



Machine Id
731057
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		GFL0117123	GFL0097770	GFL0060993
Sample Date		Client Info		07 Jun 2024	24 Oct 2023	10 Nov 2022
Machine Age	hrs	Client Info		6611	5505	3470
Oil Age	hrs	Client Info		1200	1200	1100
Filter Age	hrs	Client Info		1200	1200	1100
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	16	13	28
Chromium	ppm	ASTM D5185(m)	>4	1	1	2
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	2
Titanium	ppm	ASTM D5185(m)		<1	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>9	4	5	14
Lead	ppm	ASTM D5185(m)	>30	7	8	13
Copper	ppm	ASTM D5185(m)	>35	<1	<1	4
Tin	ppm	ASTM D5185(m)	>4	<1	<1	2
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

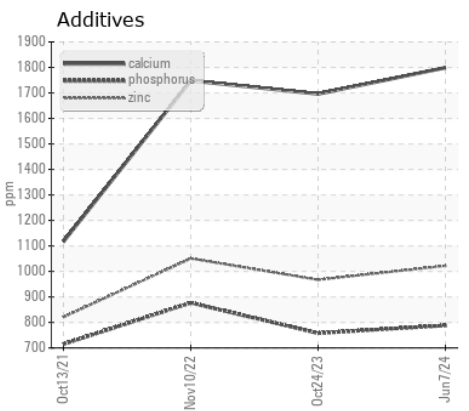
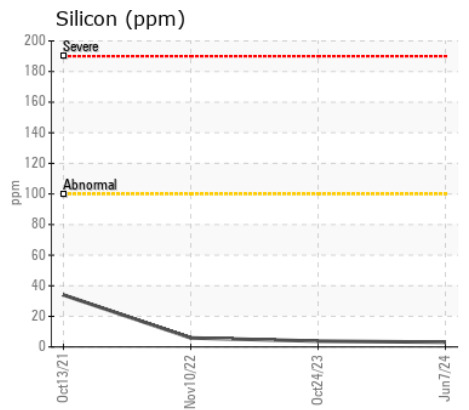
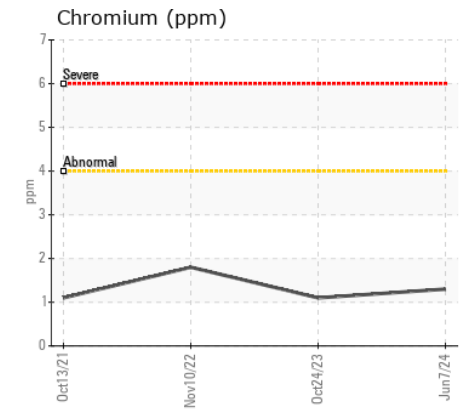
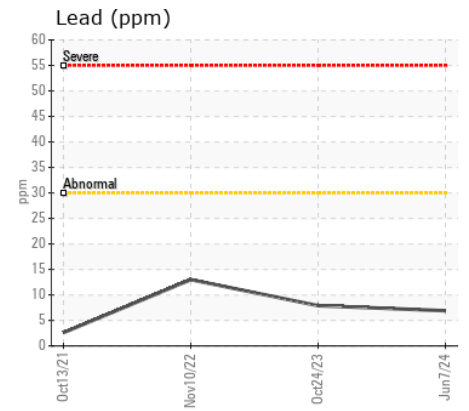
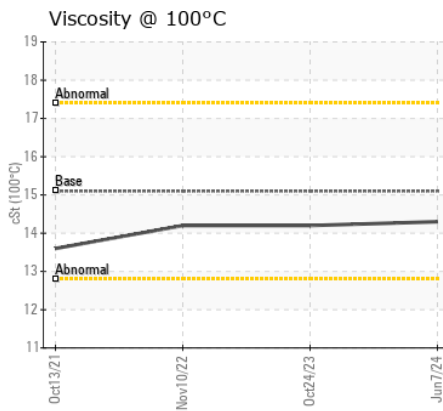
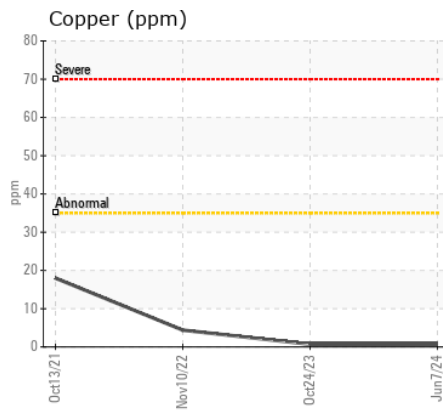
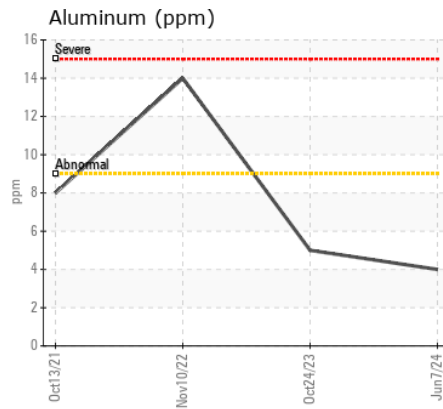
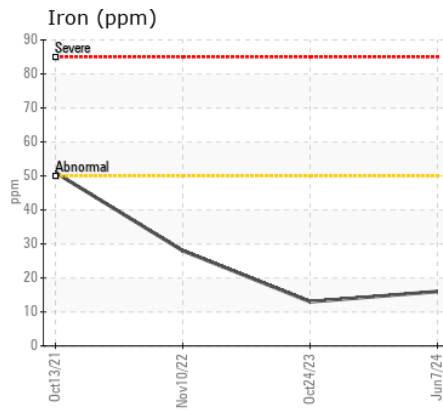
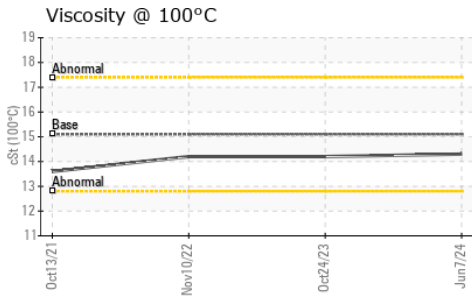
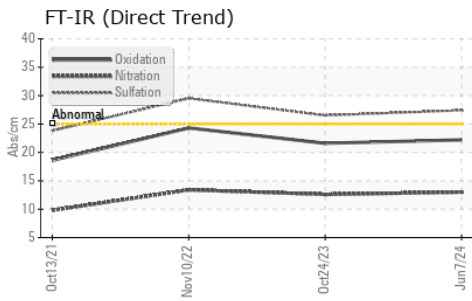
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	3	4	6
Potassium	ppm	ASTM D5185(m)	>20	8	12	34
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	13.0	12.6	13.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.4	26.5	29.5
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)		9	8	9
Boron	ppm	ASTM D5185(m)	50	8	6	9
Barium	ppm	ASTM D5185(m)	5	<1	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	59	61	66
Manganese	ppm	ASTM D5185(m)	0	<1	0	2
Magnesium	ppm	ASTM D5185(m)	560	670	628	674
Calcium	ppm	ASTM D5185(m)	1510	1799	1696	1748
Phosphorus	ppm	ASTM D5185(m)	780	788	758	877
Zinc	ppm	ASTM D5185(m)	870	1022	967	1051
Sulfur	ppm	ASTM D5185(m)	2040	2094	2085	2168
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.2	21.6	24.3
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	14.3	14.2	14.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117123
Lab Number : 02640983
Unique Number : 5798522
Test Package : MOB 1

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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.