



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(MC12185)

Machine Id

821022

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		GFL0106240	GFL0066987	---
Sample Date		Client Info		04 Apr 2024	18 Sep 2023	---
Machine Age	hrs	Client Info		17602	16945	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	37	29	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	0	<1	---
Titanium	ppm	ASTM D5185m	>2	0	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>20	2	4	---
Lead	ppm	ASTM D5185m	>40	<1	<1	---
Copper	ppm	ASTM D5185m	>330	<1	2	---
Tin	ppm	ASTM D5185m	>15	0	1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

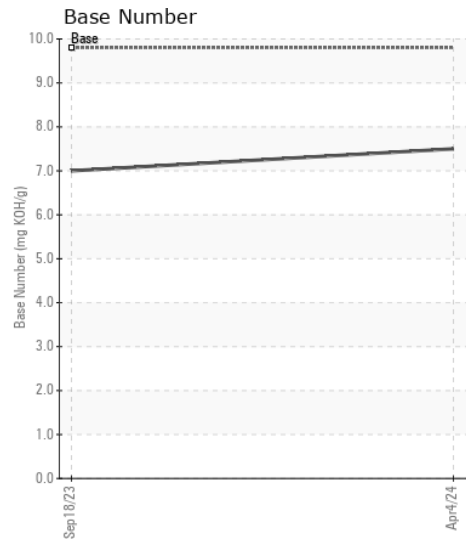
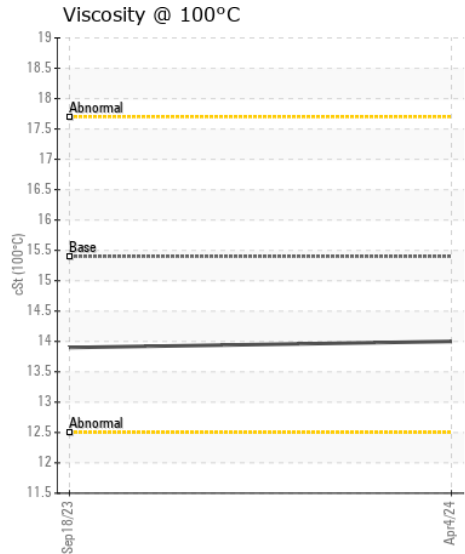
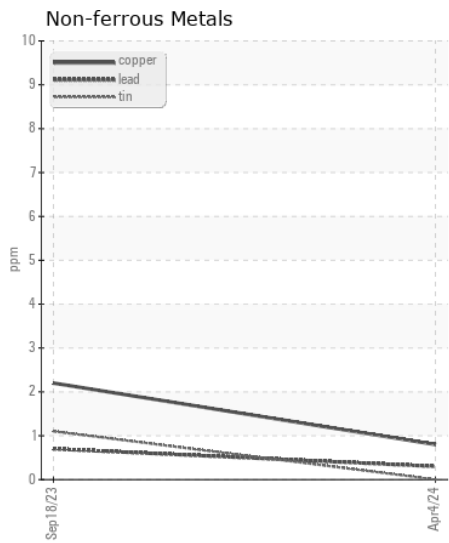
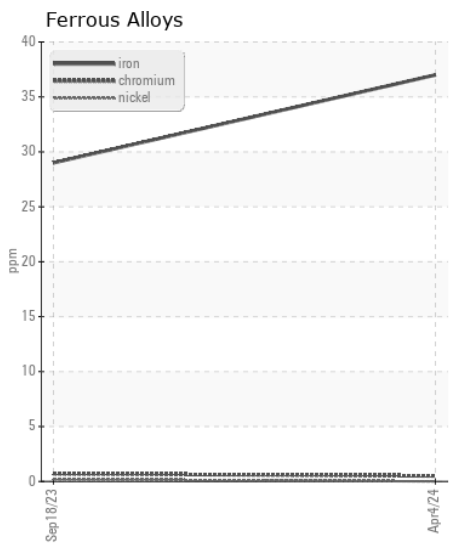
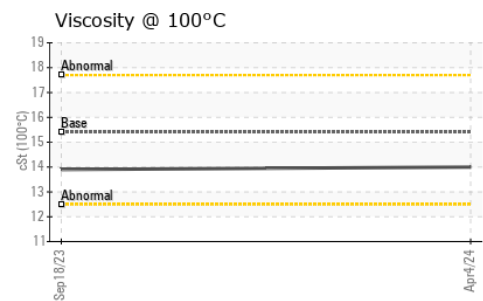
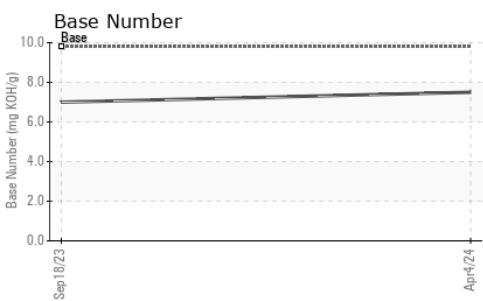
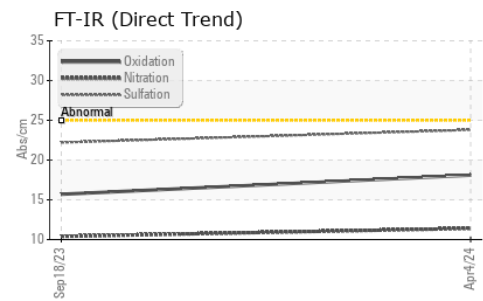
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	8	---
Potassium	ppm	ASTM D5185m	>20	<1	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	2.3	2.1	---
Nitration	Abs/cm	*ASTM D7624	>20	11.4	10.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8	22.2	---
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	12	---
Boron	ppm	ASTM D5185m	0	<1	5	---
Barium	ppm	ASTM D5185m	0	<1	0	---
Molybdenum	ppm	ASTM D5185m	60	61	61	---
Manganese	ppm	ASTM D5185m	0	<1	1	---
Magnesium	ppm	ASTM D5185m	1010	886	913	---
Calcium	ppm	ASTM D5185m	1070	1042	1141	---
Phosphorus	ppm	ASTM D5185m	1150	953	992	---
Zinc	ppm	ASTM D5185m	1270	1191	1213	---
Sulfur	ppm	ASTM D5185m	2060	3158	3456	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.1	15.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.5	7.0	---
Visc @ 100°C	cSt	ASTM D445	15.4	14.0	13.9	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0106240
Lab Number : 06157495
Unique Number : 10992918
Test Package : FLEET
Received : 23 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 24 Apr 2024 - Wes Davis

GFL Environmental - 916 - Greenbay HC
 1799 County Trunk PP
 DePere, WI
 US 54115
 Contact: Travis Runge
 travis.runge@gflenv.com
 T: (920)351-2341
 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)