



Machine Id
920001
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. 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		GFL0098007	---	---
Sample Date		Client Info		05 Feb 2024	---	---
Machine Age	hrs	Client Info		22136	---	---
Oil Age	hrs	Client Info		1348	---	---
Filter Age	hrs	Client Info		1348	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				SEVERE	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>75	33	---	---
Chromium	ppm	ASTM D5185(m)	>5	2	---	---
Nickel	ppm	ASTM D5185(m)	>4	<1	---	---
Titanium	ppm	ASTM D5185(m)	>2	0	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>15	3	---	---
Lead	ppm	ASTM D5185(m)	>25	2	---	---
Copper	ppm	ASTM D5185(m)	>100	2	---	---
Tin	ppm	ASTM D5185(m)	>4	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

CONTAMINATION

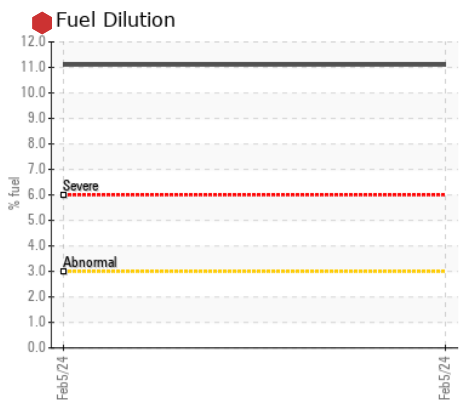
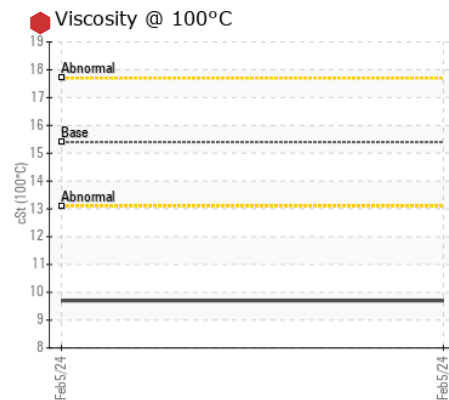
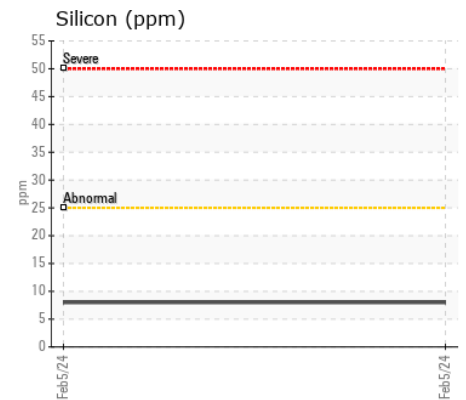
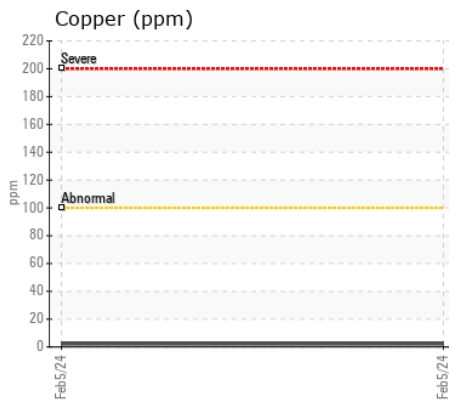
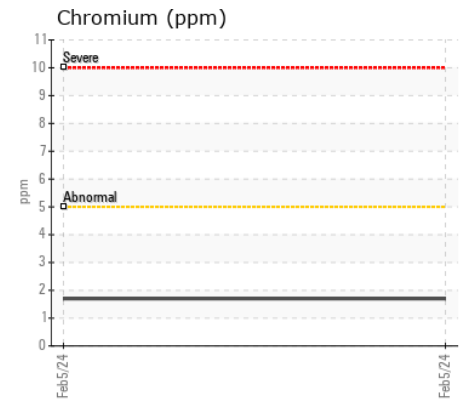
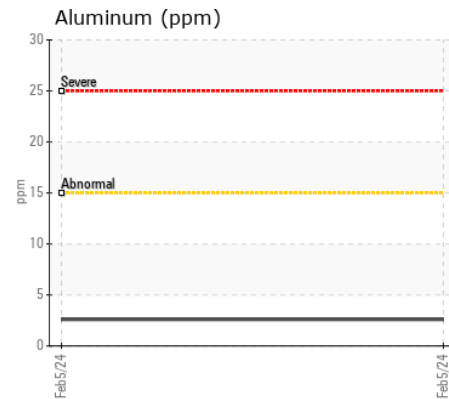
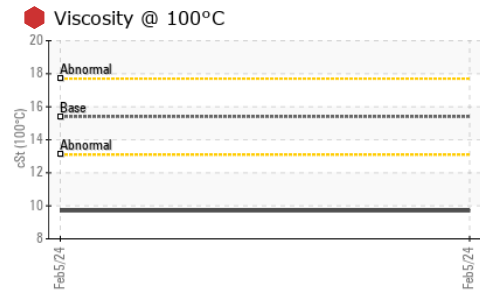
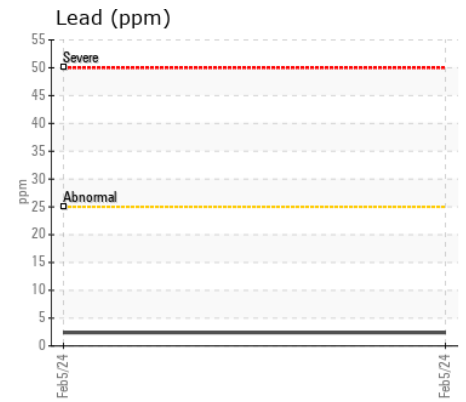
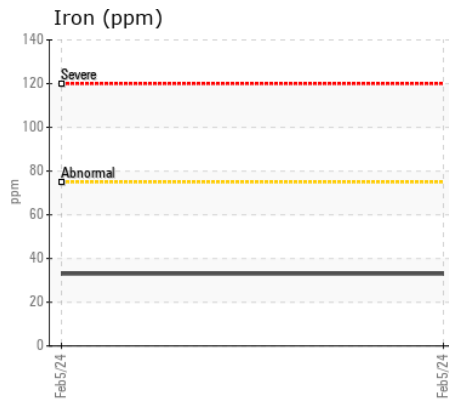
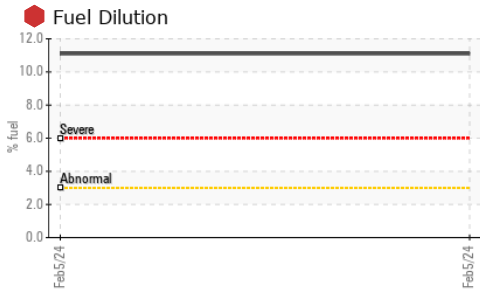
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	---	---
Potassium	ppm	ASTM D5185(m)	>20	4	---	---
Fuel	%	ASTM D7593*	>3.0	11.1	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>6	0.5	---	---
Nitration	Abs/cm	ASTM D7624*	>20	14.2	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	28.7	---	---
Emulsified Water	scalar	Visual*	>0.2	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)		6	---	---
Boron	ppm	ASTM D5185(m)	0	1	---	---
Barium	ppm	ASTM D5185(m)	0	0	---	---
Molybdenum	ppm	ASTM D5185(m)	60	48	---	---
Manganese	ppm	ASTM D5185(m)	0	0	---	---
Magnesium	ppm	ASTM D5185(m)	1010	762	---	---
Calcium	ppm	ASTM D5185(m)	1070	837	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	808	---	---
Zinc	ppm	ASTM D5185(m)	1270	927	---	---
Sulfur	ppm	ASTM D5185(m)	2060	2045	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	37.9	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	9.7	---	---



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0098007 **Received** : 15 Feb 2024
Lab Number : 02615924 **Tested** : 16 Feb 2024
Unique Number : 5733034 **Diagnosed** : 16 Feb 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

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.

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