



Machine Id
7933
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (22 LTR)

RECOMMENDATION

Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0061151	GFL0097579	GFL0054499
Sample Date		Client Info		09 Jun 2024	27 Dec 2023	10 Aug 2022
Machine Age	hrs	Client Info		22865	21710	19589
Oil Age	hrs	Client Info		2170	1015	1145
Filter Age	hrs	Client Info		2170	1015	1145
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	SEVERE	ABNORMAL

WEAR

Iron ppm levels are severe. Chromium ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated. Ring wear is indicated.

PQ		ASTM D8184*	>45	21	0	3
Iron	ppm	ASTM D5185(m)	>50	▲ 135	▲ 162	▲ 79
Chromium	ppm	ASTM D5185(m)	>5	▲ 7	▲ 17	▲ 8
Nickel	ppm	ASTM D5185(m)	>4	2	3	1
Titanium	ppm	ASTM D5185(m)	>5	0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	11	11	8
Lead	ppm	ASTM D5185(m)	>40	10	19	16
Copper	ppm	ASTM D5185(m)	>150	3	4	5
Tin	ppm	ASTM D5185(m)	>4	<1	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

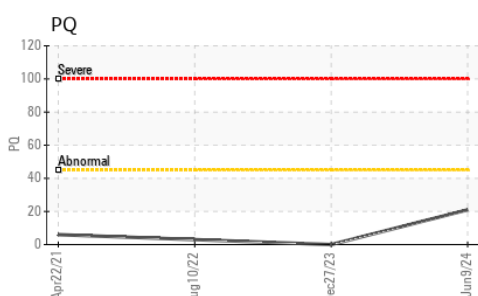
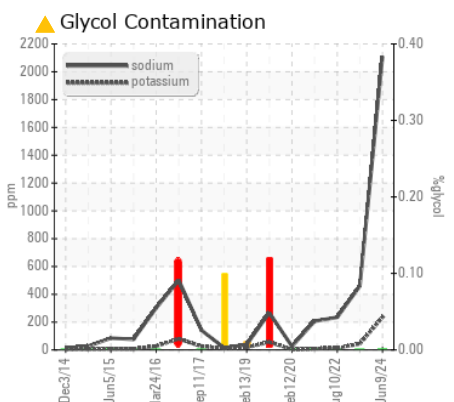
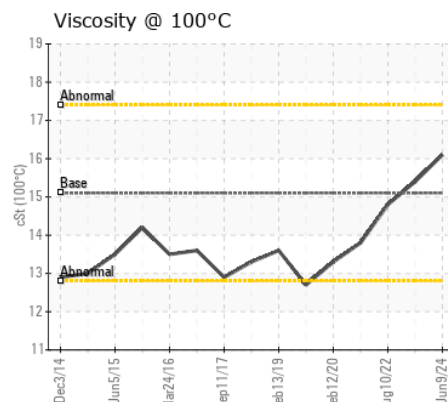
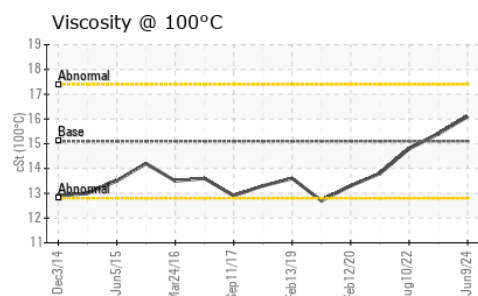
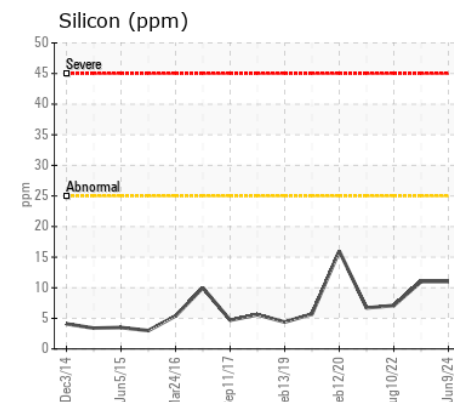
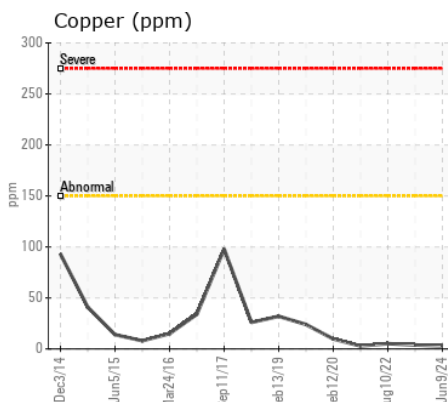
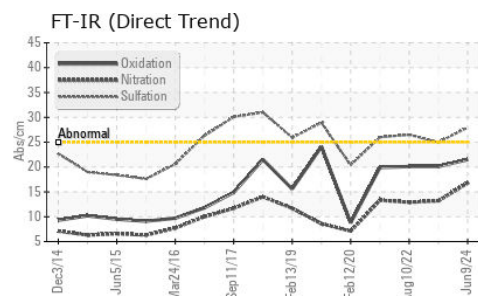
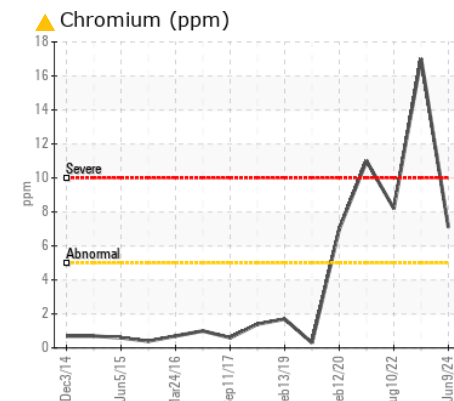
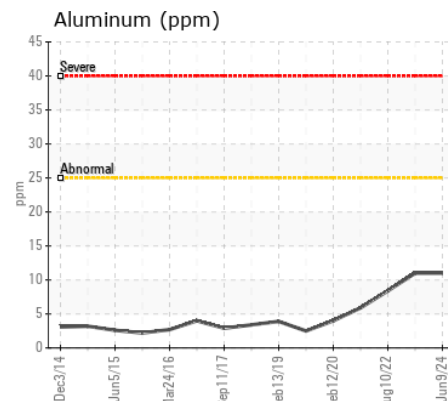
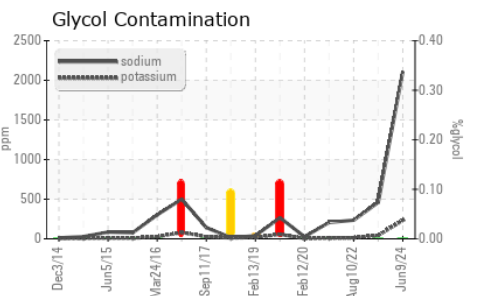
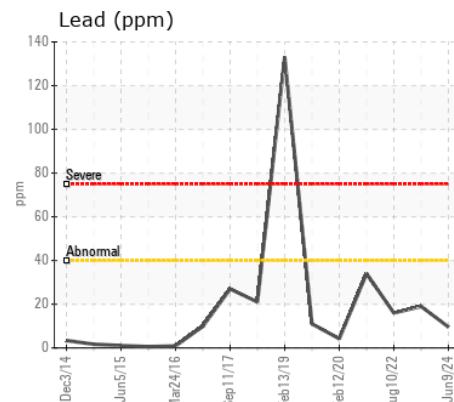
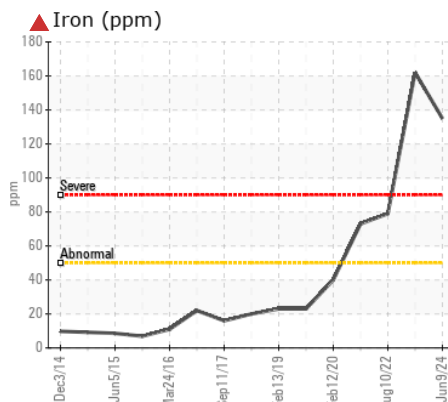
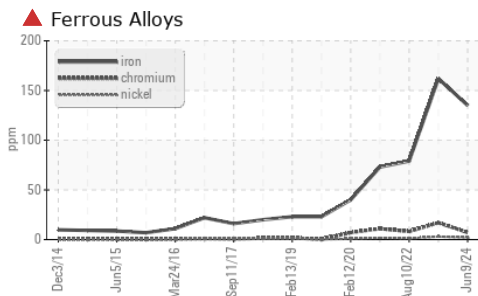
Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative.

