

Machine Id
124-0902
Component
Diesel Engine
Fluid
PETRO CANADA DURON SAE 15W40 (--- GAL)

RECOMMENDATION

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		PC0073062	---	---
Sample Date		Client Info		01 May 2024	---	---
Machine Age	hrs	Client Info		23546	---	---
Oil Age	hrs	Client Info		1000	---	---
Filter Age	hrs	Client Info		1000	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	56	---	---
Chromium	ppm	ASTM D5185(m)	>20	1	---	---
Nickel	ppm	ASTM D5185(m)	>5	<1	---	---
Titanium	ppm	ASTM D5185(m)	>2	0	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	5	---	---
Lead	ppm	ASTM D5185(m)	>40	<1	---	---
Copper	ppm	ASTM D5185(m)	>330	3	---	---
Tin	ppm	ASTM D5185(m)	>15	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

CONTAMINATION

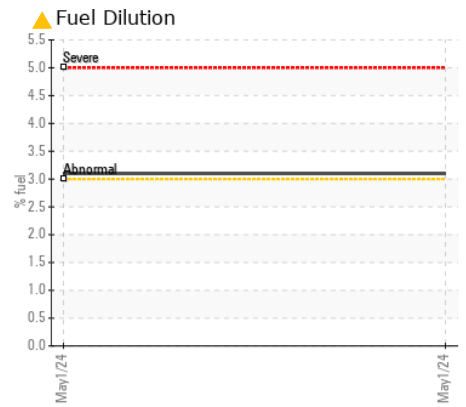
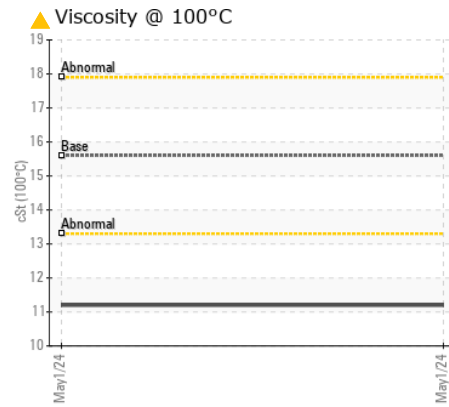
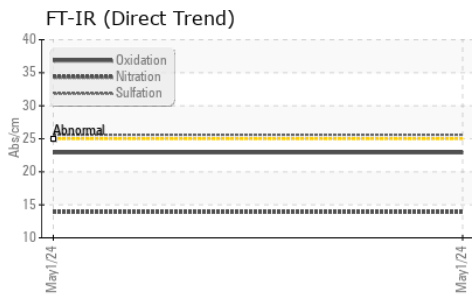
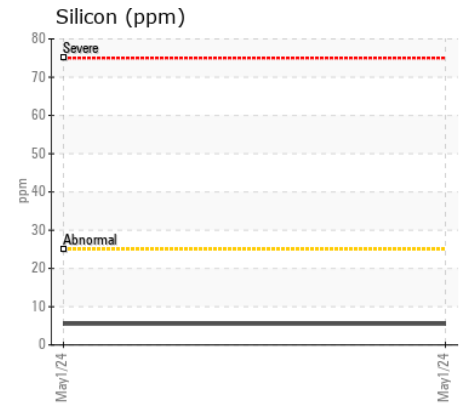
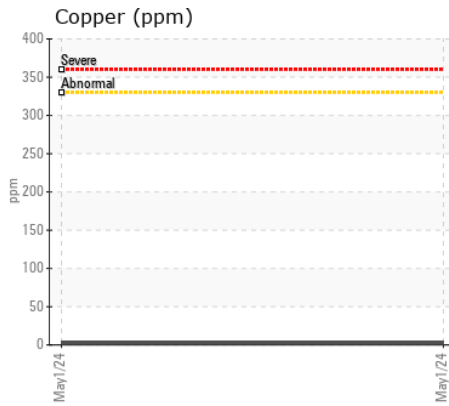
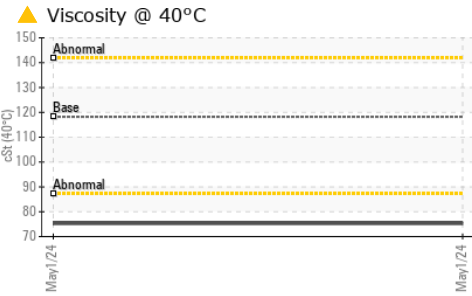
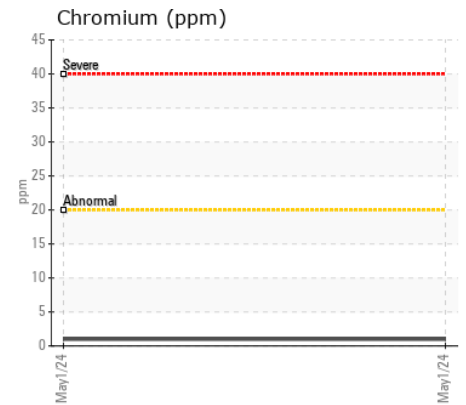
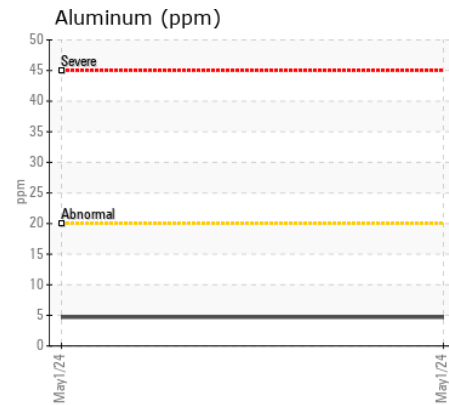
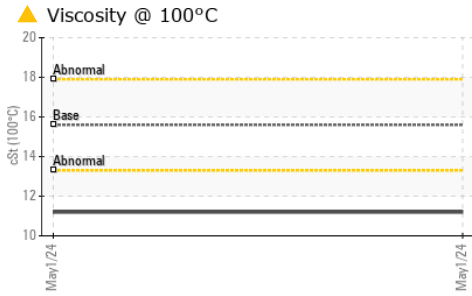
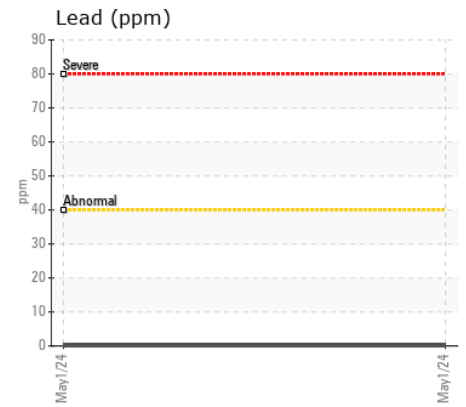
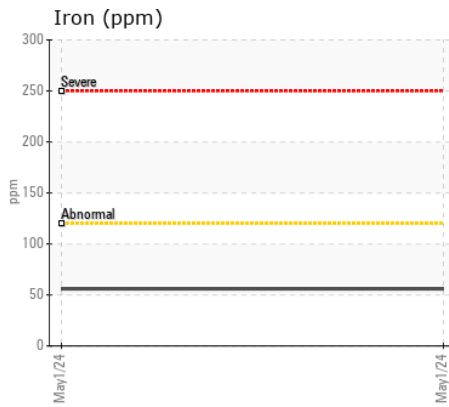
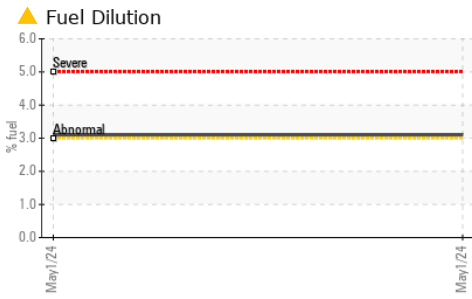
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	---	---
Potassium	ppm	ASTM D5185(m)	>20	9	---	---
Fuel	%	ASTM D7593*	>3.0	▲ 3.1	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>4	0.4	---	---
Nitration	Abs/cm	ASTM D7624*	>20	13.9	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.6	---	---
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)	1	2	---	---
Barium	ppm	ASTM D5185(m)	1	0	---	---
Molybdenum	ppm	ASTM D5185(m)	60	58	---	---
Manganese	ppm	ASTM D5185(m)	1	<1	---	---
Magnesium	ppm	ASTM D5185(m)	1010	921	---	---
Calcium	ppm	ASTM D5185(m)	1070	1017	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	913	---	---
Zinc	ppm	ASTM D5185(m)	1270	1127	---	---
Sulfur	ppm	ASTM D5185(m)	2060	2195	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.9	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	▲ 75.3	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	▲ 11.2	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	139	139	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0073062 **Received** : 15 May 2024
Lab Number : 02635591 **Tested** : 16 May 2024
Unique Number : 5776744 **Diagnosed** : 16 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, VI)

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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