



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
214010
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0113684	GFL0100443	---
Sample Date		Client Info		21 Feb 2024	26 Jan 2024	---
Machine Age	hrs	Client Info		287	133	---
Oil Age	hrs	Client Info		0	133	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ATTENTION	ATTENTION	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>120	50	42	---
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	5	5	---
Lead	ppm	ASTM D5185m	>40	0	1	---
Copper	ppm	ASTM D5185m	>330	63	35	---
Tin	ppm	ASTM D5185m	>15	0	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

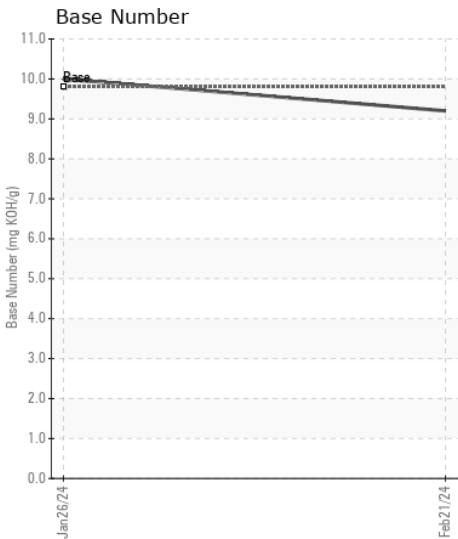
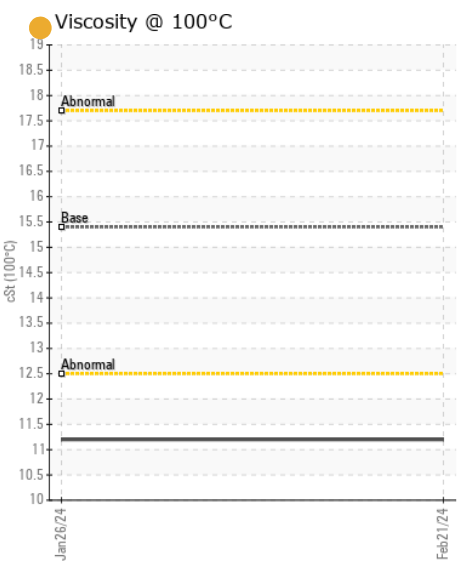
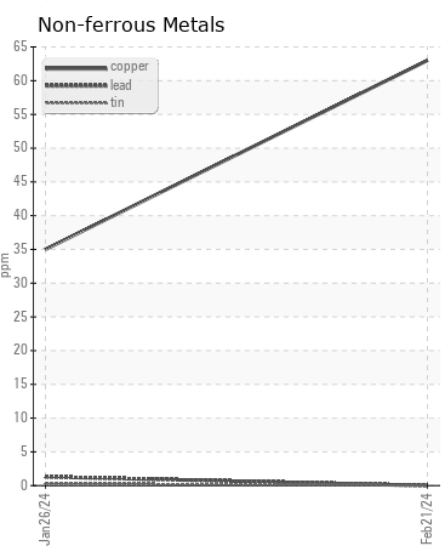
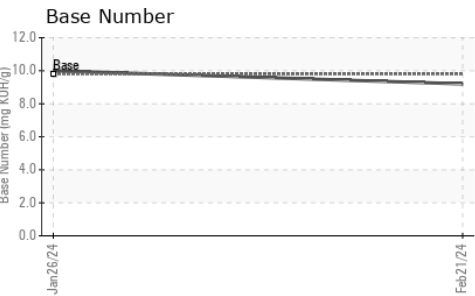
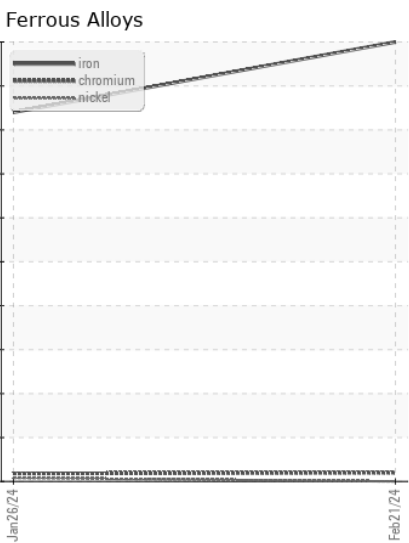
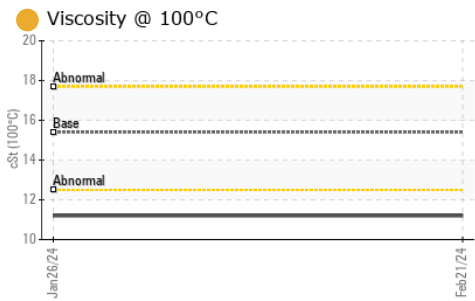
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	23	20	---
Potassium	ppm	ASTM D5185m	>20	5	7	---
Fuel		WC Method	>3.0	<1.0	0.6	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>4	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	7.8	6.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	21.6	---
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		6	6	---
Boron	ppm	ASTM D5185m	0	49	58	---
Barium	ppm	ASTM D5185m	0	5	5	---
Molybdenum	ppm	ASTM D5185m	60	40	42	---
Manganese	ppm	ASTM D5185m	0	5	5	---
Magnesium	ppm	ASTM D5185m	1010	548	557	---
Calcium	ppm	ASTM D5185m	1070	1599	1507	---
Phosphorus	ppm	ASTM D5185m	1150	742	752	---
Zinc	ppm	ASTM D5185m	1270	869	915	---
Sulfur	ppm	ASTM D5185m	2060	2318	2462	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.7	19.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.2	10.0	---
Visc @ 100°C	cSt	ASTM D445	15.4	11.2	11.2	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0113684 **Received** : 27 Feb 2024
Lab Number : 06101363 **Tested** : 28 Feb 2024
Unique Number : 10899593 **Diagnosed** : 28 Feb 2024 - Don Baldrige
Test Package : FLEET

GFL Environmental - 868 - Childersburg Fines Hauling (Alpine)
 13737 Plant Rd
 Childersburg, AL
 US 35044
 Contact: JONATHAN WILLIAMS
 jonathan.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: