



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
931004

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0117110	GFL0097772	GFL0081582
Sample Date		Client Info		18 Jun 2024	20 Oct 2023	24 Apr 2023
Machine Age	hrs	Client Info		6275	5093	4133
Oil Age	hrs	Client Info		1200	1200	1200
Filter Age	hrs	Client Info		1200	1200	1200
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	19	23	17
Chromium	ppm	ASTM D5185(m)	>5	1	1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>5	<1	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	5	6	4
Lead	ppm	ASTM D5185(m)	>40	8	9	9
Copper	ppm	ASTM D5185(m)	>150	2	2	2
Tin	ppm	ASTM D5185(m)	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

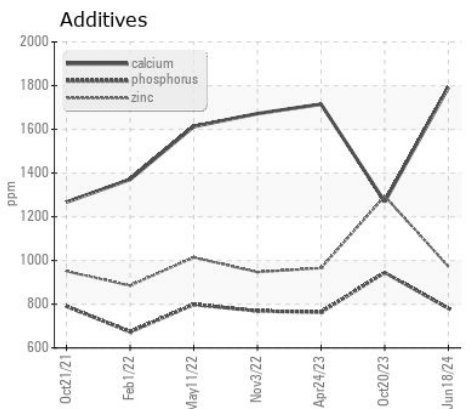
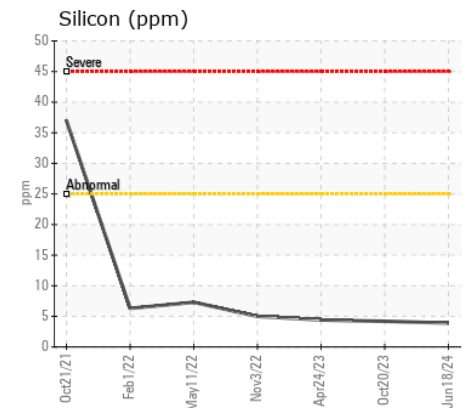
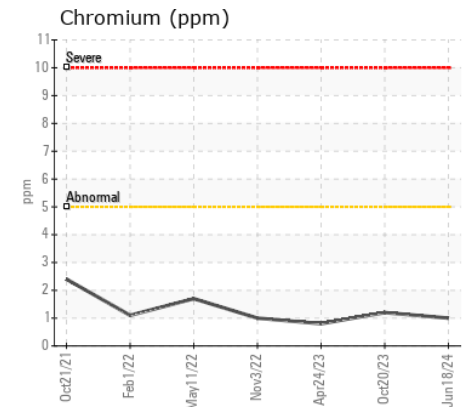
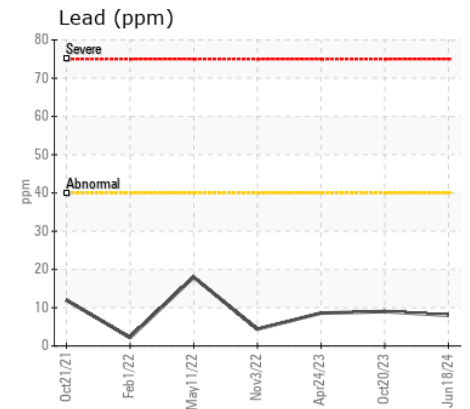
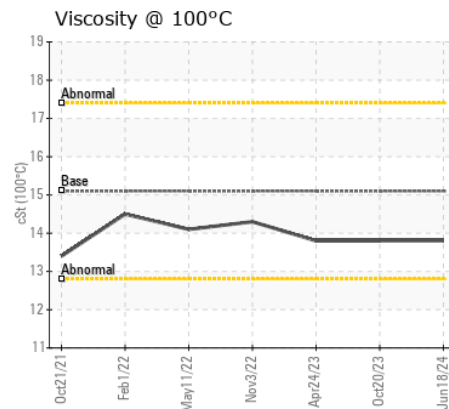
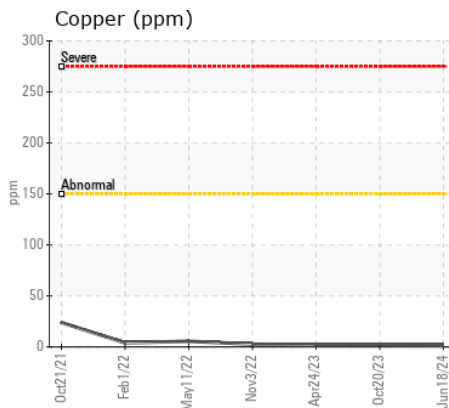
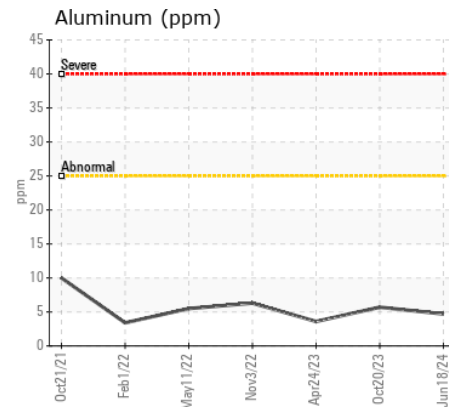
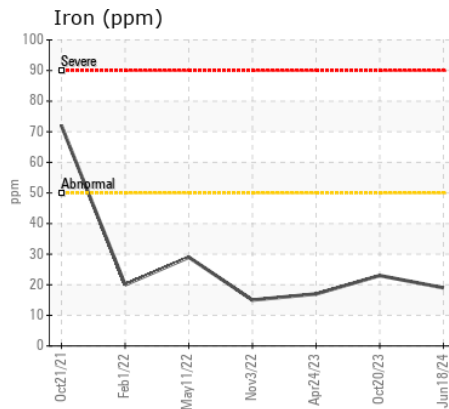
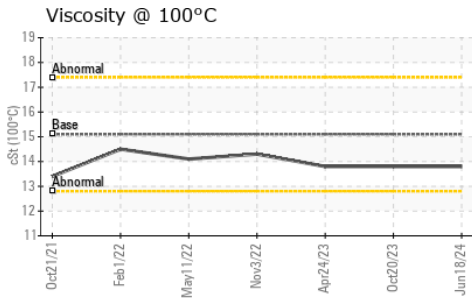
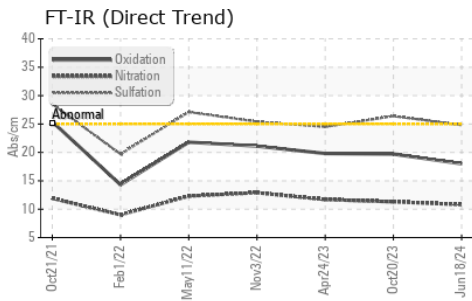
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	4	4
Potassium	ppm	ASTM D5185(m)	>20	8	8	5
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	10.8	11.3	11.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.8	26.4	24.5
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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	10	10
Boron	ppm	ASTM D5185(m)	50	12	1	6
Barium	ppm	ASTM D5185(m)	5	<1	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	86	68	55
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	560	512	1032	605
Calcium	ppm	ASTM D5185(m)	1510	1792	1269	1715
Phosphorus	ppm	ASTM D5185(m)	780	781	945	763
Zinc	ppm	ASTM D5185(m)	870	973	1294	965
Sulfur	ppm	ASTM D5185(m)	2040	2111	2201	2058
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.0	19.7	19.8
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	13.8	13.8	13.8



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117110
Lab Number : 02643995
Unique Number : 5801534
Test Package : MOB 1 (Additional Tests: Visual)

GFL Environmental - 209 - Hamilton
 560 Seaman Street
 Stoney Creek, ON
 CA L8E 3X7
 Contact: Fred Carleton
 fred.carleton@gflenv.com
 T: (289)925-6693
 F: (905)664-9008

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.