

Machine Id
501113
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. 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		GFL0115530	GFL0040296	GFL0016688
Sample Date		Client Info		26 Mar 2024	29 Dec 2021	10 Feb 2021
Machine Age	kms	Client Info		1534316	306451	209998
Oil Age	kms	Client Info		0	0	55668
Filter Age	kms	Client Info		0	0	55668
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	44	10	13
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>30	8	4	5
Lead	ppm	ASTM D5185(m)	>30	0	<1	<1
Copper	ppm	ASTM D5185(m)	>150	11	9	25
Tin	ppm	ASTM D5185(m)	>5	<1	1	2
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

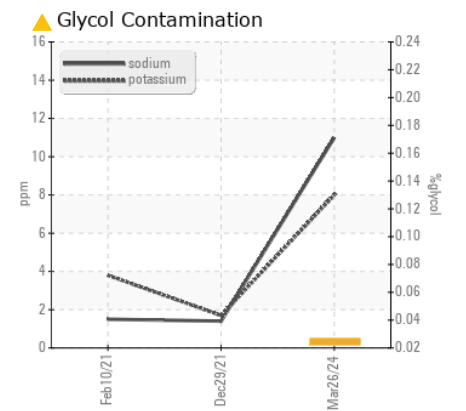
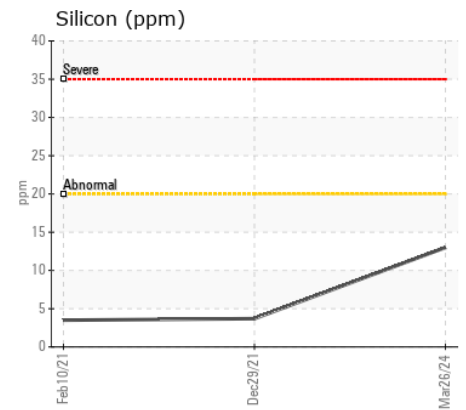
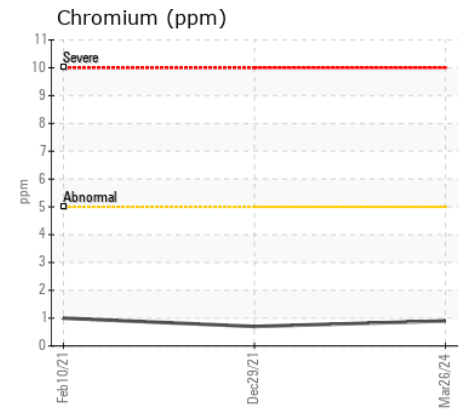
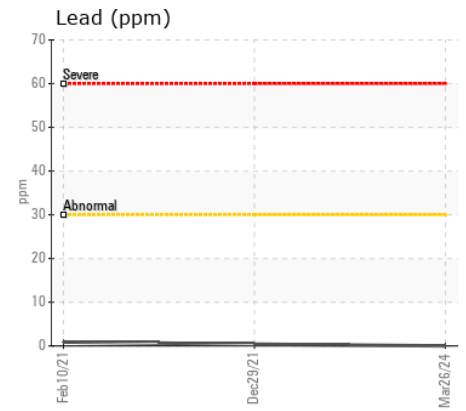
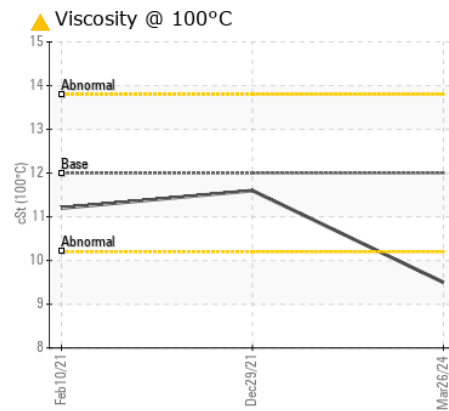
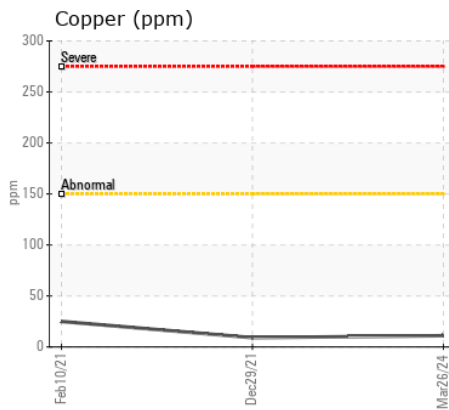
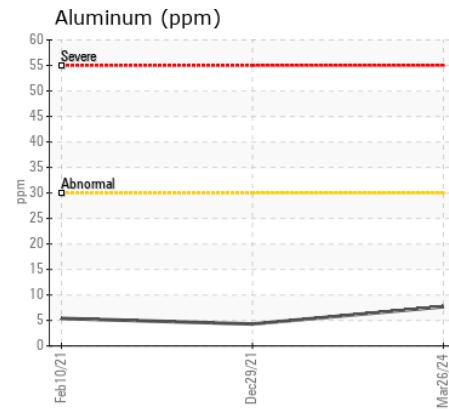
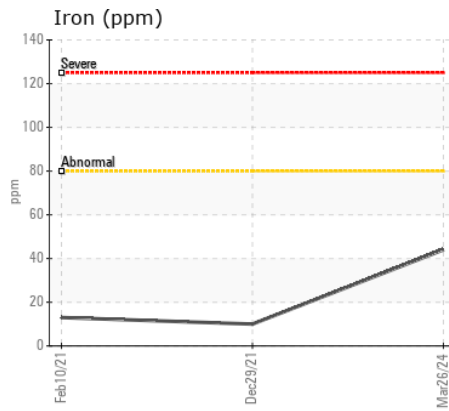
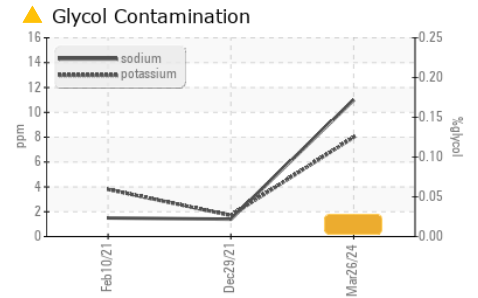
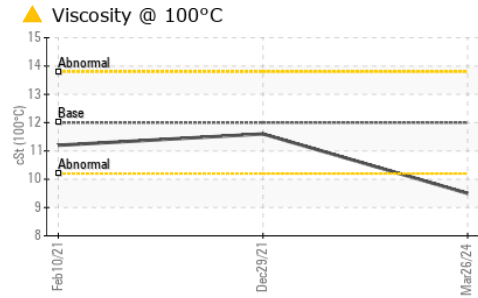
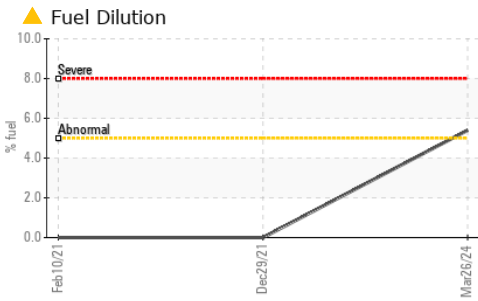
Test for glycol is positive. There is a moderate amount of fuel present in the oil. There is a light concentration of glycol present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>20	13	4	4
Potassium	ppm	ASTM D5185(m)	>20	▲ 8	2	4
Fuel	%	ASTM D7593*	>5	▲ 5.4	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		▲ 0.027	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.4	0	0.2
Nitration	Abs/cm	ASTM D7624*	>20	9.1	6.0	7.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.8	19.5	19.1
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		11	1	2
Boron	ppm	ASTM D5185(m)	2	10	4	4
Barium	ppm	ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	50	55	58	59
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	854	995	973
Calcium	ppm	ASTM D5185(m)	1050	986	1033	1043
Phosphorus	ppm	ASTM D5185(m)	995	893	1090	999
Zinc	ppm	ASTM D5185(m)	1180	1061	1214	1252
Sulfur	ppm	ASTM D5185(m)	2600	2937	2540	2583
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.7	14.0	14.6
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	▲ 9.5	11.6	11.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0115530 **Received** : 28 Mar 2024
Lab Number : 02625116 **Tested** : 01 Apr 2024
Unique Number : 5750235 **Diagnosed** : 01 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, PercentFuel)

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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.