



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
171 WELLINGTON
 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		WC0914912	WC0794998	---
Sample Date		Client Info		22 Feb 2024	20 Apr 2023	---
Machine Age	hrs	Client Info		950	913	---
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

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	2	4	---
Chromium	ppm	ASTM D5185(m)	>20	0	0	---
Nickel	ppm	ASTM D5185(m)	>4	0	0	---
Titanium	ppm	ASTM D5185(m)		13	69	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>20	<1	2	---
Lead	ppm	ASTM D5185(m)	>40	0	<1	---
Copper	ppm	ASTM D5185(m)	>330	<1	<1	---
Tin	ppm	ASTM D5185(m)	>15	0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	<1	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

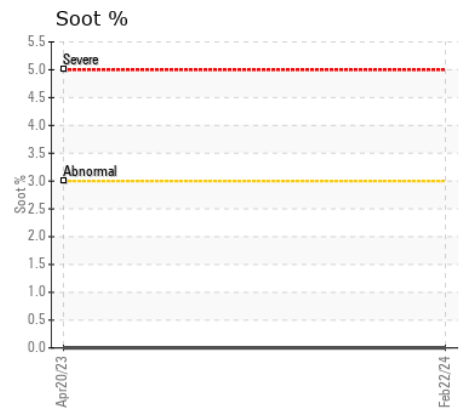
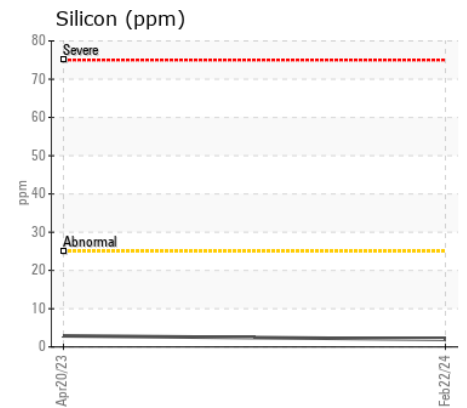
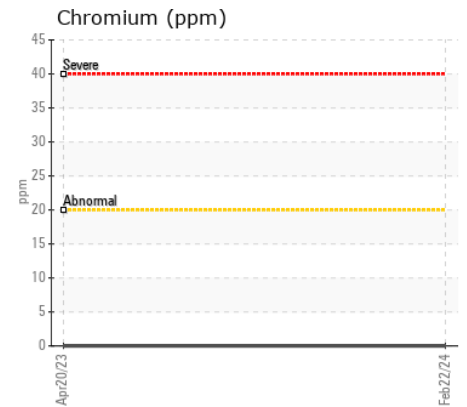
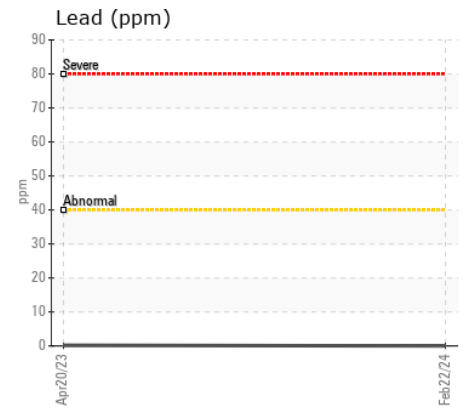
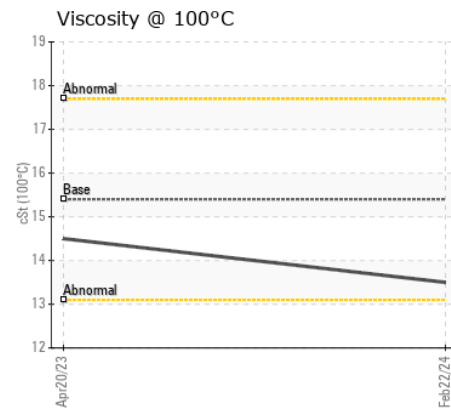
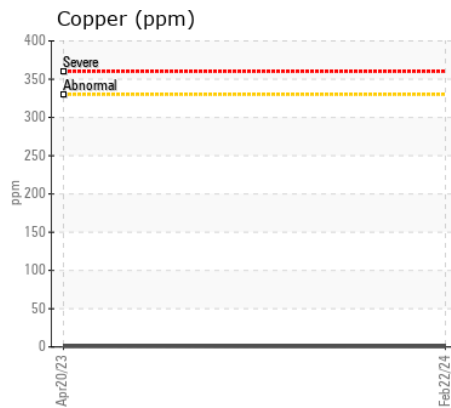
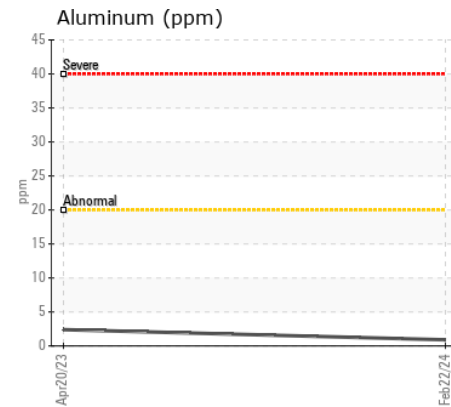
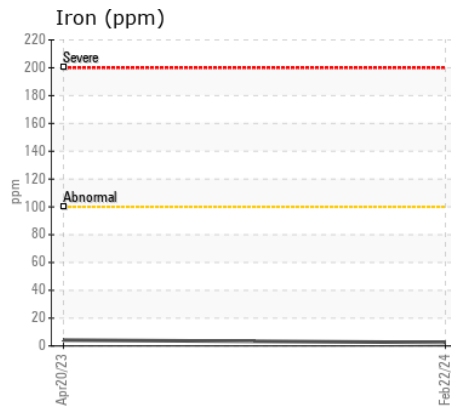
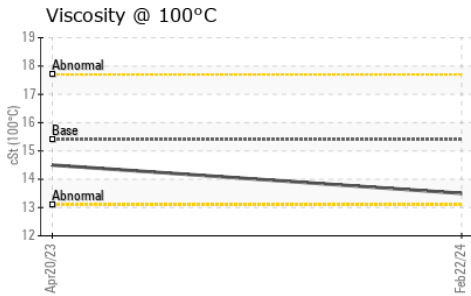
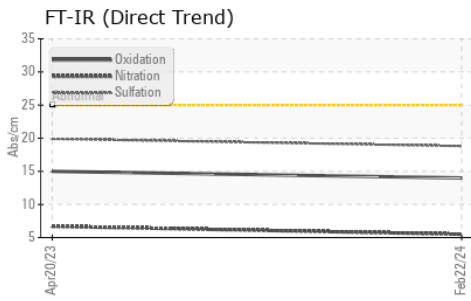
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	3	---
Potassium	ppm	ASTM D5185(m)	>20	<1	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	5.5	6.7	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.8	19.9	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		1	4	---
Boron	ppm	ASTM D5185(m)	1	22	118	---
Barium	ppm	ASTM D5185(m)	1	0	0	---
Molybdenum	ppm	ASTM D5185(m)	1	47	1	---
Manganese	ppm	ASTM D5185(m)		<1	1	---
Magnesium	ppm	ASTM D5185(m)	10	873	328	---
Calcium	ppm	ASTM D5185(m)	3032	1265	2146	---
Phosphorus	ppm	ASTM D5185(m)	1054	1029	1112	---
Zinc	ppm	ASTM D5185(m)	1332	1185	1181	---
Sulfur	ppm	ASTM D5185(m)	3985	2855	3512	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.0	15.0	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.5	14.5	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0914912
Lab Number : 02633074
Unique Number : 5774227
Test Package : MOB 1 (Additional Tests: Visual)

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.