



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
39 MARY ST
 Component
Diesel Engine
 Fluid
PETRO CANADA XR 4 SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0915446	WC0795029	WC0606475
Sample Date		Client Info		02 May 2024	24 Mar 2023	19 Jan 2022
Machine Age	hrs	Client Info		394	0	384
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

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

CONTAMINATION

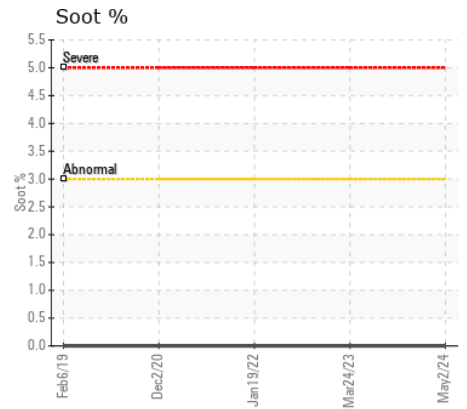
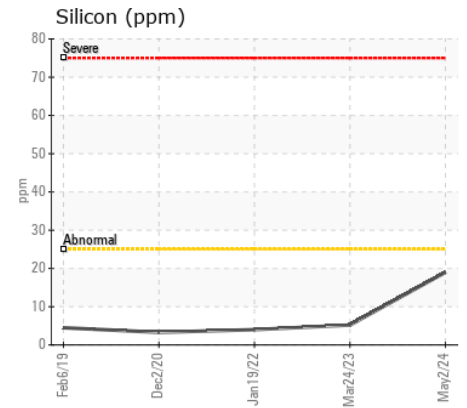
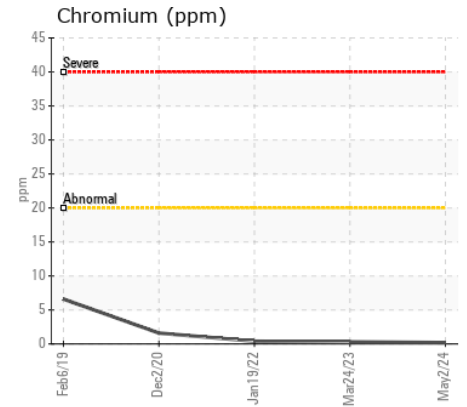
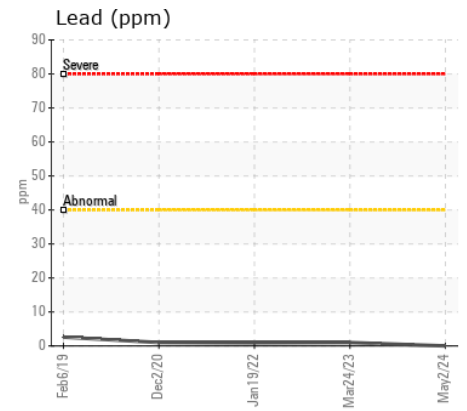
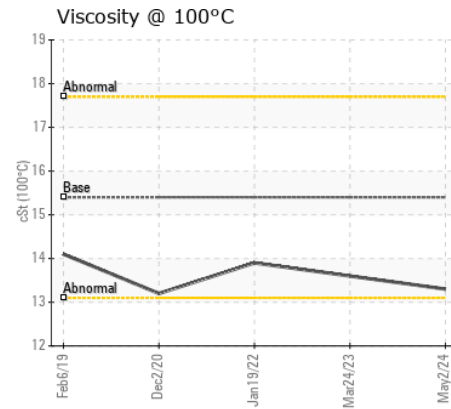
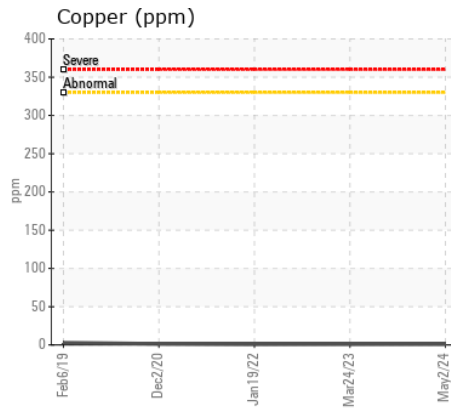
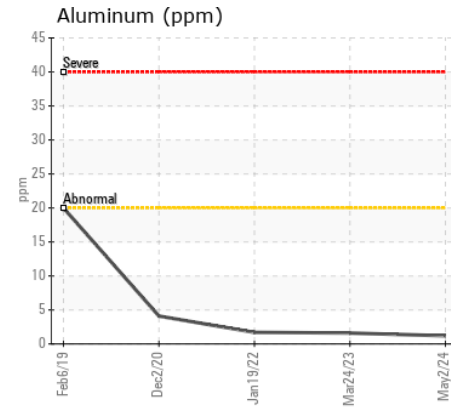
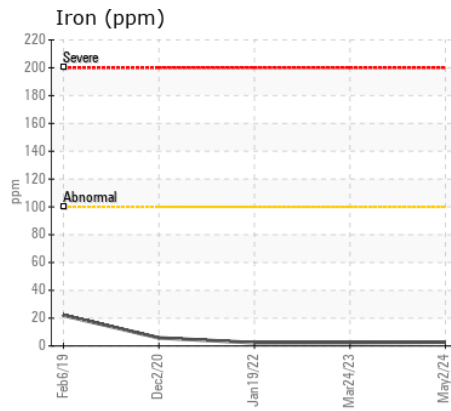
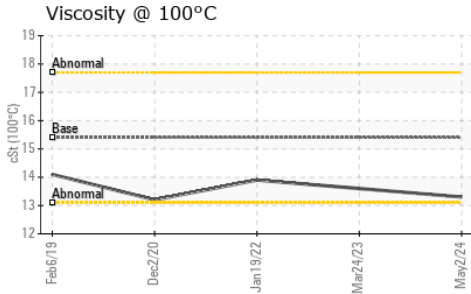
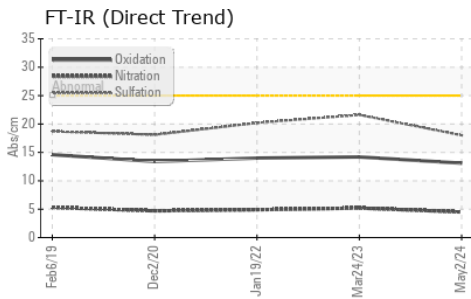
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	19	5	4
Potassium	ppm	ASTM D5185(m)	>20	0	0	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	4.5	5.2	4.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.0	21.6	20.2
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	VLITE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		1	2	1
Boron	ppm	ASTM D5185(m)	1	<1	2	1
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)	1	59	58	57
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	10	965	949	979
Calcium	ppm	ASTM D5185(m)	3032	998	1081	1026
Phosphorus	ppm	ASTM D5185(m)	1054	965	1071	1076
Zinc	ppm	ASTM D5185(m)	1332	1128	1164	1197
Sulfur	ppm	ASTM D5185(m)	3985	2611	2714	2820
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.1	14.2	14.0
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.3	13.6	13.9



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915446
Lab Number : 02633003
Unique Number : 5774156
Test Package : MOB 1 (Additional Tests: Visual)

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

NORTHERN GENERATOR CO. LTD.
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 WOODBRIDGE, ON
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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.