



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
910091
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		GFL0104413	GFL0059147	---
Sample Date		Client Info		15 Mar 2024	07 Nov 2023	---
Machine Age	mls	Client Info		67707	65823	---
Oil Age	mls	Client Info		0	0	---
Filter Age	mls	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>120	31	5	---
Chromium	ppm	ASTM D5185m	>20	2	<1	---
Nickel	ppm	ASTM D5185m	>5	7	0	---
Titanium	ppm	ASTM D5185m	>2	<1	0	---
Silver	ppm	ASTM D5185m	>2	0	<1	---
Aluminum	ppm	ASTM D5185m	>20	2	2	---
Lead	ppm	ASTM D5185m	>40	<1	<1	---
Copper	ppm	ASTM D5185m	>330	3	3	---
Tin	ppm	ASTM D5185m	>15	2	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

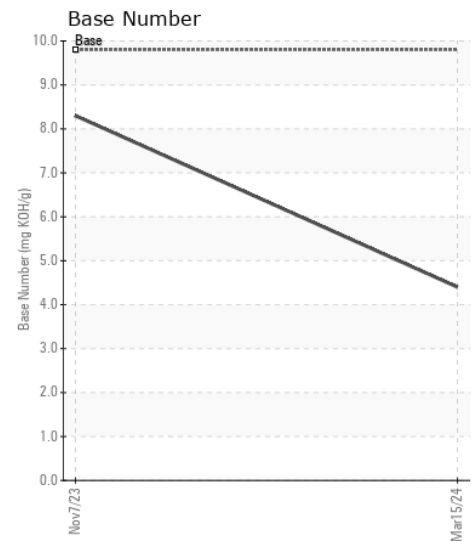
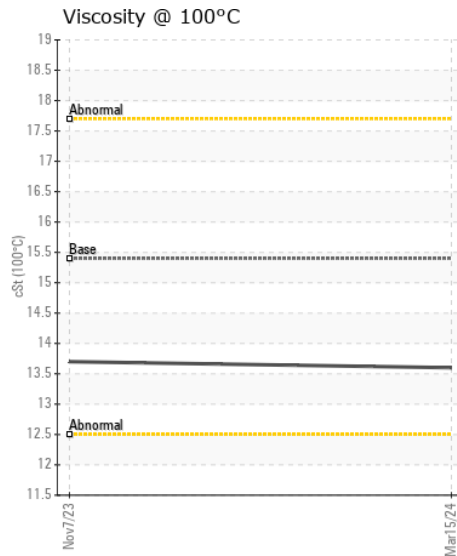
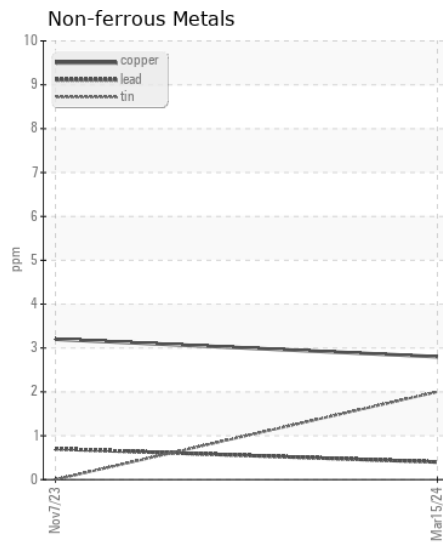
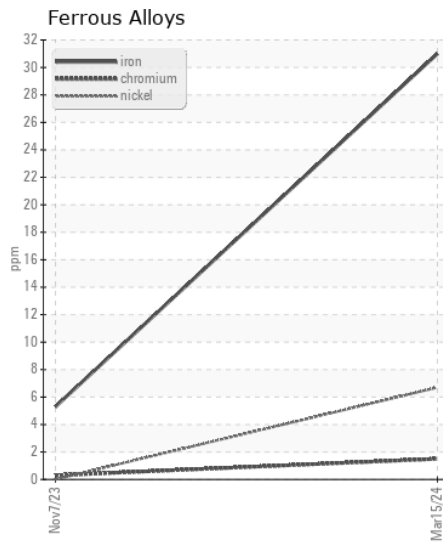
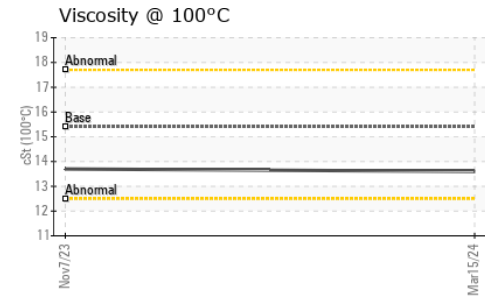
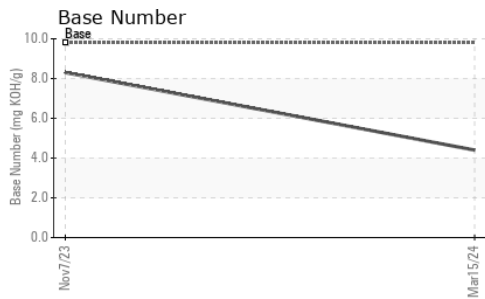
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	4	---
Potassium	ppm	ASTM D5185m	>20	3	2	---
Fuel		WC Method	>3.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>4	1.1	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	9.8	7.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.5	18.5	---
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		13	0	---
Boron	ppm	ASTM D5185m	0	2	3	---
Barium	ppm	ASTM D5185m	0	0	6	---
Molybdenum	ppm	ASTM D5185m	60	58	62	---
Manganese	ppm	ASTM D5185m	0	1	0	---
Magnesium	ppm	ASTM D5185m	1010	906	876	---
Calcium	ppm	ASTM D5185m	1070	1076	1057	---
Phosphorus	ppm	ASTM D5185m	1150	990	1014	---
Zinc	ppm	ASTM D5185m	1270	1246	1164	---
Sulfur	ppm	ASTM D5185m	2060	2614	3553	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.2	14.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	4.4	8.3	---
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. : GFL0104413
Lab Number : 06122123
Unique Number : 10936274
Test Package : FLEET

Received : 19 Mar 2024
Tested : 20 Mar 2024
Diagnosed : 20 Mar 2024 - Wes Davis

GFL Environmental - 410 - Michigan West
 39000 Van Born Rd
 Wayne, MI
 US 48184

Contact: Belal Dgheish
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F:

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)