



Machine Id
933011
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for faulty combustion and a possible overheat condition. We recommend that you drain the oil from the component if this has not already been done.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0102639	GFL0090610	---
Sample Date		Client Info		12 Jan 2024	24 Aug 2023	---
Machine Age	hrs	Client Info		72560	2248	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	31	19	---
Chromium	ppm	ASTM D5185(m)	>5	2	2	---
Nickel	ppm	ASTM D5185(m)	>4	2	<1	---
Titanium	ppm	ASTM D5185(m)	>5	0	<1	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>25	11	8	---
Lead	ppm	ASTM D5185(m)	>40	5	1	---
Copper	ppm	ASTM D5185(m)	>150	4	2	---
Tin	ppm	ASTM D5185(m)	>4	1	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

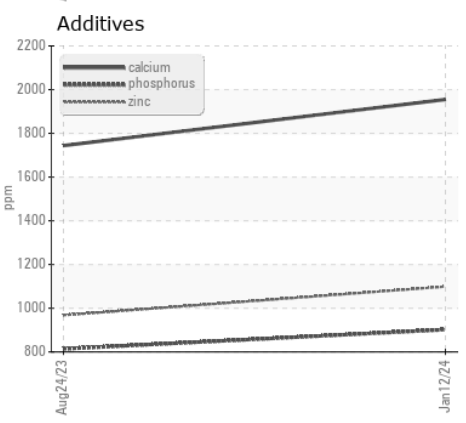
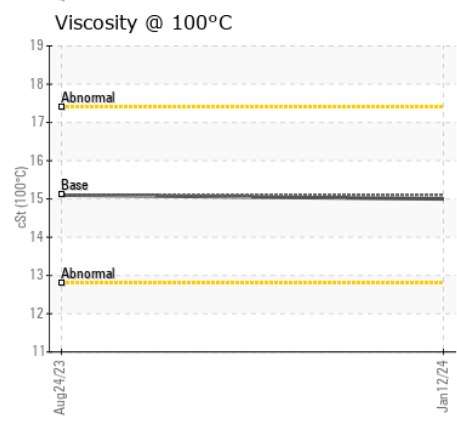
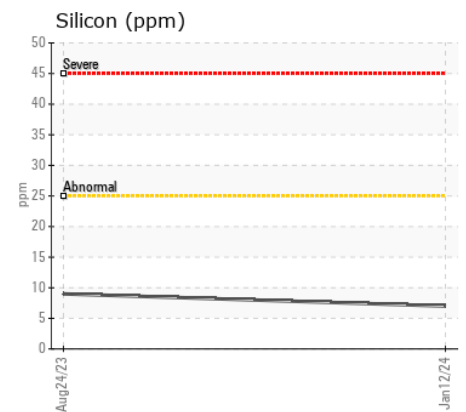
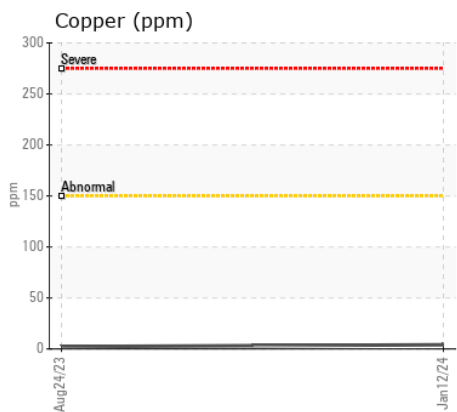
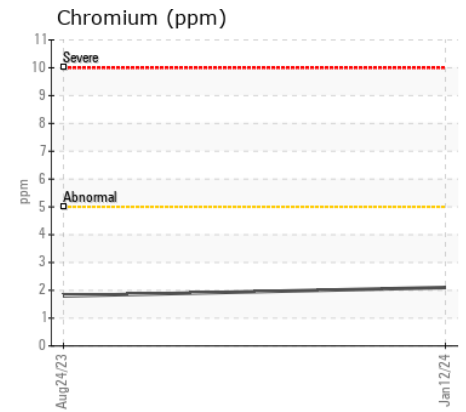
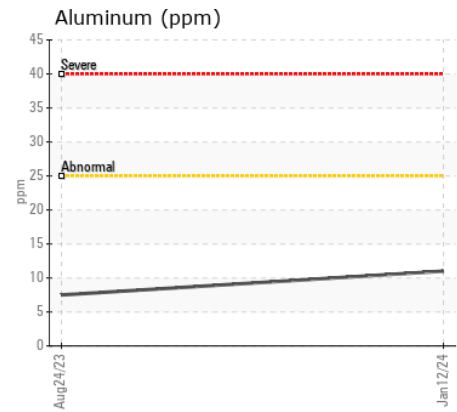
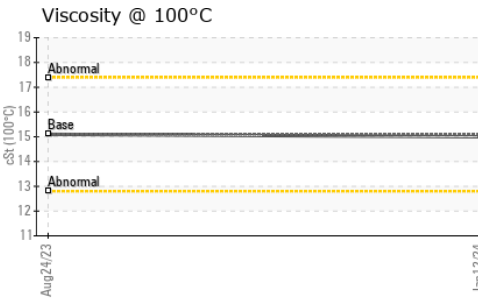
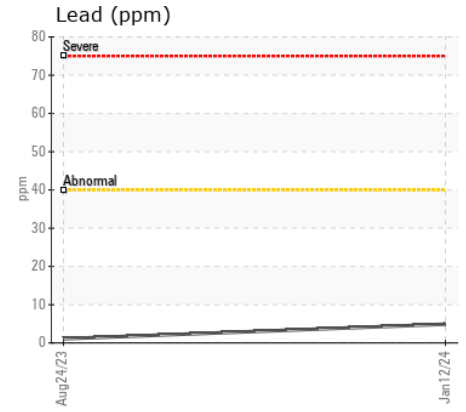
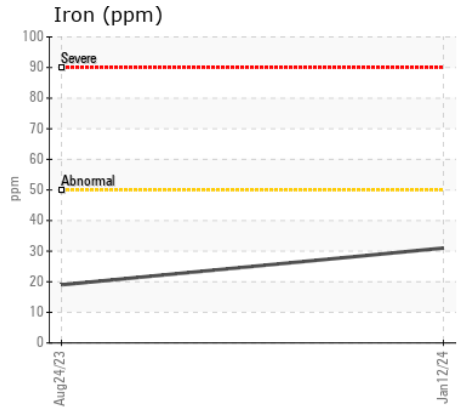
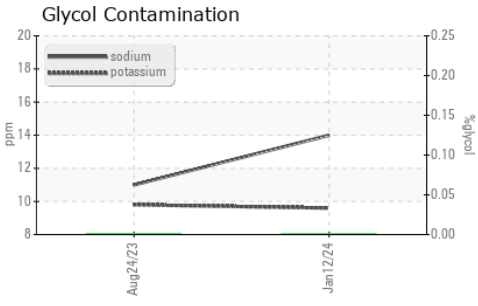
There is an abnormal level of sulfation indicated.

Silicon	ppm	ASTM D5185(m)	>25	7	9	---
Potassium	ppm	ASTM D5185(m)	>20	10	10	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol	%	ASTM D7922*		0.0	0.0	---
Soot %	%	ASTM D7844*		0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	14.2	12.5	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	▲ 32.2	28.3	---
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	---

FLUID CONDITION

A small degree of oil oxidation was indicated. The oil is no longer serviceable.

Sodium	ppm	ASTM D5185(m)		14	11	---
Boron	ppm	ASTM D5185(m)	50	6	8	---
Barium	ppm	ASTM D5185(m)	5	0	0	---
Molybdenum	ppm	ASTM D5185(m)	50	65	57	---
Manganese	ppm	ASTM D5185(m)	0	1	1	---
Magnesium	ppm	ASTM D5185(m)	560	704	625	---
Calcium	ppm	ASTM D5185(m)	1510	1955	1744	---
Phosphorus	ppm	ASTM D5185(m)	780	902	814	---
Zinc	ppm	ASTM D5185(m)	870	1099	968	---
Sulfur	ppm	ASTM D5185(m)	2040	2300	1993	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	▲ 30.5	23.1	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	15.0	15.1	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW
Sample No. : GFL0102639 **Received** : 22 Jan 2024
Lab Number : 02610178 **Diagnosed** : 23 Jan 2024
Unique Number : 5711264 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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