



Machine Id
831001
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0112548	GFL0101742	GFL0059981
Sample Date		Client Info		24 Mar 2024	29 Nov 2023	18 May 2023
Machine Age	hrs	Client Info		7358	6880	4878
Oil Age	hrs	Client Info		0	0	0
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				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	16	23	17
Chromium	ppm	ASTM D5185(m)	>4	0	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	3	18	21
Lead	ppm	ASTM D5185(m)	>30	0	8	2
Copper	ppm	ASTM D5185(m)	>35	1	1	1
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

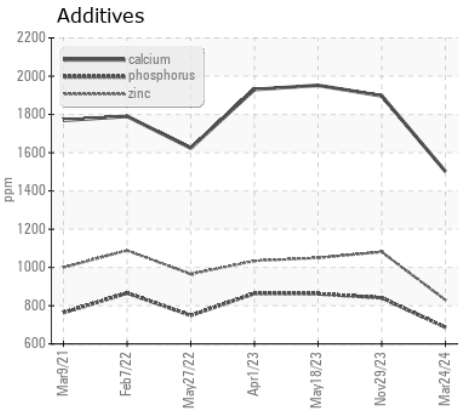
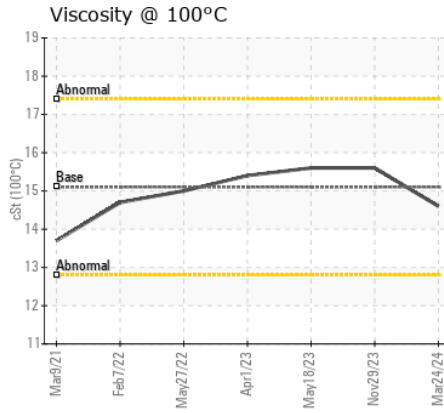
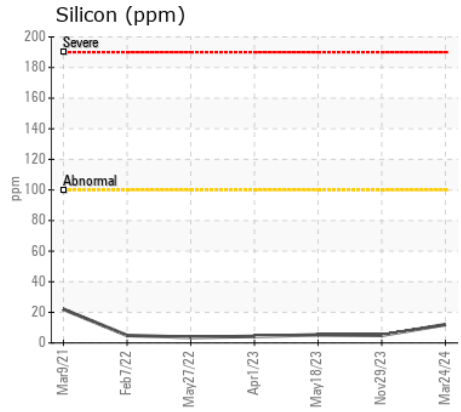
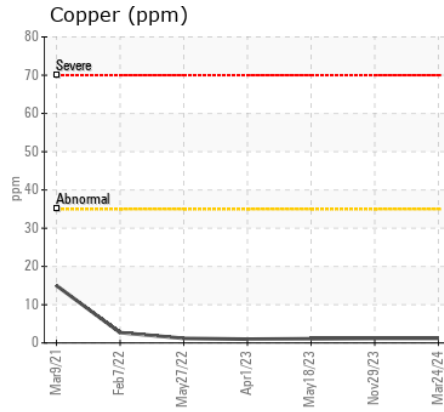
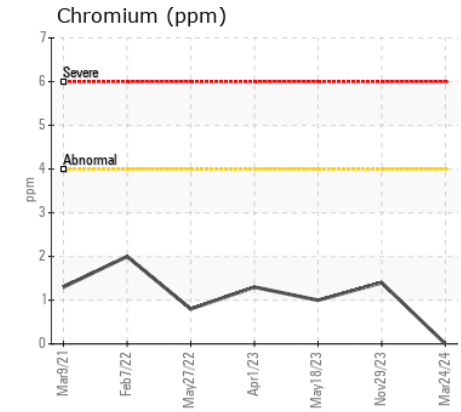
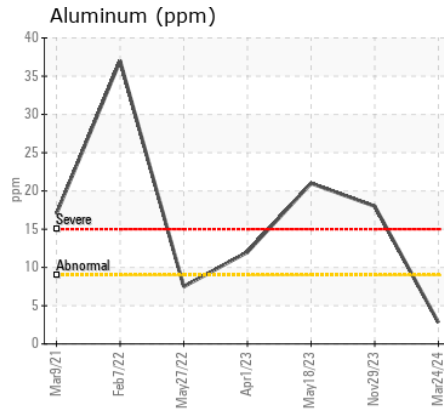
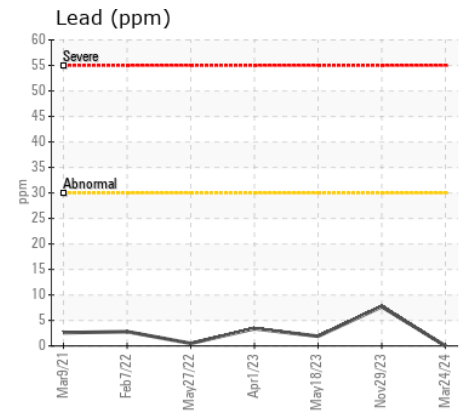
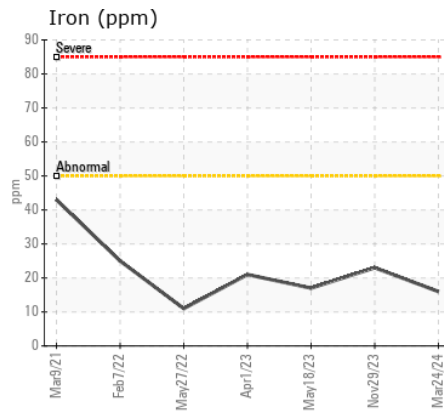
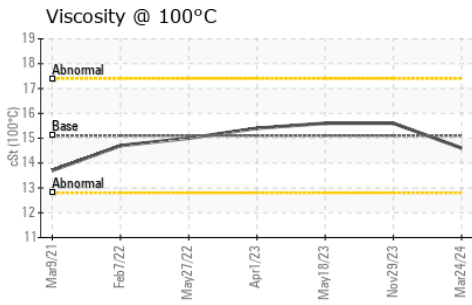
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	12	5	5
Potassium	ppm	ASTM D5185(m)	>20	4	33	30
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		---	0.0	---
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	8.5	13.7	12.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.9	29.6	27.1
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		4	11	3
Boron	ppm	ASTM D5185(m)	50	22	10	10
Barium	ppm	ASTM D5185(m)	5	8	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	48	64	59
Manganese	ppm	ASTM D5185(m)	0	2	<1	1
Magnesium	ppm	ASTM D5185(m)	560	524	701	644
Calcium	ppm	ASTM D5185(m)	1510	1502	1897	1952
Phosphorus	ppm	ASTM D5185(m)	780	687	841	862
Zinc	ppm	ASTM D5185(m)	870	830	1081	1050
Sulfur	ppm	ASTM D5185(m)	2040	1889	2154	2169
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.4	▲ 26.0	22.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	14.6	▲ 15.6	15.6



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112548
Lab Number : 02624920
Unique Number : 5750039
Test Package : MOB 1
Received : 27 Mar 2024
Tested : 27 Mar 2024
Diagnosed : 27 Mar 2024 - Wes Davis

GFL Environmental - 554 - Edmonton SW
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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.