



Machine Id
2714C
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (12 GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0112921	GFL0098130	GFL0079601
Sample Date		Client Info		26 Feb 2024	04 Dec 2023	03 Oct 2023
Machine Age	hrs	Client Info		3340	3340	3340
Oil Age	hrs	Client Info		595	379	142
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	10	1	2
Chromium	ppm	ASTM D5185m	>4	1	<1	0
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	2	2	0
Lead	ppm	ASTM D5185m	>30	13	<1	<1
Copper	ppm	ASTM D5185m	>35	3	0	0
Tin	ppm	ASTM D5185m	>4	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

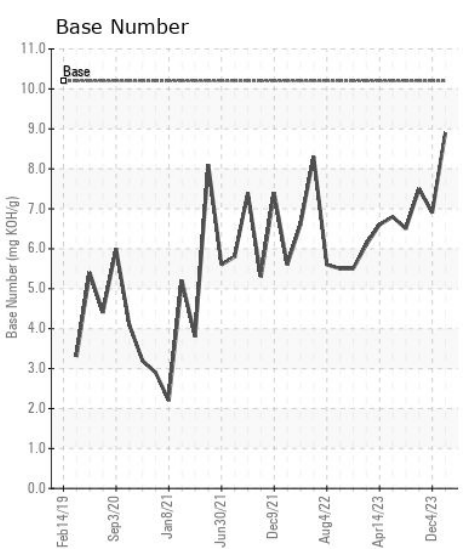
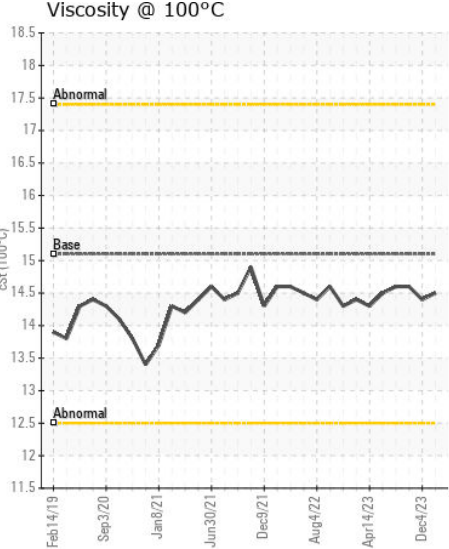
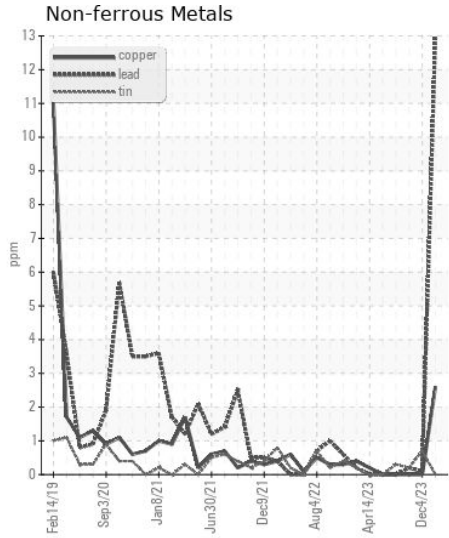
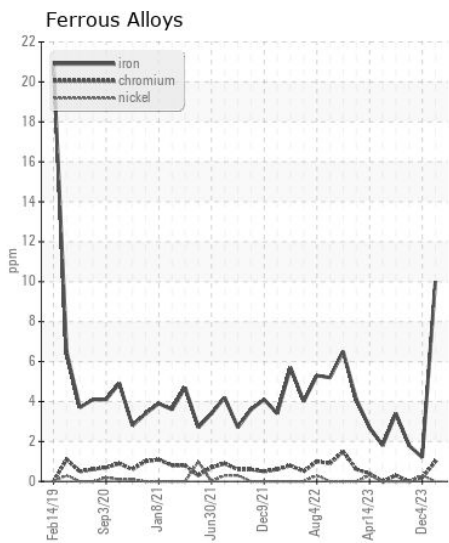
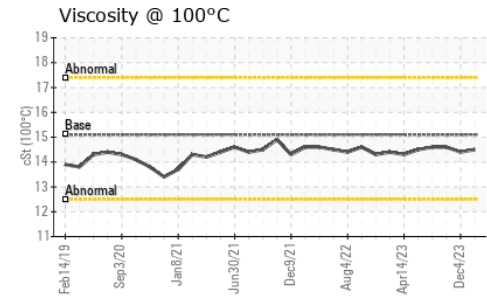
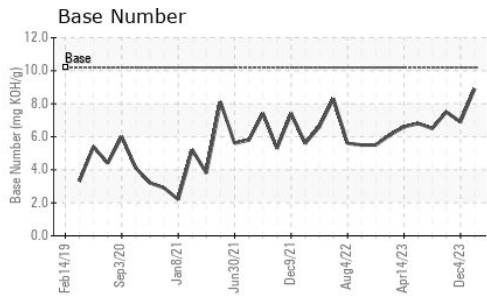
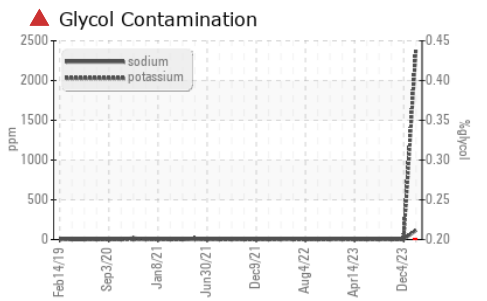
Sodium and/or potassium levels are high. Test for glycol is positive.

Silicon	ppm	ASTM D5185m	>+100	8	3	3
Potassium	ppm	ASTM D5185m	>20	▲ 2394	2	0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol	%	*ASTM D2982		▲ 0.20	---	---
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	12.2	8.7	7.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.1	19.5	18.7
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		▲ 116	4	4
Boron	ppm	ASTM D5185m	50	7	23	31
Barium	ppm	ASTM D5185m	5	8	0	0
Molybdenum	ppm	ASTM D5185m	50	52	50	50
Manganese	ppm	ASTM D5185m	0	0	<1	0
Magnesium	ppm	ASTM D5185m	560	460	603	589
Calcium	ppm	ASTM D5185m	1510	1306	1524	1575
Phosphorus	ppm	ASTM D5185m	780	712	835	785
Zinc	ppm	ASTM D5185m	870	832	1000	966
Sulfur	ppm	ASTM D5185m	2040	2225	2569	2590
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	16.7	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	8.9	6.9	7.5
Visc @ 100°C	cSt	ASTM D445	15.1	14.5	14.4	14.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0112921 **Received** : 26 Feb 2024
Lab Number : 06100020 **Tested** : 28 Feb 2024
Unique Number : 10898250 **Diagnosed** : 28 Feb 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: GLYCOL)

GFL Environmental - 017 - Durham
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 Durham, NC
 US 27703
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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)