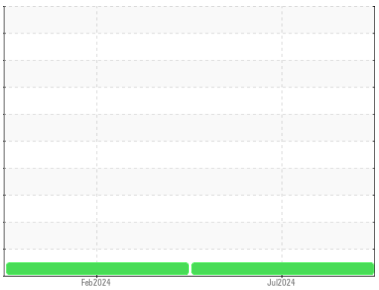
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
101014
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

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		**GFL0116403**	GFL0107913	---
Sample Date		Client Info		**12 Jul 2024**	15 Feb 2024	---
Machine Age	hrs	Client Info		**16653**	16124	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**Changed**	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	**16**	5	---
Chromium	ppm	ASTM D5185(m)	>20	**<1**	0	---
Nickel	ppm	ASTM D5185(m)	>4	**<1**	0	---
Titanium	ppm	ASTM D5185(m)		**0**	0	---
Silver	ppm	ASTM D5185(m)	>3	**0**	0	---
Aluminum	ppm	ASTM D5185(m)	>20	**5**	3	---
Lead	ppm	ASTM D5185(m)	>40	**0**	0	---
Copper	ppm	ASTM D5185(m)	>330	**3**	1	---
Tin	ppm	ASTM D5185(m)	>15	**0**	0	---
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	---

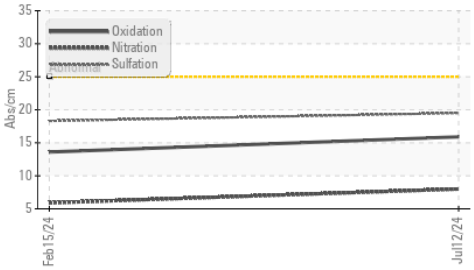
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	**6**	12	---
Barium	ppm	ASTM D5185(m)	0	**0**	0	---
Molybdenum	ppm	ASTM D5185(m)	50	**64**	64	---
Manganese	ppm	ASTM D5185(m)	0	**<1**	0	---
Magnesium	ppm	ASTM D5185(m)	950	**881**	696	---
Calcium	ppm	ASTM D5185(m)	1050	**1191**	1319	---
Phosphorus	ppm	ASTM D5185(m)	995	**1037**	1020	---
Zinc	ppm	ASTM D5185(m)	1180	**1217**	1127	---
Sulfur	ppm	ASTM D5185(m)	2600	**2592**	2882	---
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)		**4**	4	---
Potassium	ppm	ASTM D5185(m)	>20	**6**	3	---

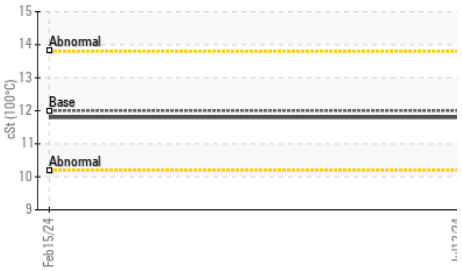
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	**0.4**	0	---
Nitration	Abs/cm	ASTM D7624*	>20	**8.0**	5.9	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	**19.5**	18.3	---

OIL ANALYSIS REPORT

FT-IR (Direct Trend)



Viscosity @ 100°C



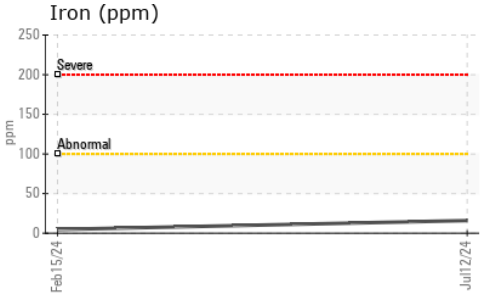
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**15.9**	13.6	---

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

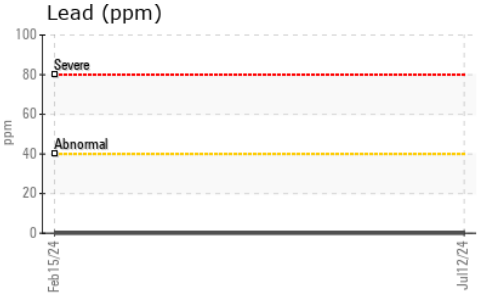
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	**11.8**	11.8	---

GRAPHS

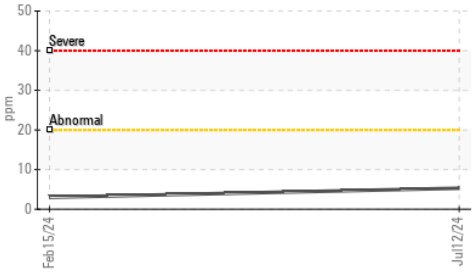
Iron (ppm)



Lead (ppm)

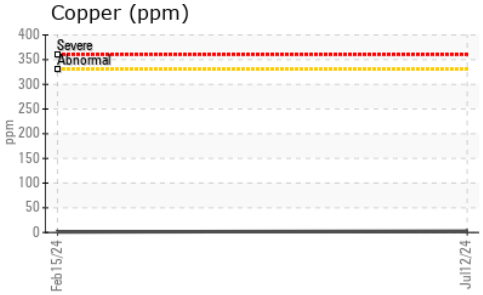


Aluminum (ppm)

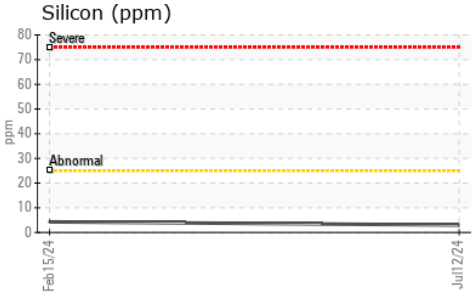


Chromium (ppm)

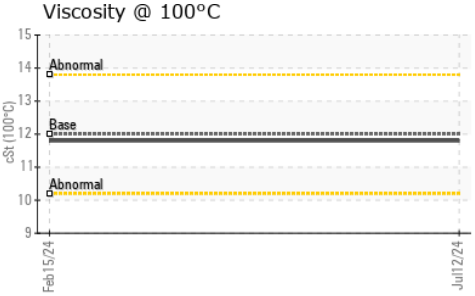
Copper (ppm)



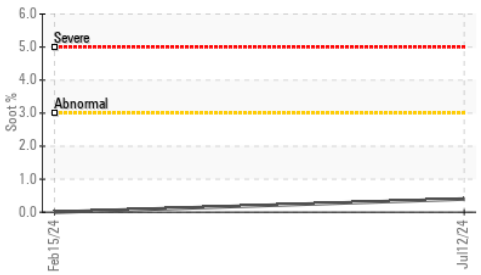
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0116403
Lab Number : 02648376
Unique Number : 5813928
Test Package : MOB 1

Received : 17 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 18 Jul 2024 - Kevin Marson

GFL Environmental - 350 - Emeral Park Regina
2B Industrial Drive,, Great Plains Industrial Park,
Emerald Park, SK
CA S4L 1B6
Contact: Vaughn Hortness
vhortness@gflenv.com
T: (877)244-9500
F: (306)244-9501

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.