

Machine Id
124-1704
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 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		PC0088739	PC0071394	PC0072667
Sample Date		Client Info		29 Apr 2024	25 Oct 2023	17 Oct 2023
Machine Age	hrs	Client Info		188724	11958	0
Oil Age	hrs	Client Info		5000	1000	0
Filter Age	hrs	Client Info		5000	1000	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				SEVERE	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	10	12	10
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	2	2
Lead	ppm	ASTM D5185(m)	>40	<1	<1	1
Copper	ppm	ASTM D5185(m)	>330	1	1	1
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

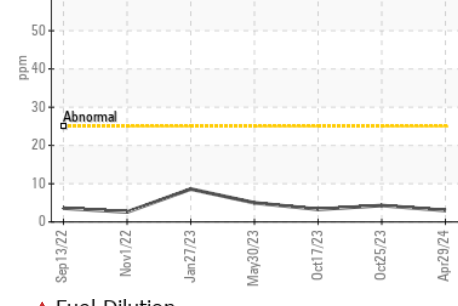
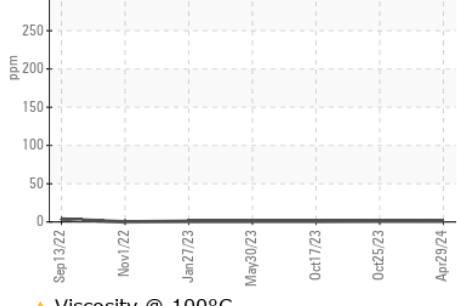
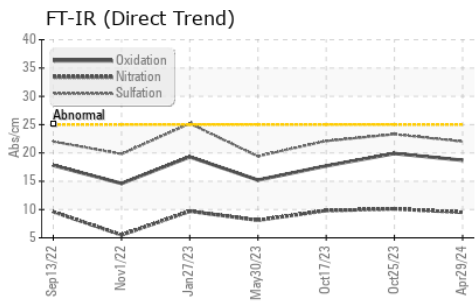
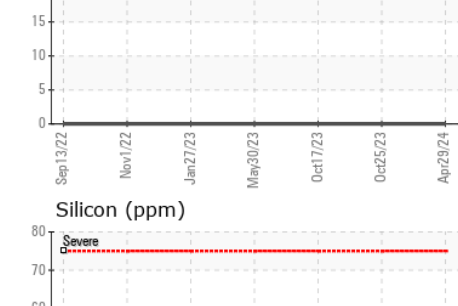
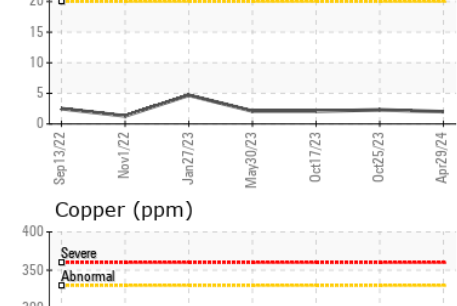
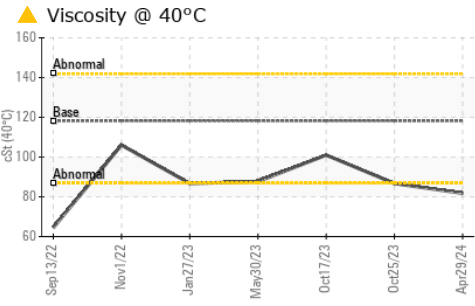
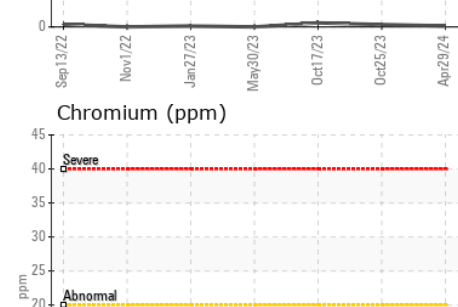
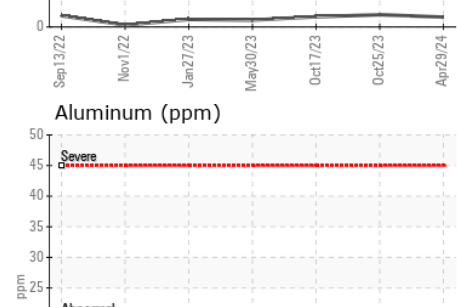
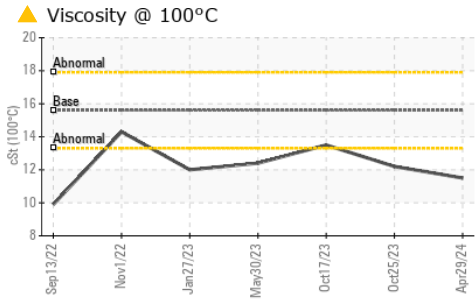
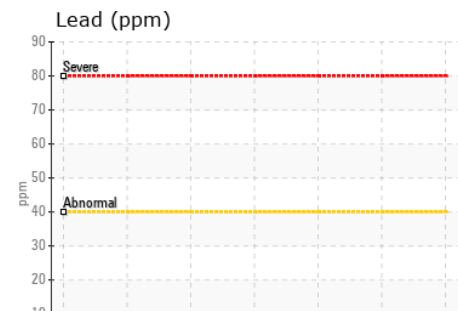
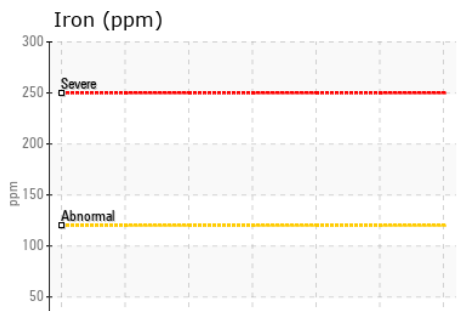
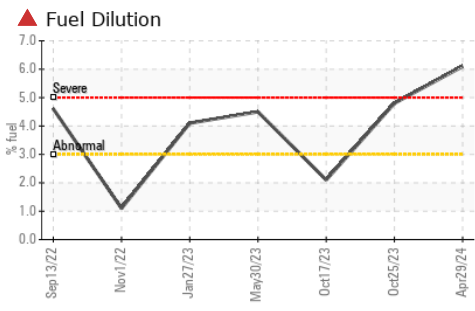
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	4	3
Potassium	ppm	ASTM D5185(m)	>20	2	2	2
Fuel	%	ASTM D7593*	>3.0	▲ 6.1	▲ 4.8	2.1
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.1	0.2	0.3
Nitration	Abs/cm	ASTM D7624*	>20	9.5	10.1	9.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.0	23.3	22.1
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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)		6	6	5
Boron	ppm	ASTM D5185(m)	0	<1	2	2
Barium	ppm	ASTM D5185(m)	0	0	<1	<1
Molybdenum	ppm	ASTM D5185(m)	60	59	59	62
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	1010	961	928	998
Calcium	ppm	ASTM D5185(m)	1070	1003	995	1097
Phosphorus	ppm	ASTM D5185(m)	1150	933	926	1028
Zinc	ppm	ASTM D5185(m)	1270	1119	1148	1235
Sulfur	ppm	ASTM D5185(m)	2060	2145	2098	2277
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.7	19.9	17.7
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	▲ 81.8	▲ 86.7	101
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	▲ 11.5	▲ 12.2	13.5
Viscosity Index (VI)	Scale	ASTM D2270*	139	131	135	133



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0088739 **Received** : 03 May 2024
Lab Number : 02633070 **Tested** : 06 May 2024
Unique Number : 5774223 **Diagnosed** : 06 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, PercentFuel, VI, Visual)

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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.