



Machine Id
731060
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		GFL0117118	GFL0097761	PC0016947
Sample Date		Client Info		13 May 2024	03 Oct 2023	30 May 2023
Machine Age	hrs	Client Info		5511	4450	4067
Oil Age	hrs	Client Info		1200	0	1200
Filter Age	hrs	Client Info		1200	0	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	15	13	19
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	3
Lead	ppm	ASTM D5185(m)	>30	13	2	7
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

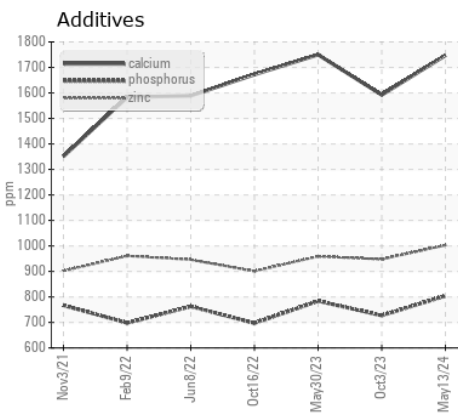
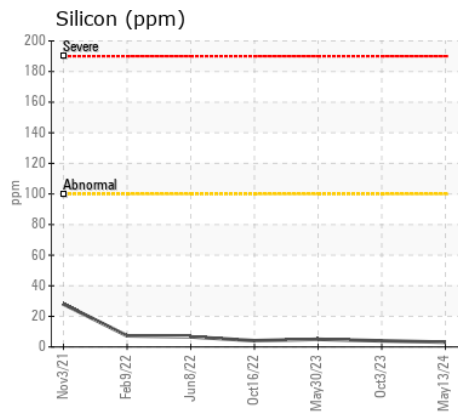
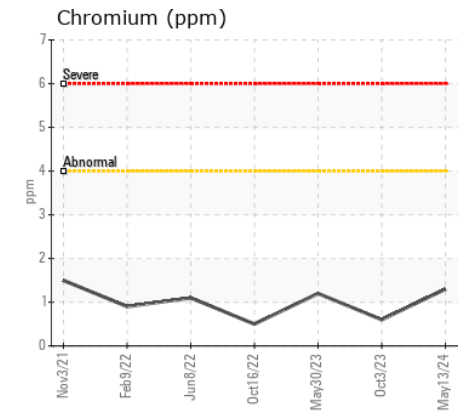
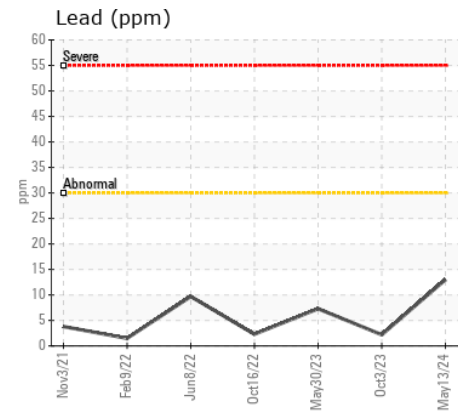
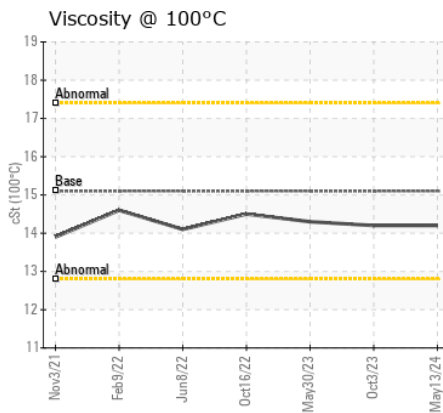
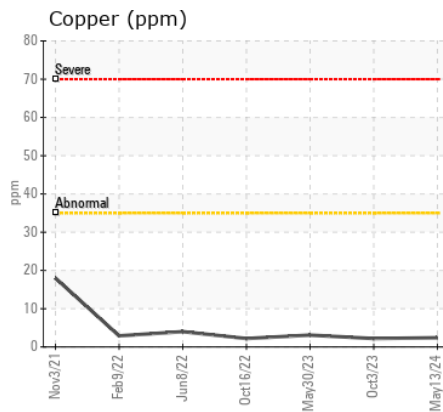
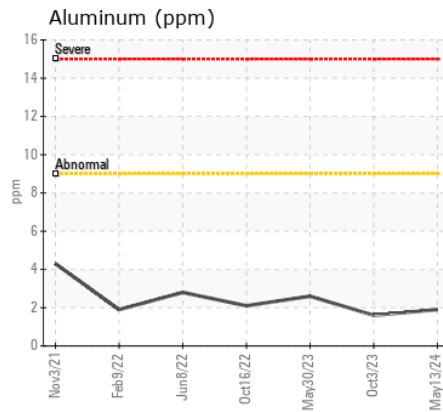
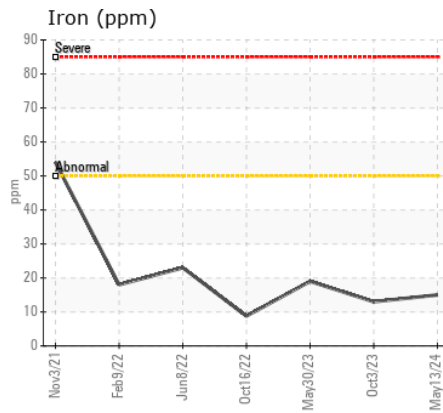
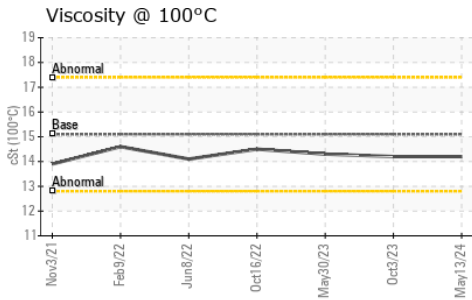
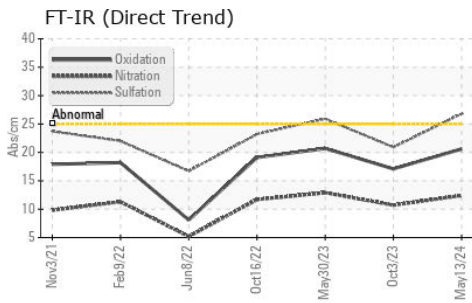
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	3	4	5
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	1
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.4	10.7	12.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.8	20.9	25.9
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	11	13	7
Barium	ppm	ASTM D5185(m)	5	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	57	58	58
Manganese	ppm	ASTM D5185(m)	0	<1	<1	1
Magnesium	ppm	ASTM D5185(m)	560	657	590	600
Calcium	ppm	ASTM D5185(m)	1510	1747	1592	1750
Phosphorus	ppm	ASTM D5185(m)	780	804	727	784
Zinc	ppm	ASTM D5185(m)	870	1003	948	959
Sulfur	ppm	ASTM D5185(m)	2040	2059	2094	2068
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.6	17.1	20.7
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	14.2	14.2	14.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117118
Lab Number : 02636254
Unique Number : 5785416
Test Package : MOB 1
Received : 17 May 2024
Tested : 17 May 2024
Diagnosed : 17 May 2024 - Wes Davis

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.