



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
731101
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0097785	GFL0081607	GFL0071060
Sample Date		Client Info		08 Jan 2024	25 Jul 2023	16 Feb 2023
Machine Age	hrs	Client Info		6582	5458	3218
Oil Age	hrs	Client Info		1200	1200	3218
Filter Age	hrs	Client Info		1200	1200	3218
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	13	10	11
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>9	2	2	2
Lead	ppm	ASTM D5185(m)	>30	15	4	2
Copper	ppm	ASTM D5185(m)	>35	3	2	2
Tin	ppm	ASTM D5185(m)	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

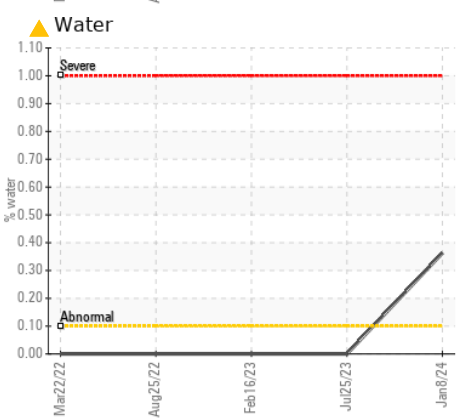
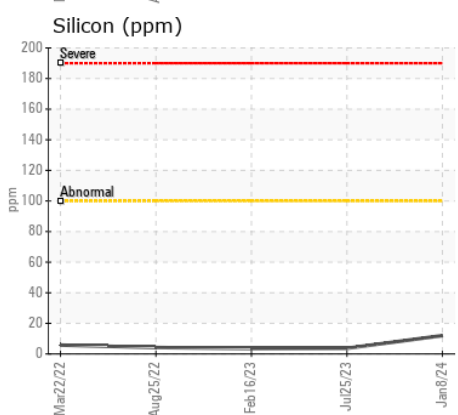
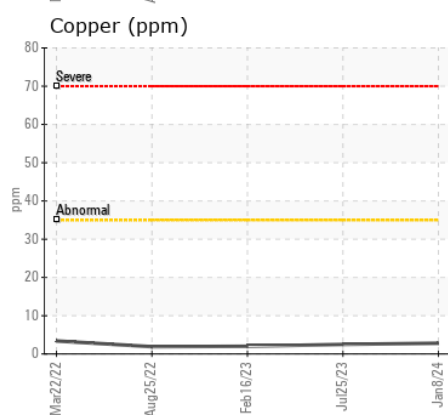
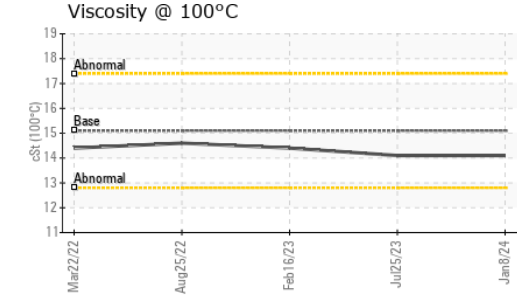
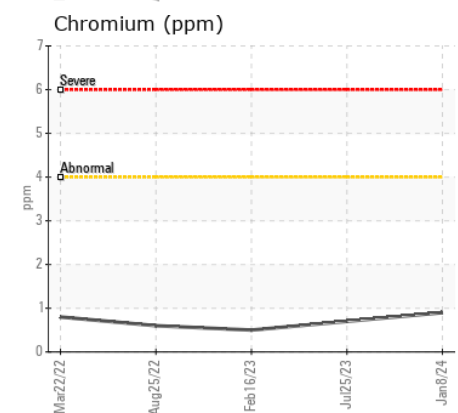
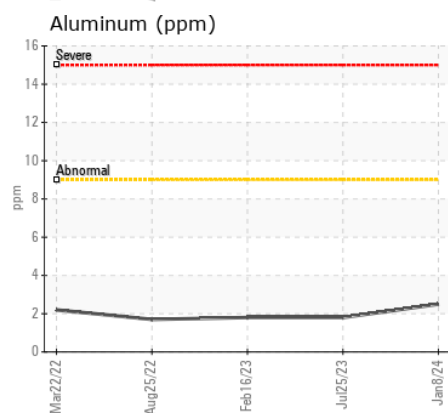
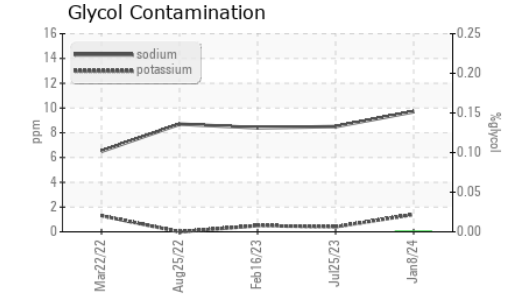
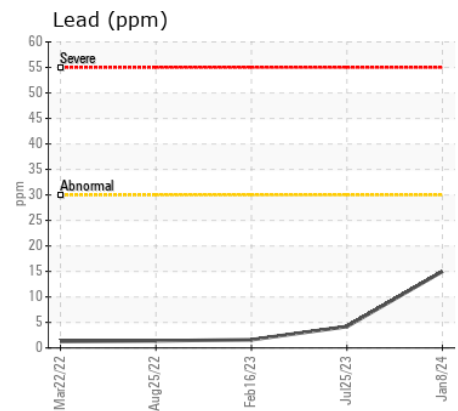
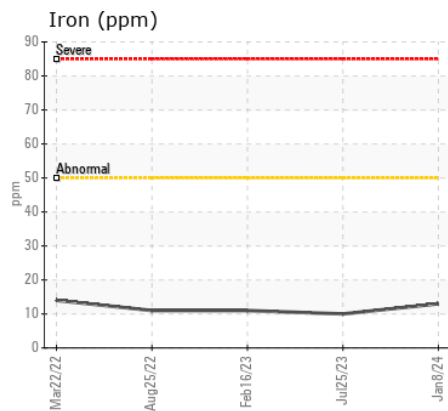
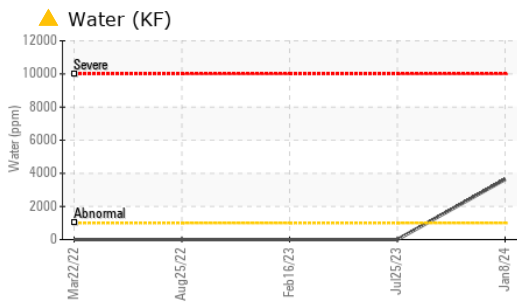
There is a moderate concentration of water present in the oil. Test for glycol is negative.

Silicon	ppm	ASTM D5185(m)	>+100	12	4	4
Potassium	ppm	ASTM D5185(m)	>20	1	<1	<1
Water	%	ASTM D6304*	>0.1	▲ 0.363	---	---
ppm Water	ppm	ASTM D6304*	>1000	▲ 3636	---	---
Glycol	%	ASTM D7922*		0.0	---	---
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	13.9	12.1	12.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.6	24.9	25.6
Emulsified Water	scalar	Visual*	>0.1	▲ .2%	NEG	NEG

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		10	8	8
Boron	ppm	ASTM D5185(m)	50	7	8	8
Barium	ppm	ASTM D5185(m)	5	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	57	56	53
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	560	613	595	563
Calcium	ppm	ASTM D5185(m)	1510	1701	1621	1652
Phosphorus	ppm	ASTM D5185(m)	780	773	737	735
Zinc	ppm	ASTM D5185(m)	870	974	932	938
Sulfur	ppm	ASTM D5185(m)	2040	2163	2016	2046
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.8	19.5	19.9
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	14.1	14.1	14.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 209 - Hamilton**
Sample No. : GFL0097785 **Received** : 10 Jan 2024
Lab Number : 02607665 **Diagnosed** : 11 Jan 2024
Unique Number : 5708751 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol, KF)
 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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