



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
351016
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0108199	GFL0047676	GFL0047699
Sample Date		Client Info		26 Apr 2024	10 Feb 2023	26 May 2022
Machine Age	hrs	Client Info		13246	163795	10956
Oil Age	hrs	Client Info		532	900	553
Filter Age	hrs	Client Info		532	900	553
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>110	29	27	35
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	5	3	4
Lead	ppm	ASTM D5185(m)	>45	0	<1	<1
Copper	ppm	ASTM D5185(m)	>85	<1	1	1
Tin	ppm	ASTM D5185(m)	>4	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

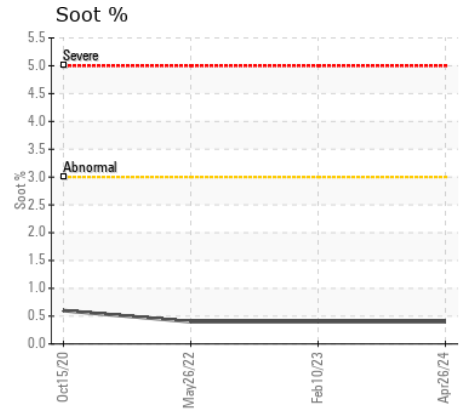
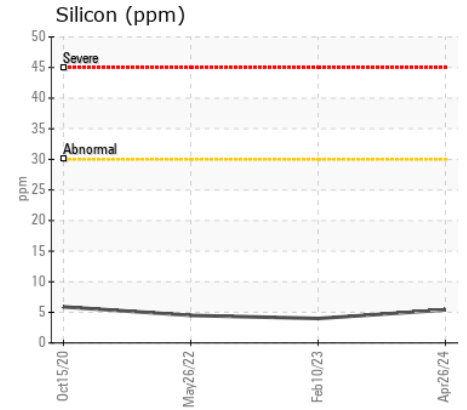
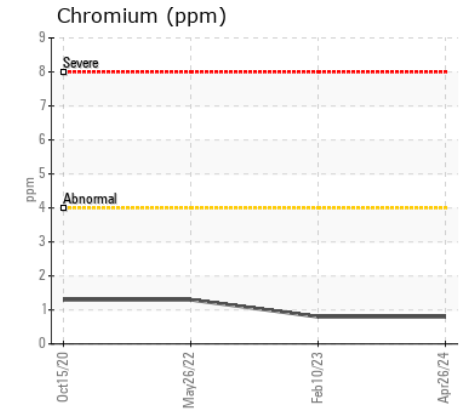
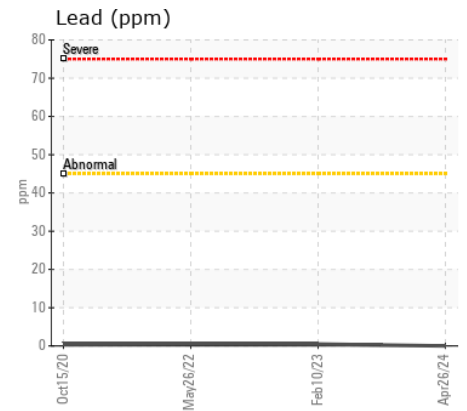
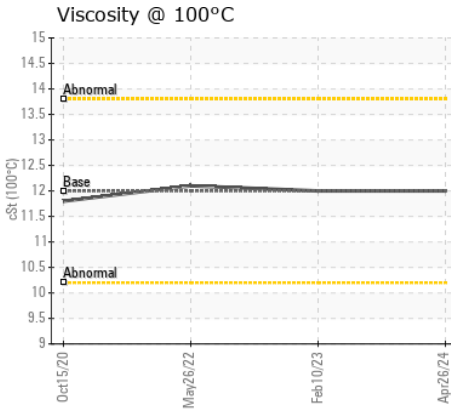
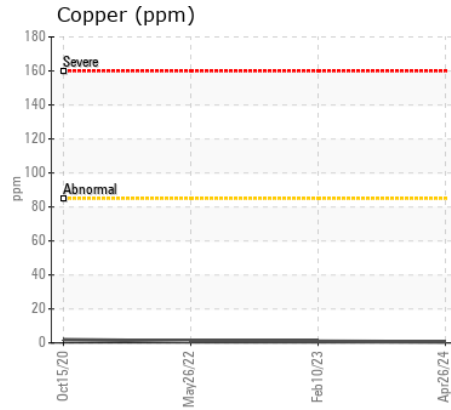
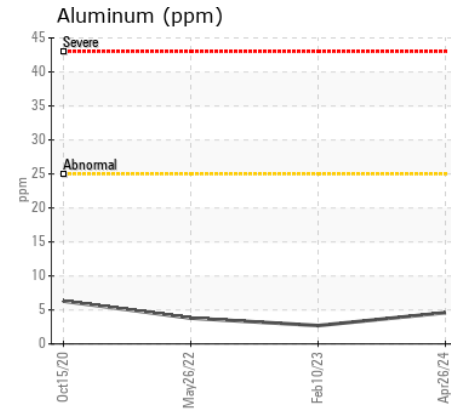
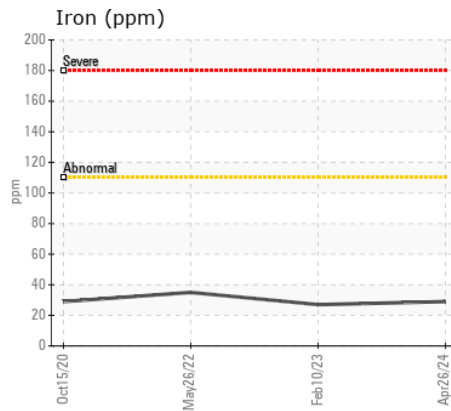
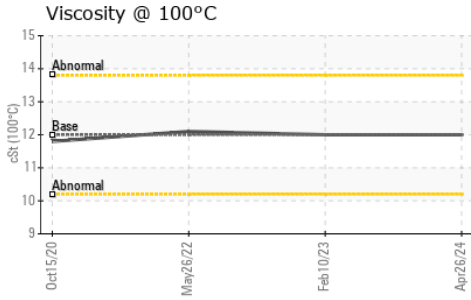
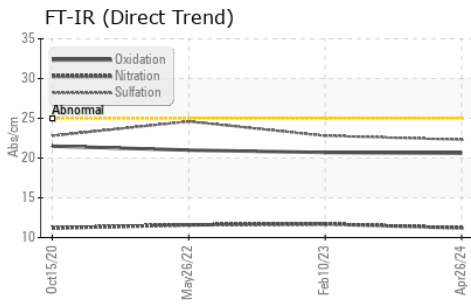
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>30	5	4	4
Potassium	ppm	ASTM D5185(m)	>20	7	2	3
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	0.4	0.4	0.4
Nitration	Abs/cm	ASTM D7624*	>20	11.2	11.7	11.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.3	22.8	24.6
Silt	scalar	Visual*	NONE	VLITE	---	---
Debris	scalar	Visual*	NONE	VLITE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	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)		2	2	2
Boron	ppm	ASTM D5185(m)	2	1	2	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	64	63	65
Manganese	ppm	ASTM D5185(m)	0	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	950	1046	1010	1087
Calcium	ppm	ASTM D5185(m)	1050	1156	1092	1143
Phosphorus	ppm	ASTM D5185(m)	995	1072	1022	1113
Zinc	ppm	ASTM D5185(m)	1180	1280	1249	1347
Sulfur	ppm	ASTM D5185(m)	2600	2470	2437	2552
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.6	20.7	21.0
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	12.0	12.0	12.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0108199
Lab Number : 02638802
Unique Number : 5787964
Test Package : MOB 1 (Additional Tests: Visual)

GFL Environmental - 355 - Saskatoon
 100 Cory Road
 Saskatoon, SK
 CA S7K 3J7
 Contact: Ryan Polichuk
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 T: (306)244-9500
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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.