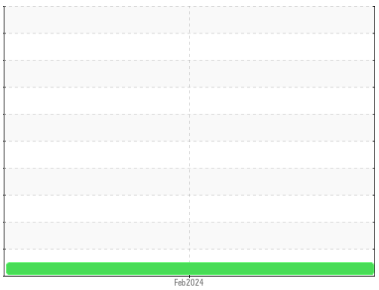
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
512034
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
Metal levels are typical for a new component breaking in.

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		**GFL0113118**	---	---
Sample Date		Client Info		**29 Feb 2024**	---	---
Machine Age	kms	Client Info		**85953**	---	---
Oil Age	kms	Client Info		**23881**	---	---
Oil Changed		Client Info		**Changed**	---	---
Sample Status				**NORMAL**	---	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>120	**15**	---	---
Chromium	ppm	ASTM D5185(m)	>20	**<1**	---	---
Nickel	ppm	ASTM D5185(m)	>5	**6**	---	---
Titanium	ppm	ASTM D5185(m)	>2	**0**	---	---
Silver	ppm	ASTM D5185(m)	>2	**<1**	---	---
Aluminum	ppm	ASTM D5185(m)	>20	**3**	---	---
Lead	ppm	ASTM D5185(m)	>40	**1**	---	---
Copper	ppm	ASTM D5185(m)	>330	**33**	---	---
Tin	ppm	ASTM D5185(m)	>15	**1**	---	---
Antimony	ppm	ASTM D5185(m)		**0**	---	---
Vanadium	ppm	ASTM D5185(m)		**0**	---	---
Beryllium	ppm	ASTM D5185(m)		**0**	---	---
Cadmium	ppm	ASTM D5185(m)		**0**	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**2**	---	---
Barium	ppm	ASTM D5185(m)	0	**0**	---	---
Molybdenum	ppm	ASTM D5185(m)	60	**59**	---	---
Manganese	ppm	ASTM D5185(m)	0	**0**	---	---
Magnesium	ppm	ASTM D5185(m)	1010	**958**	---	---
Calcium	ppm	ASTM D5185(m)	1070	**1097**	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	**999**	---	---
Zinc	ppm	ASTM D5185(m)	1270	**1192**	---	---
Sulfur	ppm	ASTM D5185(m)	2060	**2626**	---	---
Lithium	ppm	ASTM D5185(m)		**<1**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**5**	---	---
Sodium	ppm	ASTM D5185(m)		**1**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**7**	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>4	**0.2**	---	---
Nitration	Abs/cm	ASTM D7624*	>20	**8.1**	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	**20.0**	---	---

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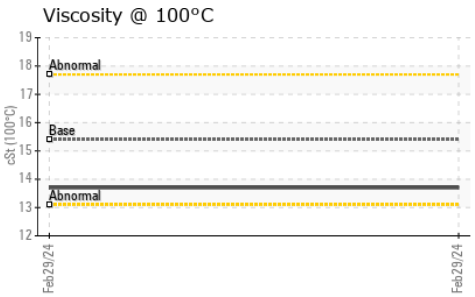
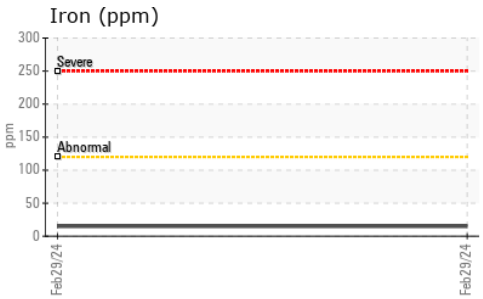


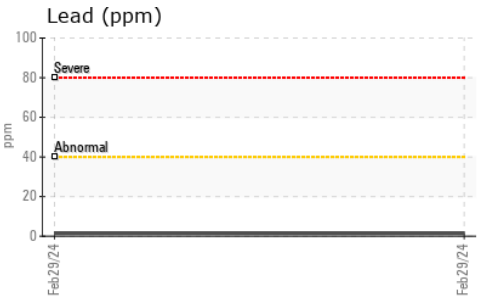
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**15.4**	---	---

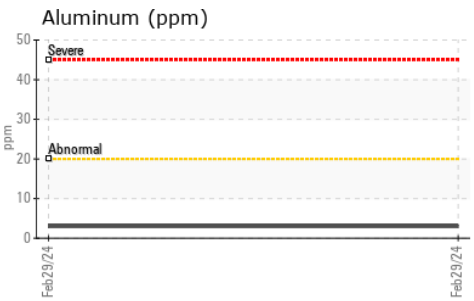
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	---	---
Free Water	scalar	Visual*		**NEG**	---	---

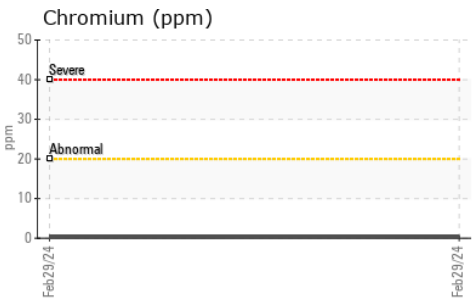
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	**13.7**	---	---

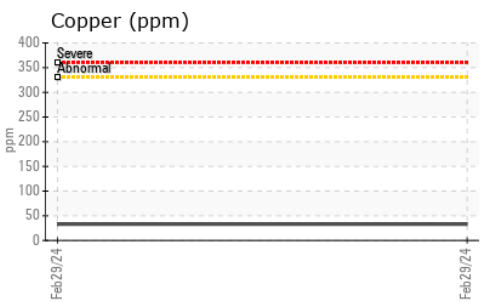
GRAPHS

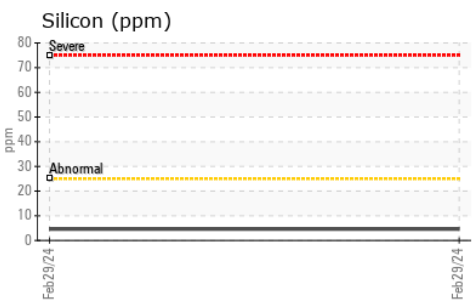


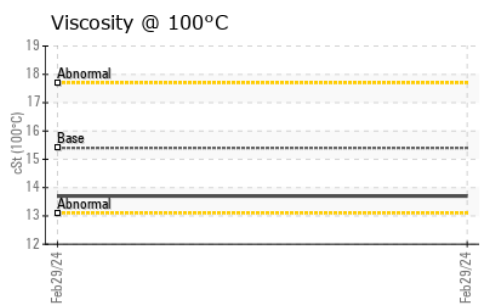


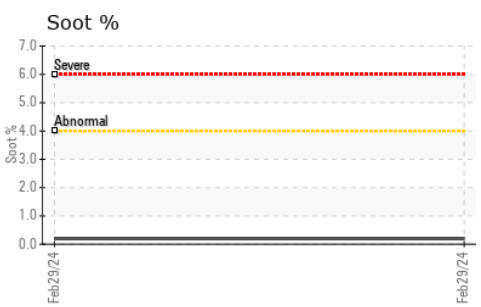












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113118
Lab Number : 02619810
Unique Number : 5736920
Test Package : MOB 1

Received : 05 Mar 2024
Tested : 05 Mar 2024
Diagnosed : 05 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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