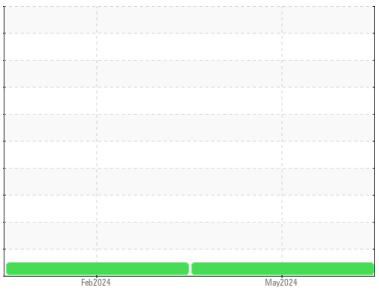
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
113006
Component
Diesel Engine
Fluid
PETRO CANADA DURON SAE 10W30 (--- 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		**GFL0118562**	GFL0107875	---
Sample Date		Client Info		**06 May 2024**	05 Feb 2024	---
Machine Age	kms	Client Info		**54783**	47407	---
Oil Age	kms	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	Changed	---
Sample Status				**NORMAL**	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>5	**<1.0**	<1.0	---
Water		WC Method	>0.2	**NEG**	NEG	---
Glycol		WC Method		**NEG**	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	**14**	18	---
Chromium	ppm	ASTM D5185(m)	>20	**<1**	<1	---
Nickel	ppm	ASTM D5185(m)	>4	**0**	<1	---
Titanium	ppm	ASTM D5185(m)		**0**	0	---
Silver	ppm	ASTM D5185(m)	>3	**0**	0	---
Aluminum	ppm	ASTM D5185(m)	>20	**6**	10	---
Lead	ppm	ASTM D5185(m)	>40	**0**	<1	---
Copper	ppm	ASTM D5185(m)	>330	**<1**	<1	---
Tin	ppm	ASTM D5185(m)	>15	**0**	<1	---
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	---

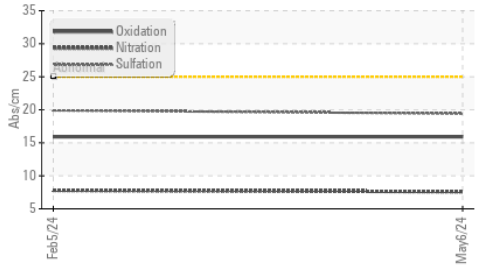
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	1	**6**	8	---
Barium	ppm	ASTM D5185(m)	1	**0**	0	---
Molybdenum	ppm	ASTM D5185(m)	1	**60**	60	---
Manganese	ppm	ASTM D5185(m)	1	**<1**	0	---
Magnesium	ppm	ASTM D5185(m)	10	**976**	951	---
Calcium	ppm	ASTM D5185(m)	2942	**1080**	1099	---
Phosphorus	ppm	ASTM D5185(m)	1102	**966**	1010	---
Zinc	ppm	ASTM D5185(m)	1351	**1172**	1181	---
Sulfur	ppm	ASTM D5185(m)	3903	**2473**	2695	---
Lithium	ppm	ASTM D5185(m)		**<1**	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**3**	4	---
Sodium	ppm	ASTM D5185(m)		**1**	1	---
Potassium	ppm	ASTM D5185(m)	>20	**14**	19	---

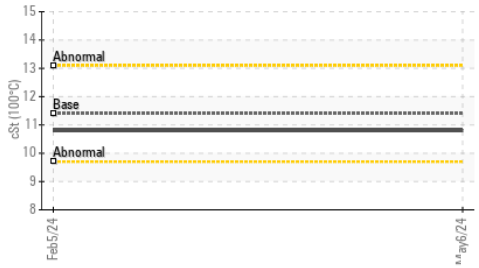
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	**0.2**	0.2	---
Nitration	Abs/cm	ASTM D7624*	>20	**7.6**	7.8	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	**19.4**	19.9	---

OIL ANALYSIS REPORT

FT-IR (Direct Trend)



Viscosity @ 100°C



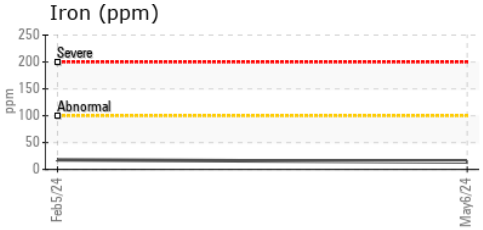
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**15.9**	15.9	---

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

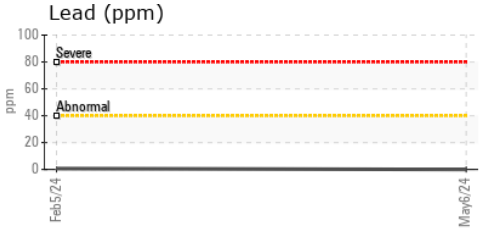
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	**10.8**	10.8	---

GRAPHS

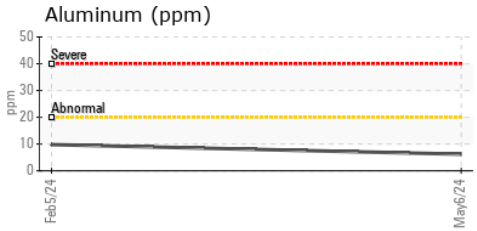
Iron (ppm)



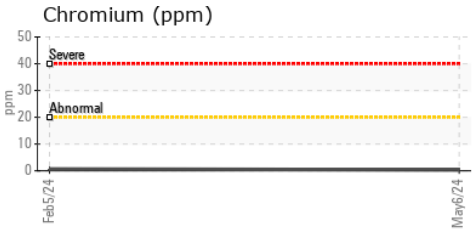
Lead (ppm)



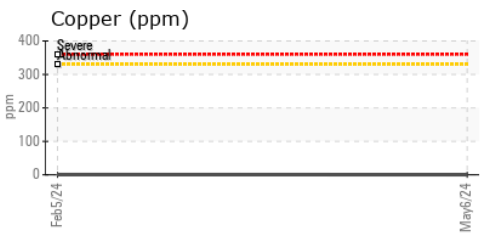
Aluminum (ppm)



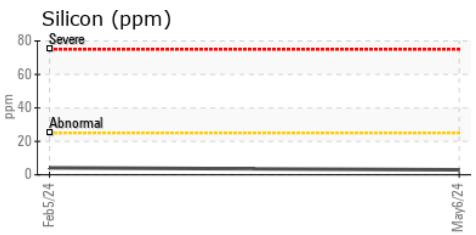
Chromium (ppm)



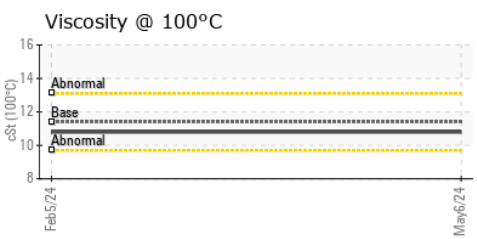
Copper (ppm)



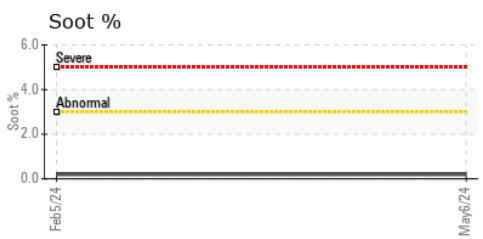
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0118562
Lab Number : 02639579
Unique Number : 5788741
Test Package : MOB 1 (Additional Tests: Visual)

Received : 04 Jun 2024
Tested : 05 Jun 2024
Diagnosed : 05 Jun 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.

GFL Environmental - 310 - Winnipeg
#360 – 555 Hervo Street,
Winnipeg, MB
CA R3T 3L6
Contact: Joshua Lourenco
jlourenco@gflenv.com
T: (204)987-9600
F: