

Machine Id
213048
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0096765	GFL0096773	---
Sample Date		Client Info		24 Jun 2024	15 Apr 2024	---
Machine Age	kms	Client Info		22573	1660	---
Oil Age	kms	Client Info		0	0	---
Filter Age	kms	Client Info		0	600	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	SEVERE	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	41	▲ 185	---
Chromium	ppm	ASTM D5185(m)	>20	2	6	---
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)	>3	2	▲ 9	---
Aluminum	ppm	ASTM D5185(m)	>20	1	4	---
Lead	ppm	ASTM D5185(m)	>40	0	1	---
Copper	ppm	ASTM D5185(m)	>330	4	34	---
Tin	ppm	ASTM D5185(m)	>15	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

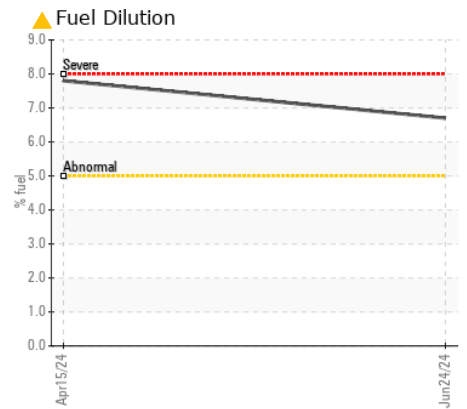
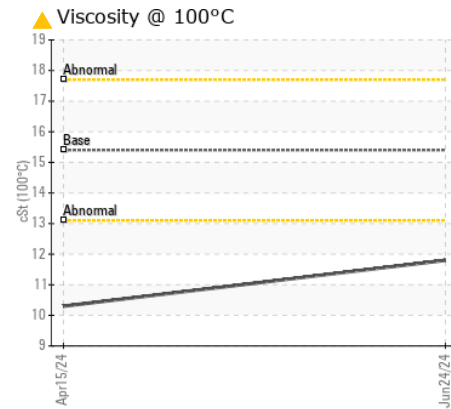
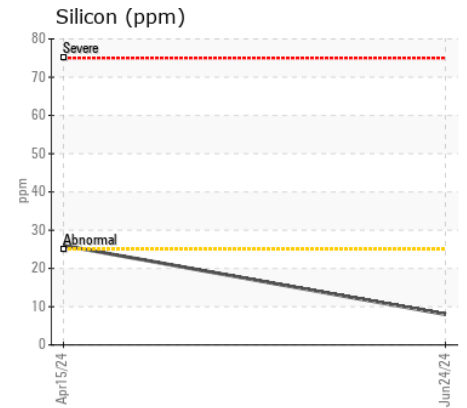
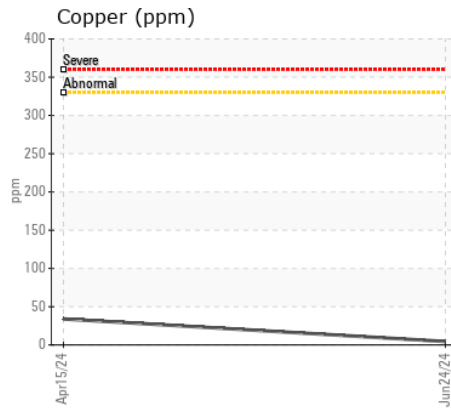
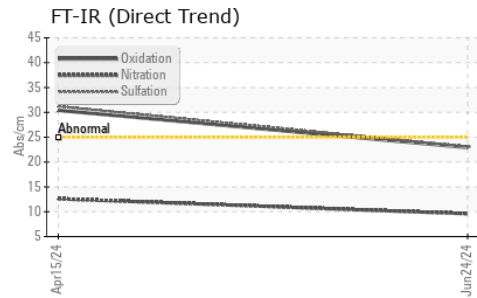
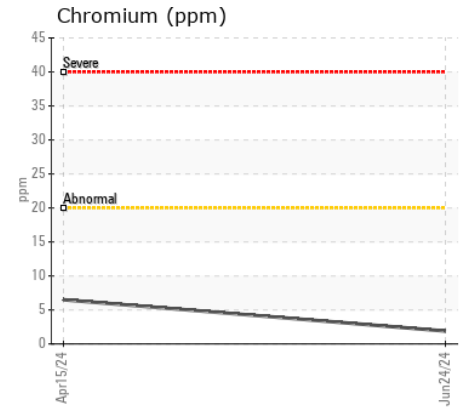
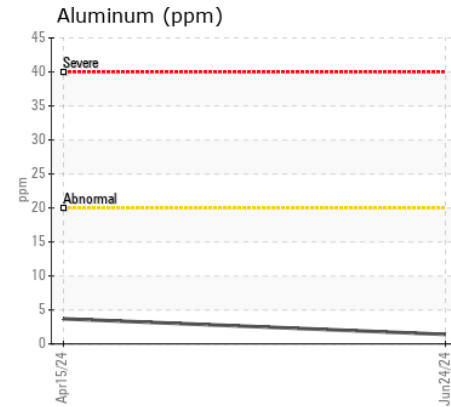
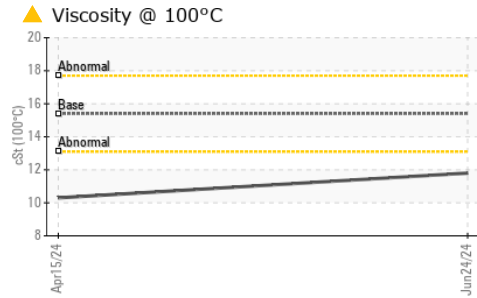
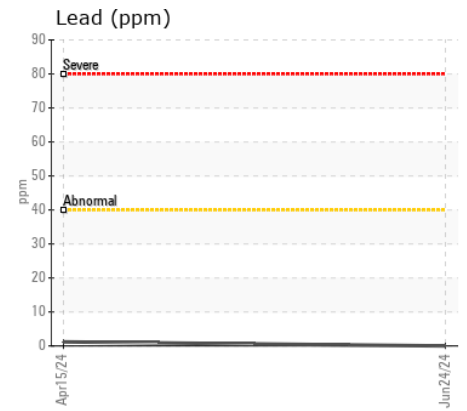
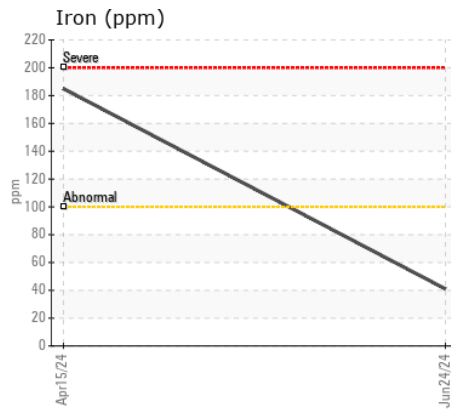
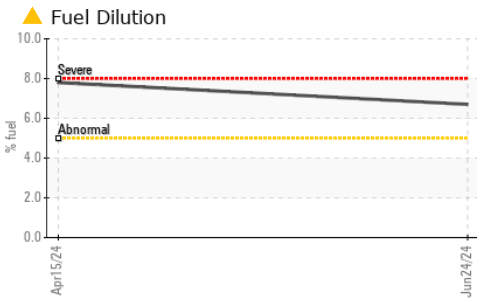
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	26	---
Potassium	ppm	ASTM D5185(m)	>20	<1	7	---
Fuel	%	ASTM D7593*	>5	▲ 6.7	▲ 7.8	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	0.0	---
Soot %	%	ASTM D7844*	>3	0.3	0.6	---
Nitration	Abs/cm	ASTM D7624*	>20	9.6	12.6	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.1	31.2	---
Emulsified Water	scalar	Visual*	>0.2	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)		5	16	---
Boron	ppm	ASTM D5185(m)	0	4	28	---
Barium	ppm	ASTM D5185(m)	0	<1	4	---
Molybdenum	ppm	ASTM D5185(m)	60	48	<1	---
Manganese	ppm	ASTM D5185(m)	0	1	6	---
Magnesium	ppm	ASTM D5185(m)	1010	853	693	---
Calcium	ppm	ASTM D5185(m)	1070	970	1252	---
Phosphorus	ppm	ASTM D5185(m)	1150	893	954	---
Zinc	ppm	ASTM D5185(m)	1270	1097	1097	---
Sulfur	ppm	ASTM D5185(m)	2060	2290	2650	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.9	30.4	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ 11.8	▲ 10.3	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0096765 **Received** : 02 Jul 2024
Lab Number : 02644762 **Tested** : 03 Jul 2024
Unique Number : 5802301 **Diagnosed** : 03 Jul 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: 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.