



Machine Id
413154
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		GFL0102660	GFL0090626	---
Sample Date		Client Info		24 Feb 2024	14 Aug 2023	---
Machine Age	hrs	Client Info		1655	583	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	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)	>120	21	29	---
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>5	3	4	---
Titanium	ppm	ASTM D5185(m)	>2	0	0	---
Silver	ppm	ASTM D5185(m)	>2	<1	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	3	8	---
Lead	ppm	ASTM D5185(m)	>40	4	9	---
Copper	ppm	ASTM D5185(m)	>330	172	386	---
Tin	ppm	ASTM D5185(m)	>15	<1	3	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

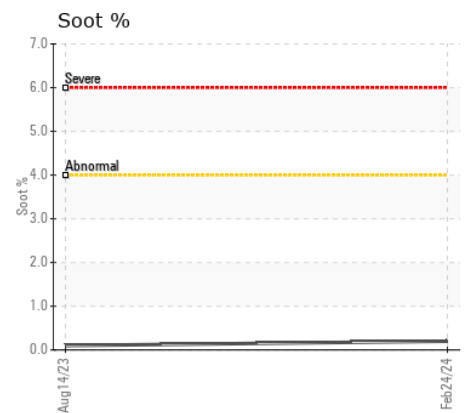
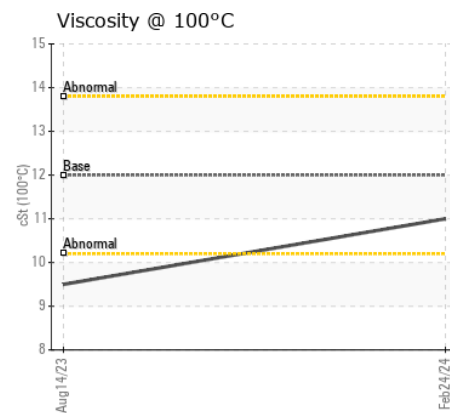
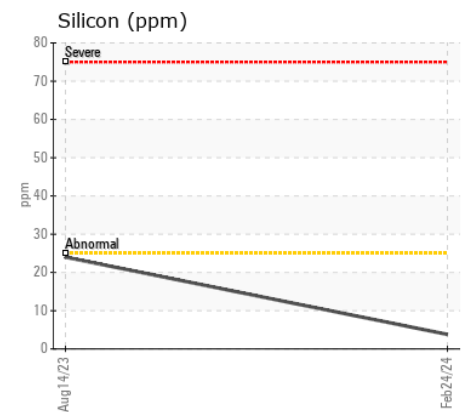
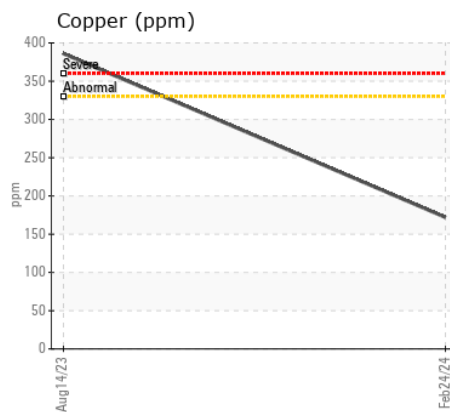
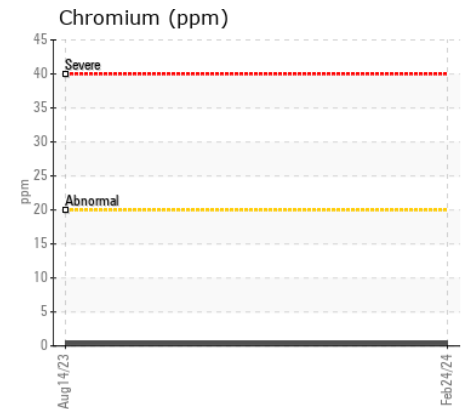
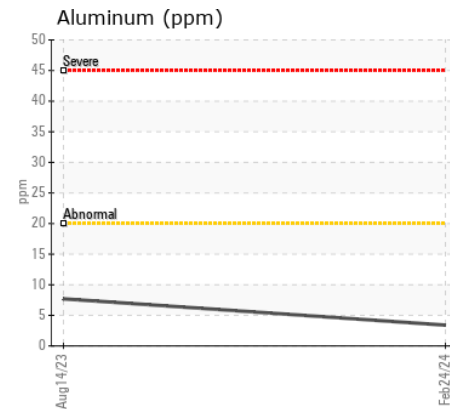
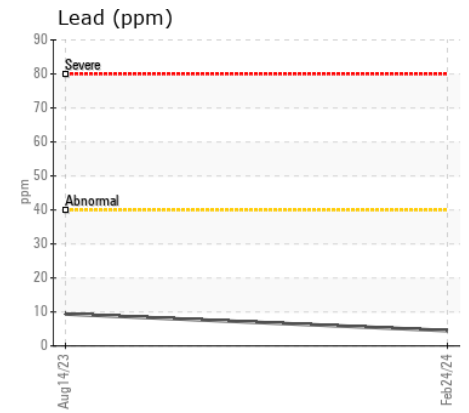
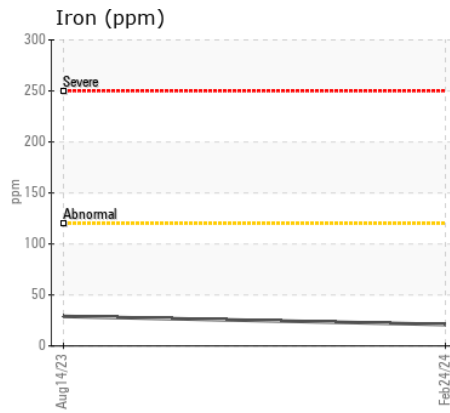
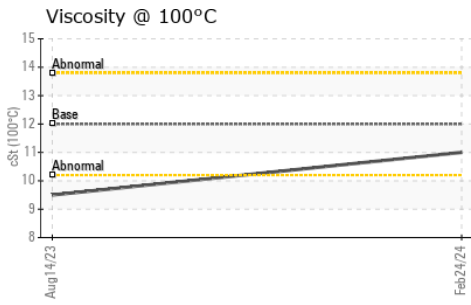
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	24	---
Potassium	ppm	ASTM D5185(m)	>20	7	14	---
Fuel		WC Method	>3.0	<1.0	1.1	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	0.0	---
Soot %	%	ASTM D7844*	>4	0.2	0.1	---
Nitration	Abs/cm	ASTM D7624*	>20	9.2	9.8	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.2	25.8	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
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	3	---
Boron	ppm	ASTM D5185(m)	2	4	226	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	50	61	121	---
Manganese	ppm	ASTM D5185(m)	0	<1	3	---
Magnesium	ppm	ASTM D5185(m)	950	953	719	---
Calcium	ppm	ASTM D5185(m)	1050	1044	1407	---
Phosphorus	ppm	ASTM D5185(m)	995	999	754	---
Zinc	ppm	ASTM D5185(m)	1180	1143	815	---
Sulfur	ppm	ASTM D5185(m)	2600	2417	2334	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.4	23.7	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.0	9.5	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0102660 **Received** : 06 Mar 2024
Lab Number : 02620090 **Tested** : 06 Mar 2024
Unique Number : 5737200 **Diagnosed** : 06 Mar 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

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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.