



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(YA169067)

Machine Id
912037

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		GFL0101381	GFL0078219	---
Sample Date		Client Info		25 Feb 2024	10 Jul 2023	---
Machine Age	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		0	3337	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	5	10	---
Chromium	ppm	ASTM D5185m	>5	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	0	0	---
Titanium	ppm	ASTM D5185m	>2	0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>20	4	4	---
Lead	ppm	ASTM D5185m	>150	1	0	---
Copper	ppm	ASTM D5185m	>90	0	<1	---
Tin	ppm	ASTM D5185m	>5	0	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

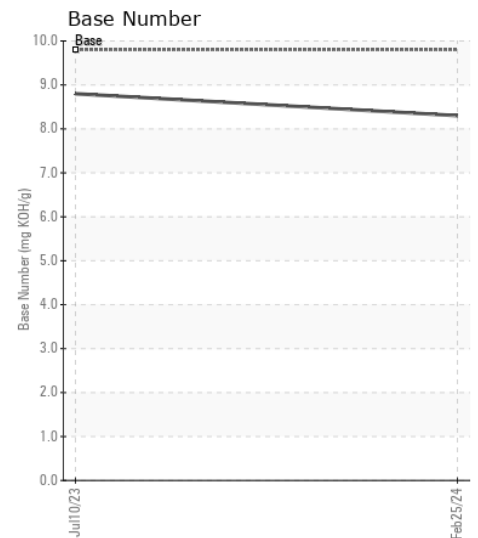
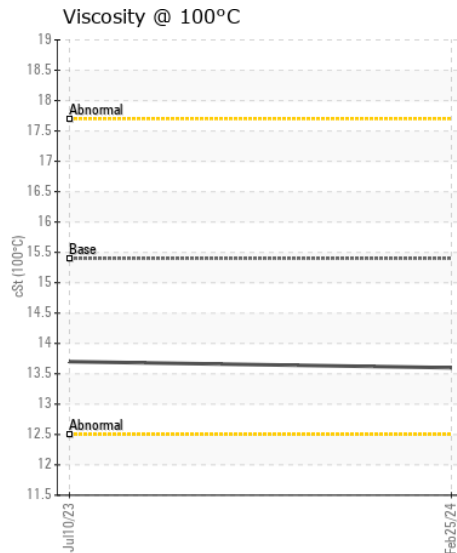
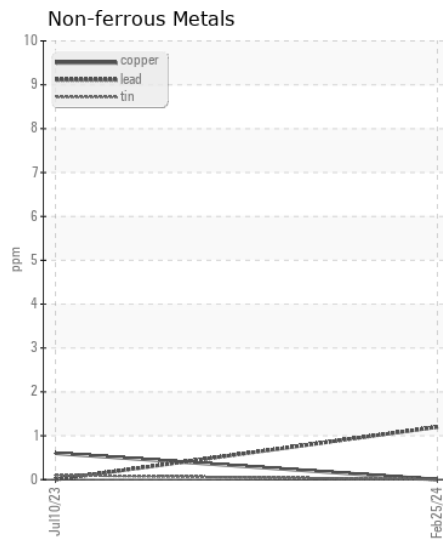
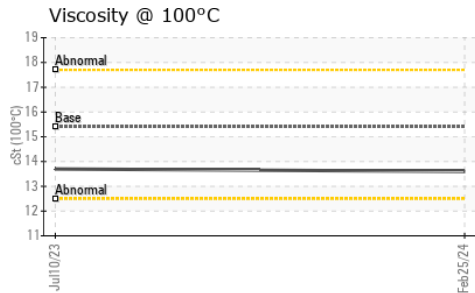
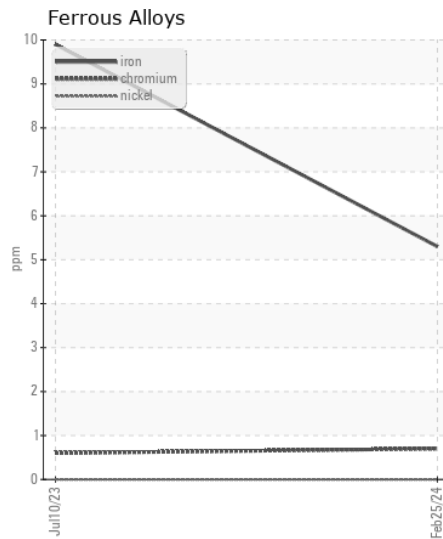
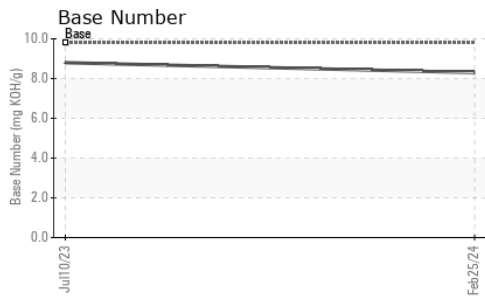
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	3	2	---
Potassium	ppm	ASTM D5185m	>20	9	11	---
Fuel		WC Method	>3.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>7.5	0.4	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	7.2	7.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.6	19.6	---
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	---

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		5	0	---
Boron	ppm	ASTM D5185m	0	7	3	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	60	62	59	---
Manganese	ppm	ASTM D5185m	0	<1	<1	---
Magnesium	ppm	ASTM D5185m	1010	992	864	---
Calcium	ppm	ASTM D5185m	1070	1160	1127	---
Phosphorus	ppm	ASTM D5185m	1150	1099	1005	---
Zinc	ppm	ASTM D5185m	1270	1308	1211	---
Sulfur	ppm	ASTM D5185m	2060	3125	3036	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.9	15.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.3	8.8	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	13.7	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0101381
Lab Number : 06100663
Unique Number : 10898893
Test Package : FLEET

Received : 26 Feb 2024
Tested : 27 Feb 2024
Diagnosed : 27 Feb 2024 - Wes Davis

GFL Environmental - 112 - New Bern
 705 Airport Road
 New Bern, NC
 US 28560

Contact: Marquis Williams
 marquis.williams@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)

T:
 F: