



WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	SEVERE

Machine Id
218010
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0112448	---	---
Sample Date		Client Info		04 Jul 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				SEVERE	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	17	---	---
Chromium	ppm	ASTM D5185(m)	>20	1	---	---
Nickel	ppm	ASTM D5185(m)	>4	<1	---	---
Titanium	ppm	ASTM D5185(m)		<1	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	3	---	---
Lead	ppm	ASTM D5185(m)	>40	<1	---	---
Copper	ppm	ASTM D5185(m)	>330	4	---	---
Tin	ppm	ASTM D5185(m)	>15	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

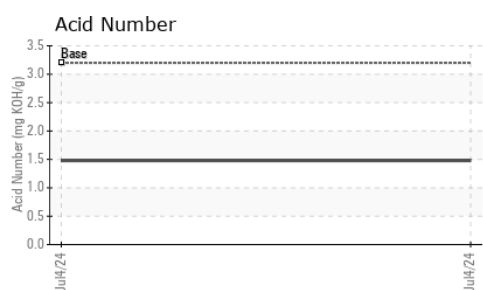
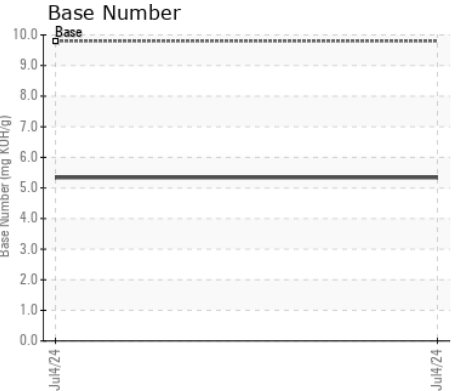
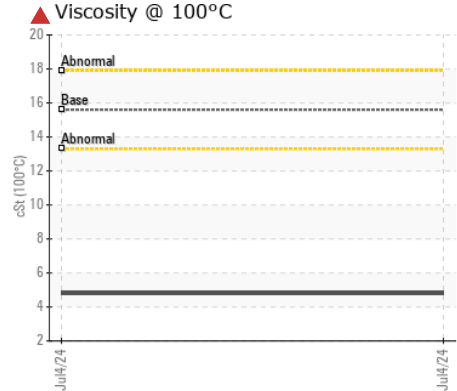
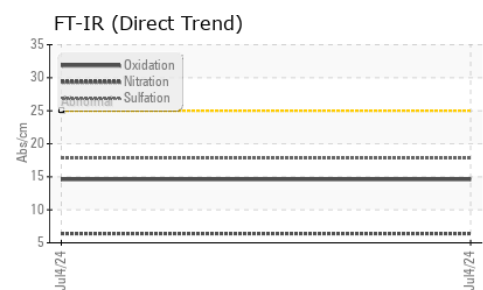
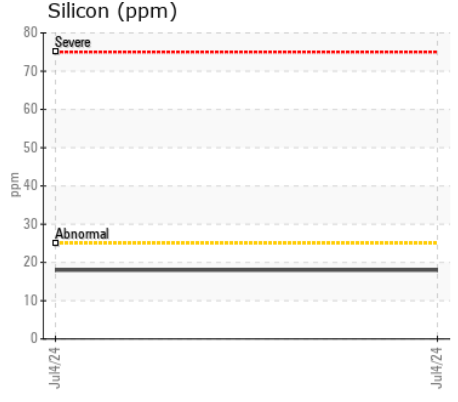
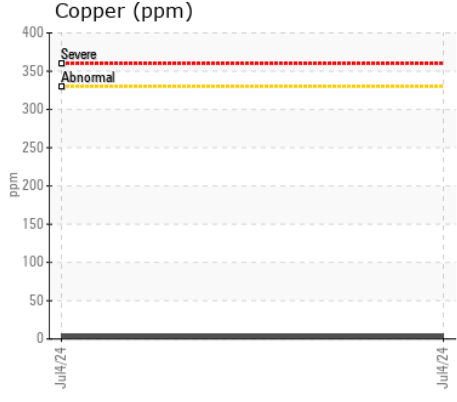
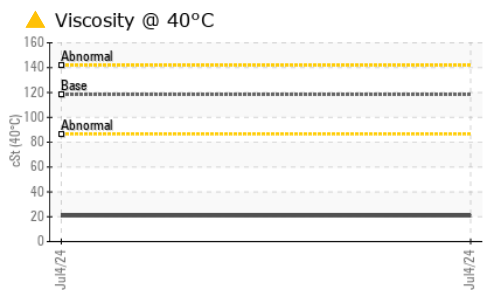
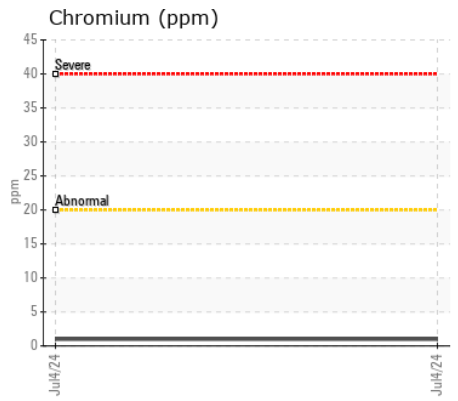
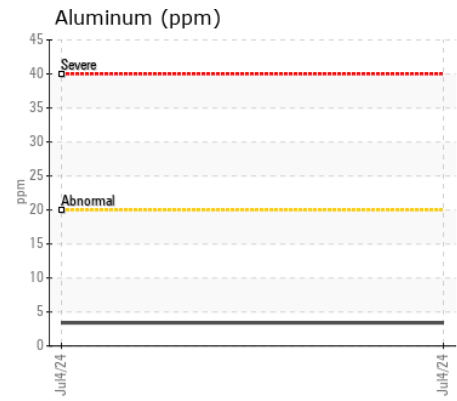
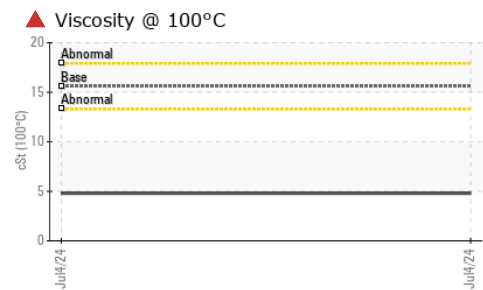
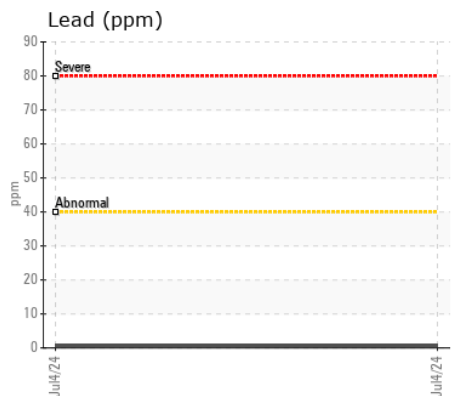
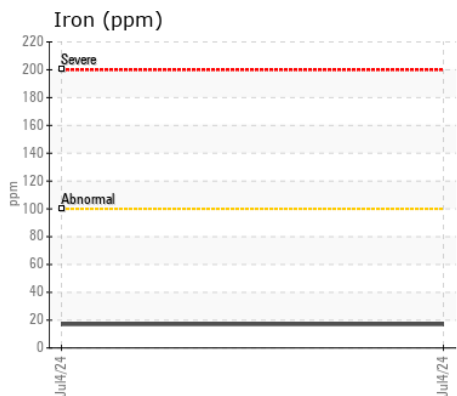
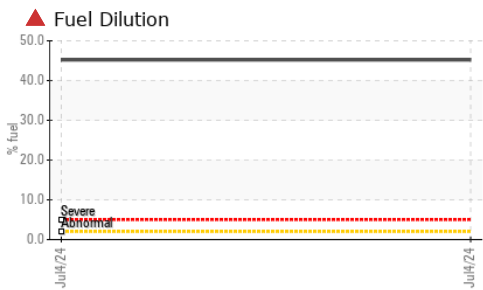
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	18	---	---
Potassium	ppm	ASTM D5185(m)	>20	1	---	---
Fuel	%	ASTM D7593*	>2.0	▲ 45.2	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	6.4	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	17.8	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	LIGHT	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		4	---	---
Boron	ppm	ASTM D5185(m)	1	4	---	---
Barium	ppm	ASTM D5185(m)	1	<1	---	---
Molybdenum	ppm	ASTM D5185(m)	60	32	---	---
Manganese	ppm	ASTM D5185(m)	1	<1	---	---
Magnesium	ppm	ASTM D5185(m)	1010	548	---	---
Calcium	ppm	ASTM D5185(m)	1070	621	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	586	---	---
Zinc	ppm	ASTM D5185(m)	1270	655	---	---
Sulfur	ppm	ASTM D5185(m)	2060	1365	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.6	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	3.2	1.48	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	5.34	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	▲ 20.8	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	▲ 4.8	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	139	160	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 550 - Rocky View County**
Sample No. : GFL0112448 **Received** : 05 Jul 2024 **220 Carmek Blvd**
Lab Number : 02645725 **Tested** : 08 Jul 2024 **Rocky View County, AB**
Unique Number : 5803264 **Diagnosed** : 08 Jul 2024 - Wes Davis **CA T1X 1X1**
Test Package : MOB 2 (Additional Tests: FuelDilution, KV40, PercentFuel, TAN Auto, TAN Man, VI, Visc @ 100°C) **Contact: GFL Calgary**
calgarymaintenance@gflenv.com
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. **T:**
F: (403)369-6163