Silicon	ppm	ASTM D5185(m)	>25	11	11	7
Potassium	ppm	ASTM D5185(m)	>20	▲ 234	44	12
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	0.0
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	16.8	13.2	12.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.9	25.0	26.5
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear. The condition of the oil is acceptable for the time in service (see recommendation).

Sodium	ppm	ASTM D5185(m)		● 2109	● 460	● 235
Boron	ppm	ASTM D5185(m)	50	10	16	8
Barium	ppm	ASTM D5185(m)	5	<1	1	0
Molybdenum	ppm	ASTM D5185(m)	50	91	69	67
Manganese	ppm	ASTM D5185(m)	0	2	3	2
Magnesium	ppm	ASTM D5185(m)	560	629	625	681
Calcium	ppm	ASTM D5185(m)	1510	1974	1834	1756
Phosphorus	ppm	ASTM D5185(m)	780	784	854	800
Zinc	ppm	ASTM D5185(m)	870	1109	1061	1076
Sulfur	ppm	ASTM D5185(m)	2040	2389	2364	2296
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.5	20.1	20.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	16.1	15.4	14.8



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0061151 **Received** : 11 Jun 2024
Lab Number : 02641101 **Tested** : 12 Jun 2024
Unique Number : 5798640 **Diagnosed** : 12 Jun 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol, PQ)

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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.