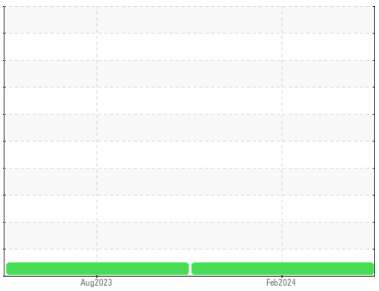
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
413154
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- LTR)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

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.

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

SAMPLE INFORMATION		method	limit/base	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	---
Oil Changed		Client Info		**Changed**	N/A	---
Sample Status				**NORMAL**	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	**<1.0**	1.1	---
Water		WC Method	>0.2	**NEG**	NEG	---
Glycol		WC Method		**NEG**	0.0	---

WEAR METALS		method	limit/base	current	history1	history2
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	---
Antimony	ppm	ASTM D5185(m)		**0**	0	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Beryllium	ppm	ASTM D5185(m)		**0**	0	---
Cadmium	ppm	ASTM D5185(m)		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
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	---
Lithium	ppm	ASTM D5185(m)		**<1**	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**4**	24	---
Sodium	ppm	ASTM D5185(m)		**1**	3	---
Potassium	ppm	ASTM D5185(m)	>20	**7**	14	---

INFRA-RED		method	limit/base	current	history1	history2
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	---

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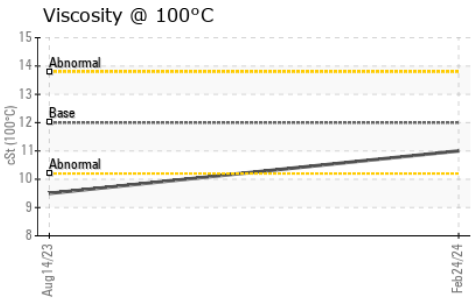
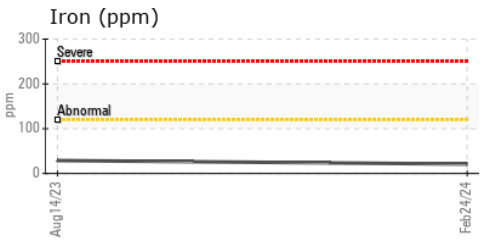


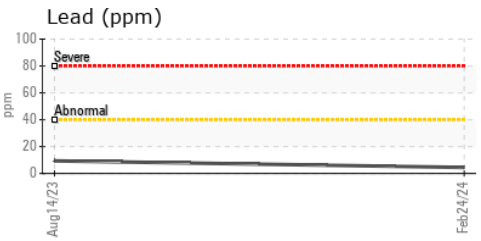
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**16.4**	23.7	---

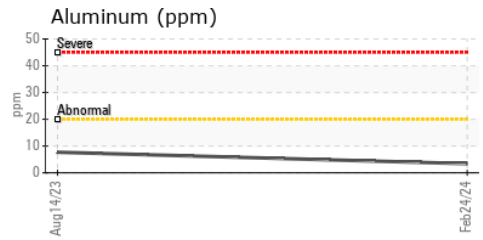
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	---	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	---	---
Precipitate	scalar	Visual*	NONE	**NONE**	---	---
Silt	scalar	Visual*	NONE	**NONE**	---	---
Debris	scalar	Visual*	NONE	**NONE**	---	---
Sand/Dirt	scalar	Visual*	NONE	**NONE**	---	---
Appearance	scalar	Visual*	NORML	**NORML**	---	---
Odor	scalar	Visual*	NORML	**NORML**	NORML	---
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	---
Free Water	scalar	Visual*		**NEG**	NEG	---

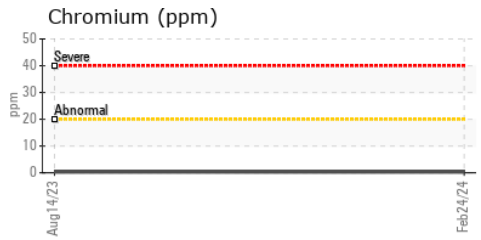
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	**11.0**	9.5	---

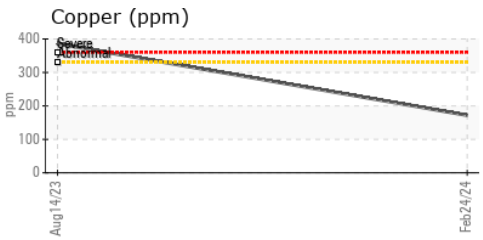
GRAPHS

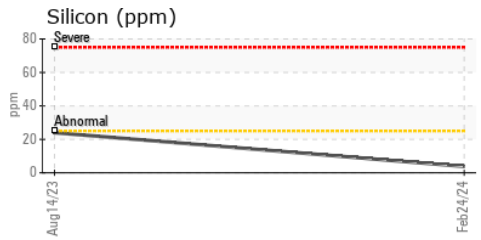


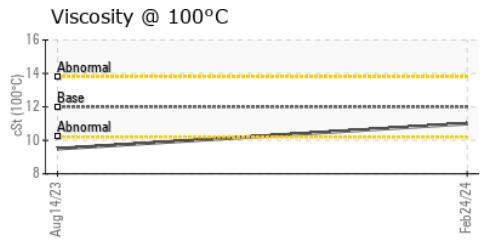


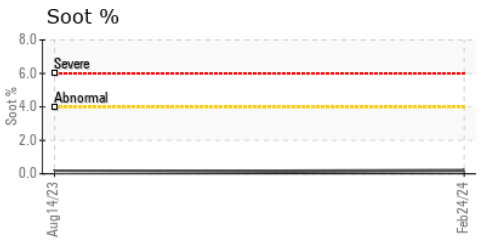












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0102660
Lab Number : 02620090
Unique Number : 5737200
Test Package : MOB 1 (Additional Tests: Visual)

Received : 06 Mar 2024
Tested : 06 Mar 2024
Diagnosed : 06 Mar 2024 - Wes Davis

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.

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