



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
913192
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0118005	---	---
Sample Date		Client Info		02 Jun 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	96	---	---
Chromium	ppm	ASTM D5185m	>5	4	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m	>2	<1	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>20	22	---	---
Lead	ppm	ASTM D5185m	>150	<1	---	---
Copper	ppm	ASTM D5185m	>90	6	---	---
Tin	ppm	ASTM D5185m	>5	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

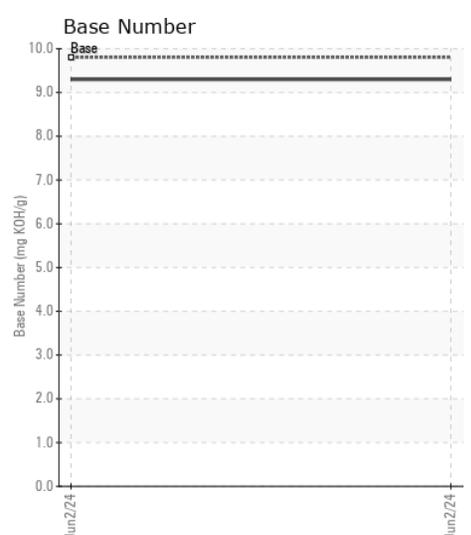
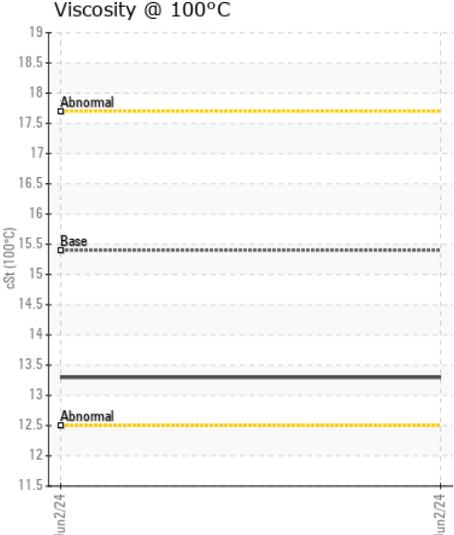
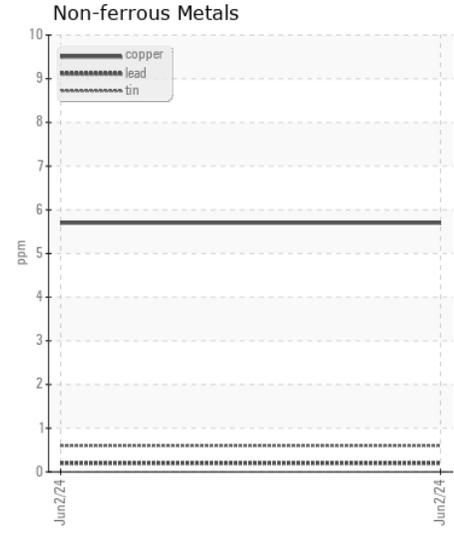
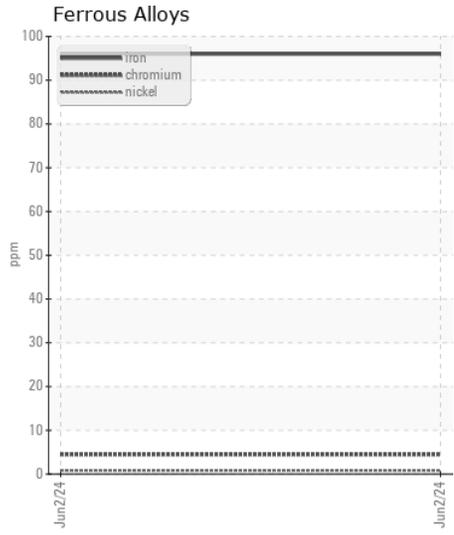
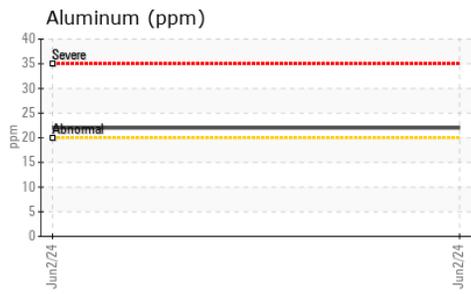
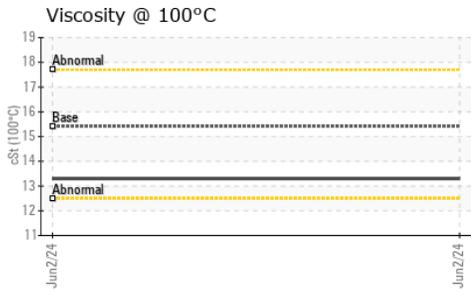
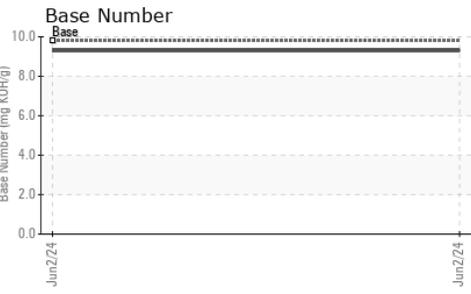
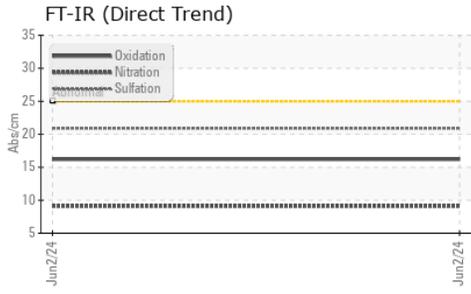
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	11	---	---
Potassium	ppm	ASTM D5185m	>20	75	---	---
Fuel		WC Method	>3.0	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>7.5	1.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	9.1	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.9	---	---
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	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		4	---	---
Boron	ppm	ASTM D5185m	0	3	---	---
Barium	ppm	ASTM D5185m	0	4	---	---
Molybdenum	ppm	ASTM D5185m	60	61	---	---
Manganese	ppm	ASTM D5185m	0	3	---	---
Magnesium	ppm	ASTM D5185m	1010	965	---	---
Calcium	ppm	ASTM D5185m	1070	1046	---	---
Phosphorus	ppm	ASTM D5185m	1150	1078	---	---
Zinc	ppm	ASTM D5185m	1270	1290	---	---
Sulfur	ppm	ASTM D5185m	2060	3462	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.3	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.3	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0118005
Lab Number : 06197501
Unique Number : 11059624
Test Package : FLEET
Received : 03 Jun 2024
Tested : 04 Jun 2024
Diagnosed : 04 Jun 2024 - Wes Davis

GFL Environmental - 045 - Tidewater
 3821 Cook Blvd.
 Chesapeake, VA
 US 23323
 Contact: ELVIN RODRIGUEZ
 elvinrodriguez@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)