



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(SB14137)
Machine Id
920021
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0069997	GFL0059610	---
Sample Date		Client Info		18 Jan 2024	07 Nov 2022	---
Machine Age	hrs	Client Info		7082	5014	---
Oil Age	hrs	Client Info		600	0	---
Filter Age	hrs	Client Info		600	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	>100	9	14	---
Chromium	ppm	ASTM D5185m	>20	0	<1	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>20	3	4	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>330	3	2	---
Tin	ppm	ASTM D5185m	>15	1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

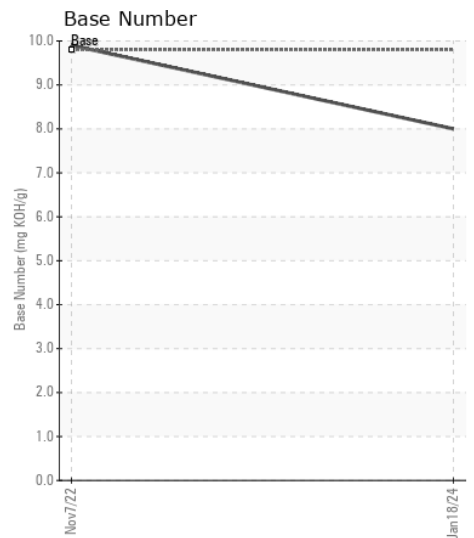
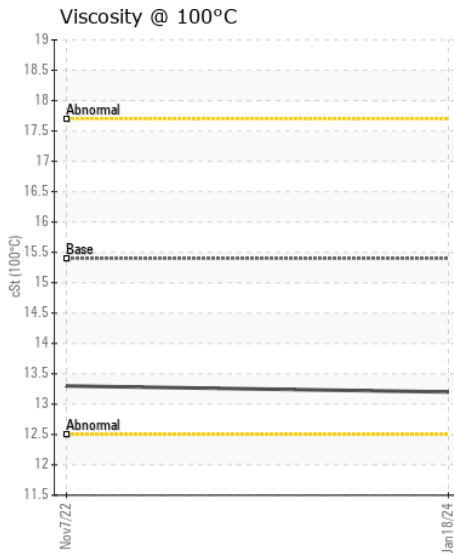
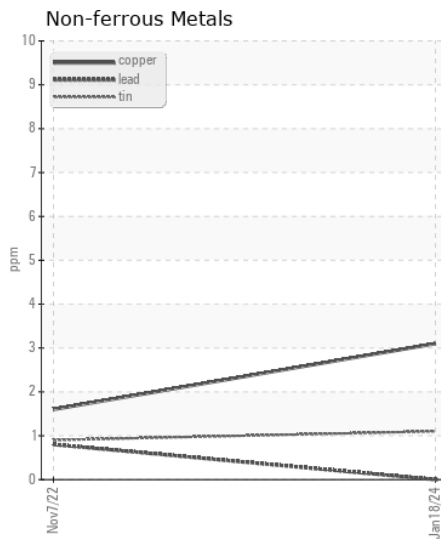
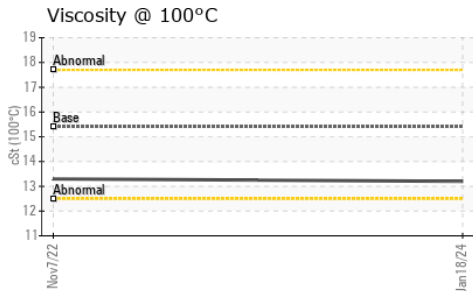
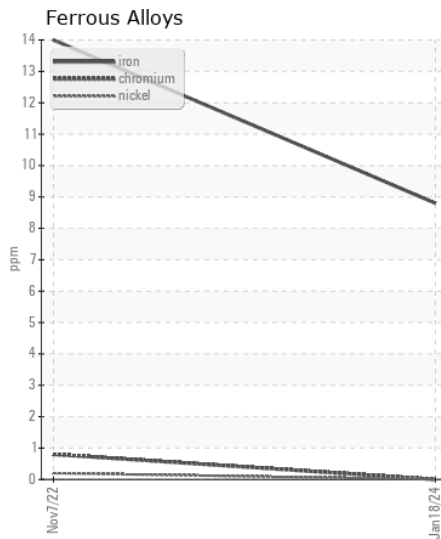
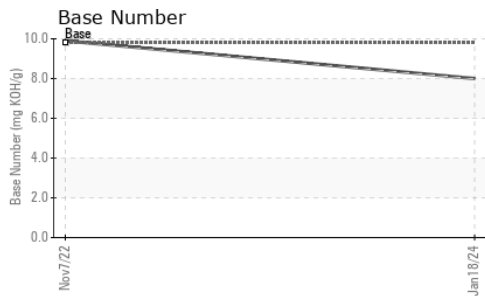
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	2	6	---
Potassium	ppm	ASTM D5185m	>20	0	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	0.4	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	8.4	10.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	24.7	---
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		2	2	---
Boron	ppm	ASTM D5185m	0	2	25	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	60	54	42	---
Manganese	ppm	ASTM D5185m	0	<1	<1	---
Magnesium	ppm	ASTM D5185m	1010	919	531	---
Calcium	ppm	ASTM D5185m	1070	1039	1604	---
Phosphorus	ppm	ASTM D5185m	1150	996	752	---
Zinc	ppm	ASTM D5185m	1270	1159	905	---
Sulfur	ppm	ASTM D5185m	2060	2890	2533	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	24.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.0	9.9	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	13.3	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0069997
Lab Number : 06083266
Unique Number : 10870711
Test Package : FLEET

Received : 08 Feb 2024
Tested : 08 Feb 2024
Diagnosed : 08 Feb 2024 - Wes Davis

GFL Environmental - 902 - Chilton HC
 428 High St
 Chilton, WI
 US 53014

Contact: Keith Mueller
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T: (920)374-1404

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)

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