



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
8421
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)

RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0102601	GFL0097621	GFL0072851
Sample Date		Client Info		18 Feb 2024	14 Nov 2023	13 Mar 2023
Machine Age	hrs	Client Info		13035	12462	11395
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
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	<1	0
Aluminum	ppm	ASTM D5185(m)	>9	2	2	2
Lead	ppm	ASTM D5185(m)	>30	2	<1	<1
Copper	ppm	ASTM D5185(m)	>35	2	2	3
Tin	ppm	ASTM D5185(m)	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

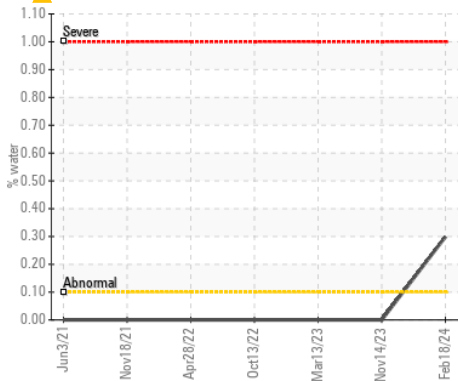
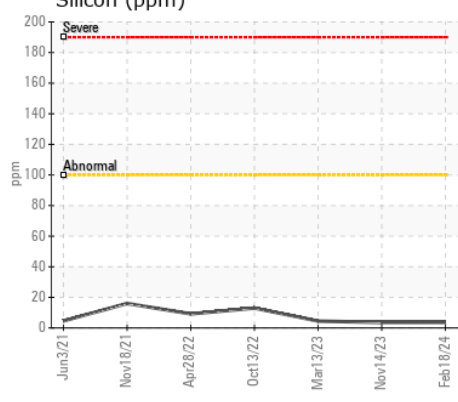
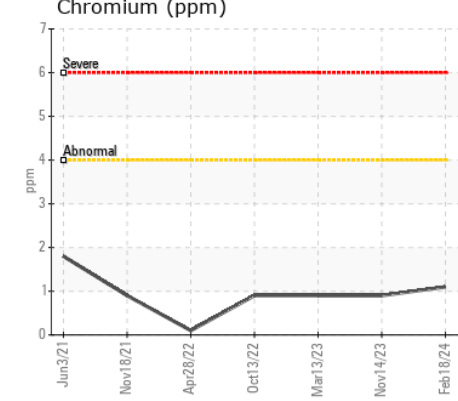
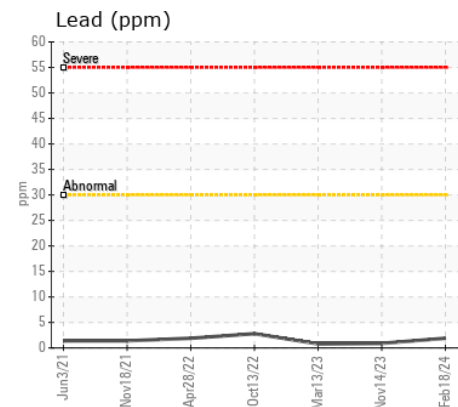
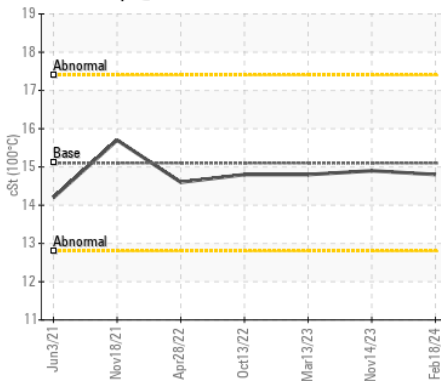
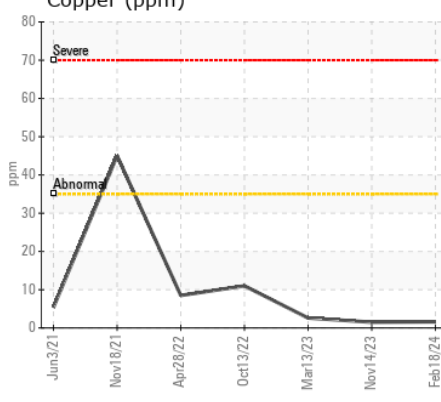
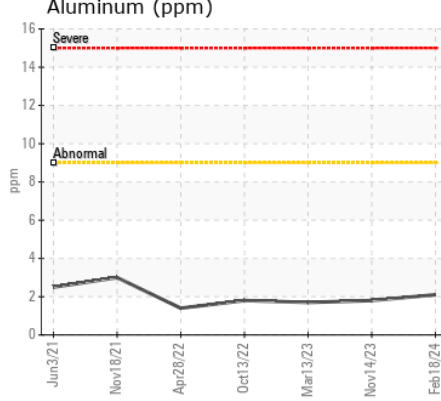
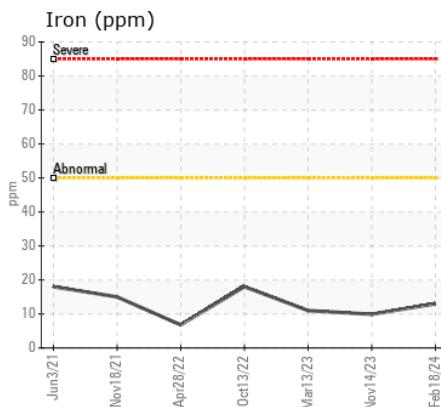
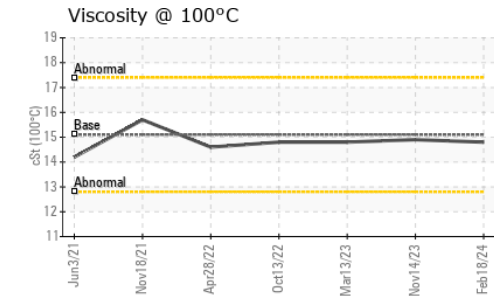
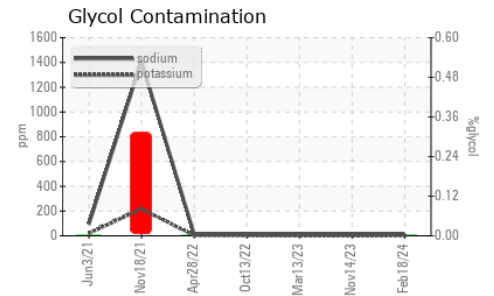
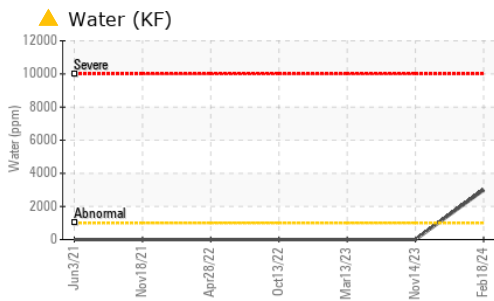
There is a moderate concentration of water present in the oil. Test for glycol is negative.

Silicon	ppm	ASTM D5185(m)	>+100	4	4	4
Potassium	ppm	ASTM D5185(m)	>20	2	0	<1
Water	%	ASTM D6304*	>0.1	▲ 0.299	---	---
ppm Water	ppm	ASTM D6304*	>1000	▲ 2998	---	---
Glycol	%	ASTM D7922*		0.0	---	---
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.8	12.2	11.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.6	25.3	22.5
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	10	10
Boron	ppm	ASTM D5185(m)	50	11	8	11
Barium	ppm	ASTM D5185(m)	5	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	54	56	53
Manganese	ppm	ASTM D5185(m)	0	<1	<1	1
Magnesium	ppm	ASTM D5185(m)	560	578	568	535
Calcium	ppm	ASTM D5185(m)	1510	1682	1717	1719
Phosphorus	ppm	ASTM D5185(m)	780	728	676	707
Zinc	ppm	ASTM D5185(m)	870	921	941	906
Sulfur	ppm	ASTM D5185(m)	2040	2142	2084	2072
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.9	20.5	18.6
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	14.8	14.9	14.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0102601
Lab Number : 02617611
Unique Number : 5734721
Test Package : MOB 1 (Additional Tests: Glycol, KF)
Received : 23 Feb 2024
Tested : 27 Feb 2024
Diagnosed : 27 Feb 2024 - Kevin Marson

GFL Environmental - 554 - Edmonton SW
 8409 -15th Street NW
 Edmonton, AB
 CA T6P 0B8
 Contact: Tim Greig
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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.