



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
4499
Component
Diesel Engine
Fluid
PETRO CANADA 15W40 (38 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0110255	GFL0097781	GFL0085869
Sample Date		Client Info		21 Feb 2024	26 Dec 2023	22 Jun 2023
Machine Age	hrs	Client Info		370743	16420	370743
Oil Age	hrs	Client Info		0	600	370743
Filter Age	hrs	Client Info		0	600	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	5	6	7
Chromium	ppm	ASTM D5185(m)	>20	0	0	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	5	5	3
Lead	ppm	ASTM D5185(m)	>40	<1	<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

CONTAMINATION

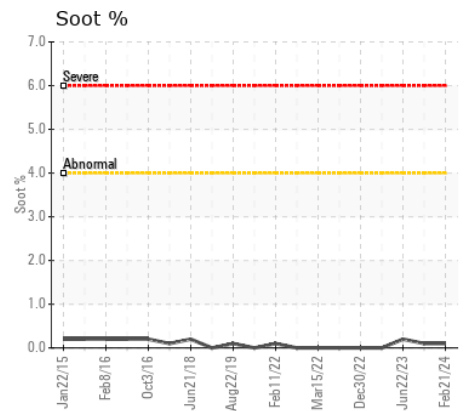
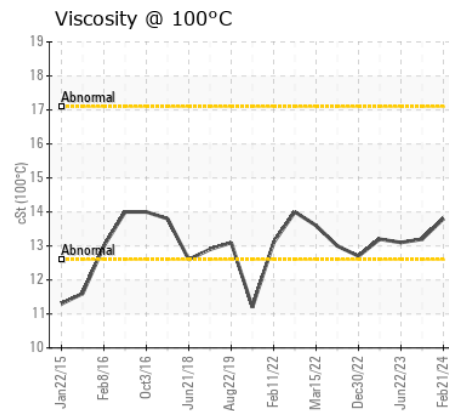
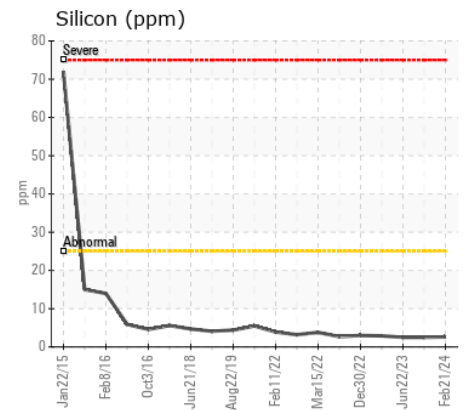
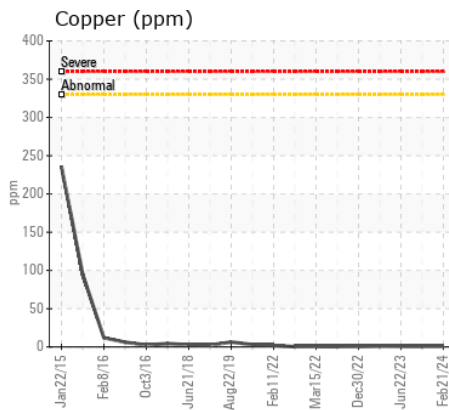
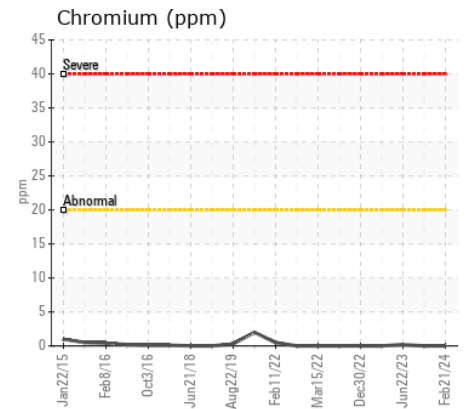
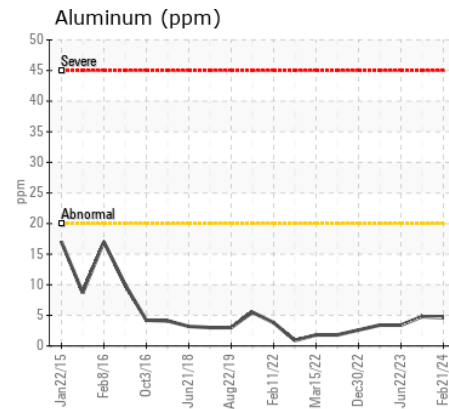
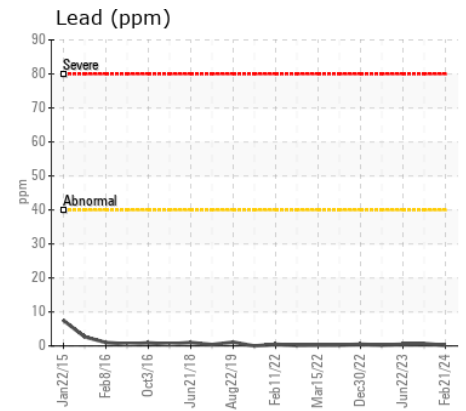
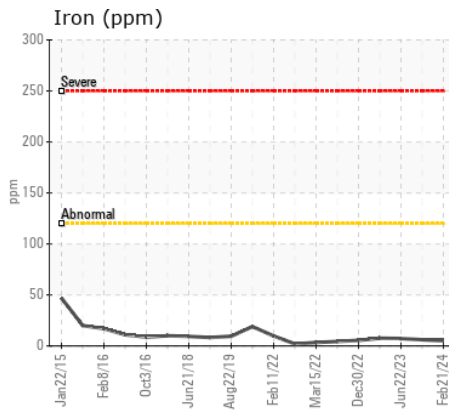
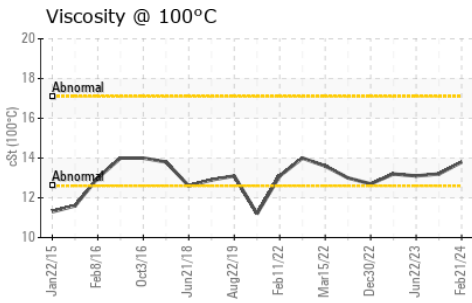
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	2	2
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.1	0.1	0.2
Nitration	Abs/cm	ASTM D7624*	>20	7.4	9.4	9.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.6	19.9	19.9
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)		2	3	3
Boron	ppm	ASTM D5185(m)		2	2	2
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		58	58	58
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		935	940	961
Calcium	ppm	ASTM D5185(m)		1055	1055	1017
Phosphorus	ppm	ASTM D5185(m)		991	960	1033
Zinc	ppm	ASTM D5185(m)		1141	1161	1168
Sulfur	ppm	ASTM D5185(m)		2647	2592	2442
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.9	16.3	16.0
Visc @ 100°C	cSt	ASTM D7279(m)		13.8	13.2	13.1



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0110255
Lab Number : 02618875
Unique Number : 5735985
Test Package : MOB 1

GFL Environmental - 209 - Hamilton
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 Stoney Creek, 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.