



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
4589M
 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		GFL0108957	GFL0105719	---
Sample Date		Client Info		28 Feb 2024	19 Dec 2023	---
Machine Age	hrs	Client Info		21650	21562	---
Oil Age	hrs	Client Info		21562	21562	---
Filter Age	hrs	Client Info		21562	21562	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	Not Changd	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	24	2	---
Chromium	ppm	ASTM D5185m	>20	1	0	---
Nickel	ppm	ASTM D5185m	>4	<1	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	7	1	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	<1	0	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

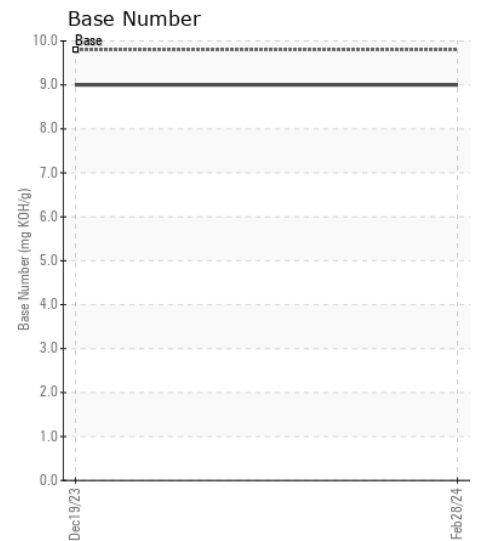
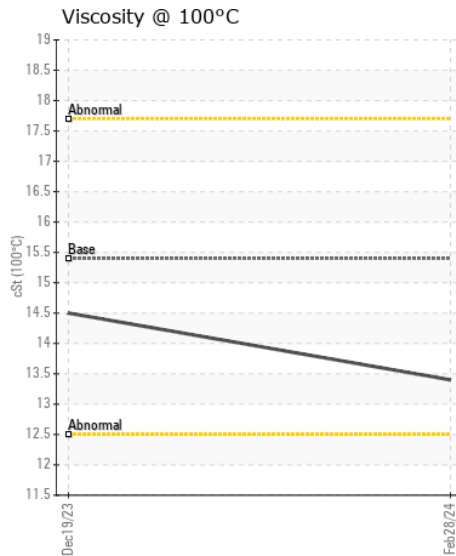
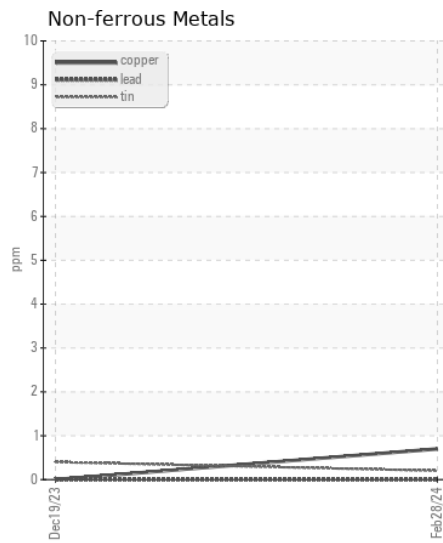
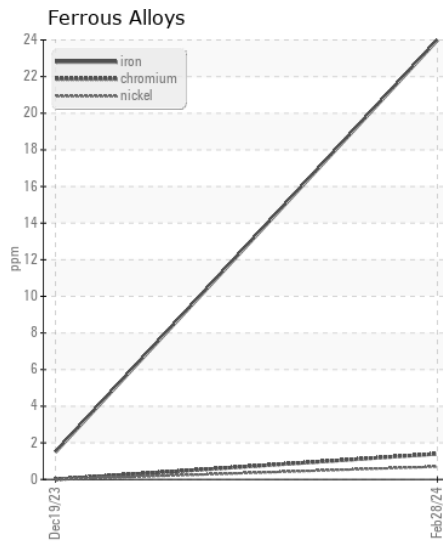
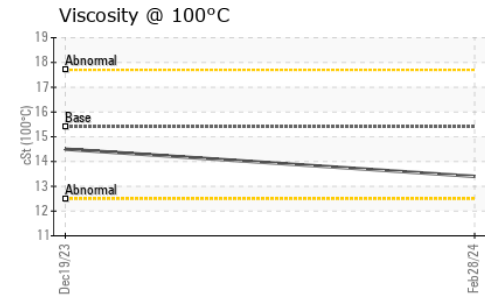
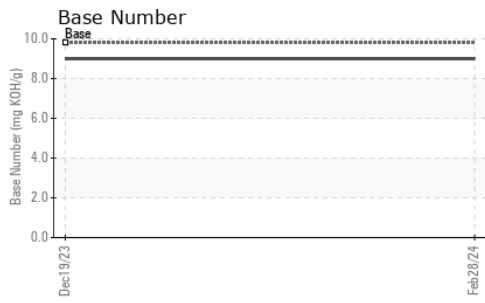
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	4	---
Potassium	ppm	ASTM D5185m	>20	15	1	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.9	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	8.5	4.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	17.3	---
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		34	1	---
Boron	ppm	ASTM D5185m	0	2	1	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	60	64	57	---
Manganese	ppm	ASTM D5185m	0	<1	0	---
Magnesium	ppm	ASTM D5185m	1010	903	947	---
Calcium	ppm	ASTM D5185m	1070	985	1025	---
Phosphorus	ppm	ASTM D5185m	1150	985	1094	---
Zinc	ppm	ASTM D5185m	1270	1193	1252	---
Sulfur	ppm	ASTM D5185m	2060	2862	3334	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.1	13.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.0	9.0	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	14.5	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0108957
Lab Number : 06105718
Unique Number : 10903948
Test Package : FLEET

Received : 01 Mar 2024
Tested : 01 Mar 2024
Diagnosed : 01 Mar 2024 - Wes Davis

GFL Environmental - 415 - Michigan East
 6200 Elmridge
 Sterling Heights, MI
 US 48313
 Contact: Frank Wolak
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 T: (586)825-9514
 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)