



Machine Id
729063
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)

RECOMMENDATION

Check for low coolant level. We advise that you check for the source of the coolant leak. Oil and filter 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		GFL0119117	GFL0106994	GFL0094245
Sample Date		Client Info		19 Jun 2024	01 Mar 2024	25 Nov 2023
Machine Age	hrs	Client Info		24921	20699	20173
Oil Age	hrs	Client Info		24921	0	0
Filter Age	hrs	Client Info		24921	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	12	18	2
Chromium	ppm	ASTM D5185m	>20	<1	0	0
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	<1	1
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	11	0	<1
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

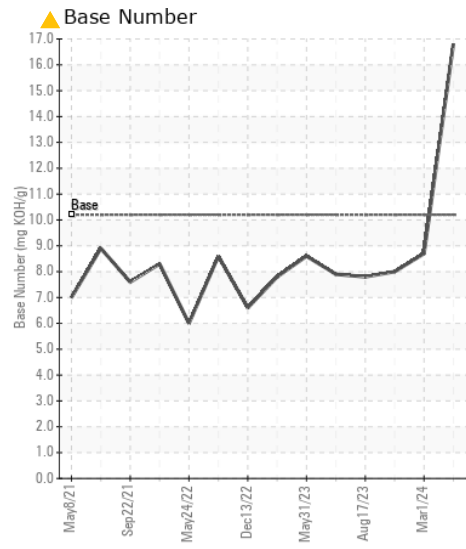
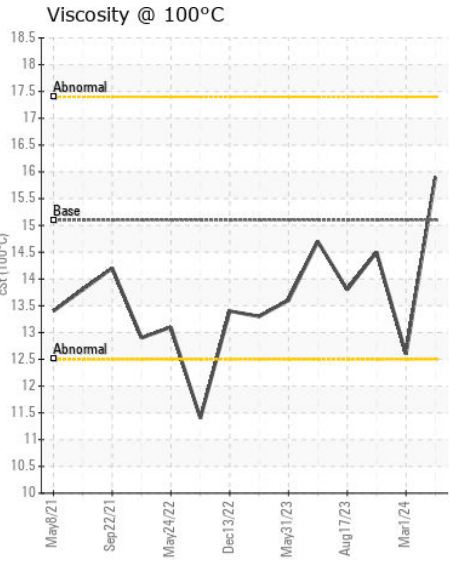
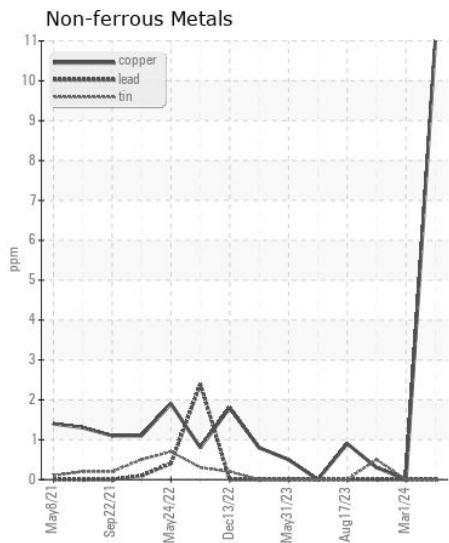
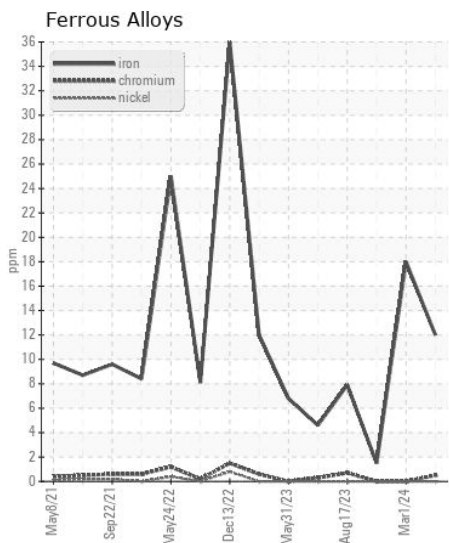
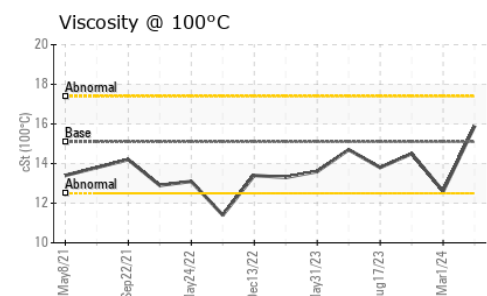
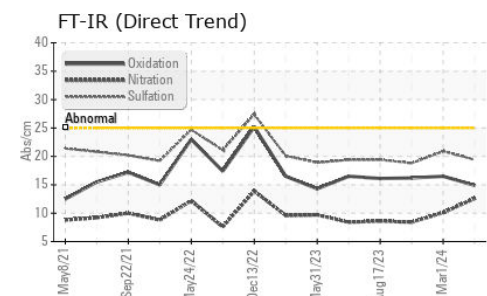
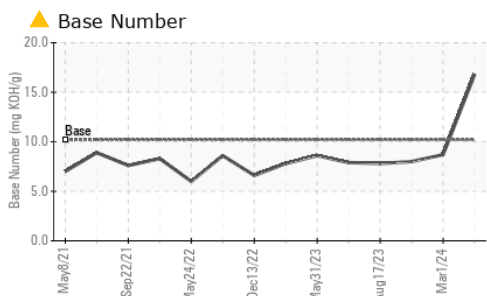
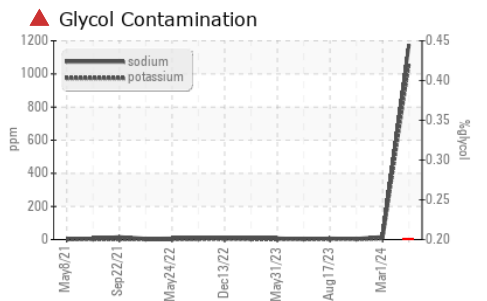
Sodium and/or potassium levels are high. Test for glycol is positive.

Silicon	ppm	ASTM D5185m	>25	8	2	2
Potassium	ppm	ASTM D5185m	>20	▲ 1059	6	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		▲ 0.20	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	1.5	0
Nitration	Abs/cm	*ASTM D7624	>20	12.6	10.1	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	20.9	18.8
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		▲ 1176	17	5
Boron	ppm	ASTM D5185m	50	2	2	23
Barium	ppm	ASTM D5185m	5	0	1	0
Molybdenum	ppm	ASTM D5185m	50	123	57	46
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	560	852	880	550
Calcium	ppm	ASTM D5185m	1510	1039	1016	1411
Phosphorus	ppm	ASTM D5185m	780	983	998	752
Zinc	ppm	ASTM D5185m	870	1193	1194	913
Sulfur	ppm	ASTM D5185m	2040	2896	2671	2324
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	16.5	16.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	▲ 16.8	8.7	8.0
Visc @ 100°C	cSt	ASTM D445	15.1	15.9	12.6	14.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0119117 **Received** : 21 Jun 2024
Lab Number : 06216608 **Tested** : 24 Jun 2024
Unique Number : 11089472 **Diagnosed** : 24 Jun 2024 - Sean Felton
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 882 - Gainesville
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 Gainesville, FL
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 Contact: ROBERT CLARK
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 T:
 F:

Certificate L2367
 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)