	>20	0	2	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	4.5	5.7	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.4	19.3	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

## FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<1	3	---
Boron	ppm	ASTM D5185(m)	1	21	87	---
Barium	ppm	ASTM D5185(m)	1	0	0	---
Molybdenum	ppm	ASTM D5185(m)	1	58	2	---
Manganese	ppm	ASTM D5185(m)		0	<1	---
Magnesium	ppm	ASTM D5185(m)	10	938	656	---
Calcium	ppm	ASTM D5185(m)	3032	1026	1297	---
Phosphorus	ppm	ASTM D5185(m)	1054	1006	941	---
Zinc	ppm	ASTM D5185(m)	1332	1149	1135	---
Sulfur	ppm	ASTM D5185(m)	3985	2652	3173	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.4	12.3	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.5	14.2	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0910648  
**Lab Number** : 02633006  
**Unique Number** : 5774159  
**Test Package** : MOB 1

**Received** : 03 May 2024  
**Tested** : 03 May 2024  
**Diagnosed** : 03 May 2024 - Kevin Marson

**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  
 F: (905)264-9714

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.