



Machine Id
0858
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (24 LTR)

RECOMMENDATION

We advise that you check for the source of the coolant leak. We advise that you check for faulty combustion, plugged air filters, or aftercoolers. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

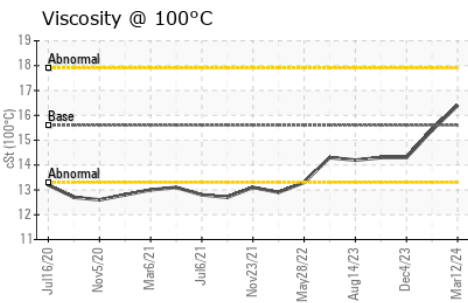
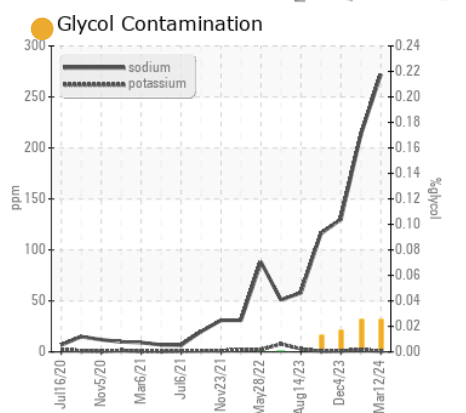
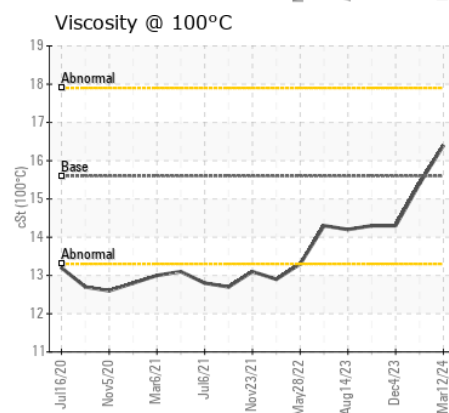
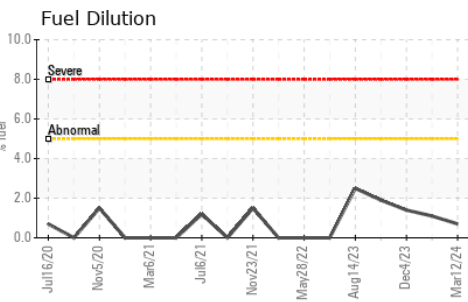
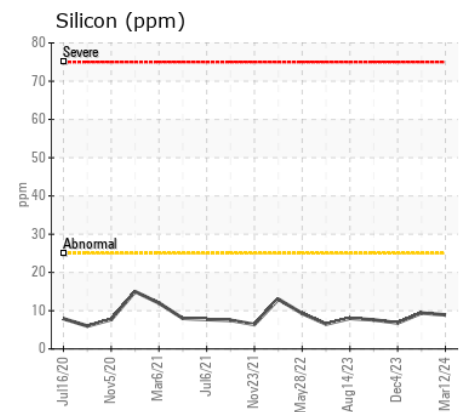
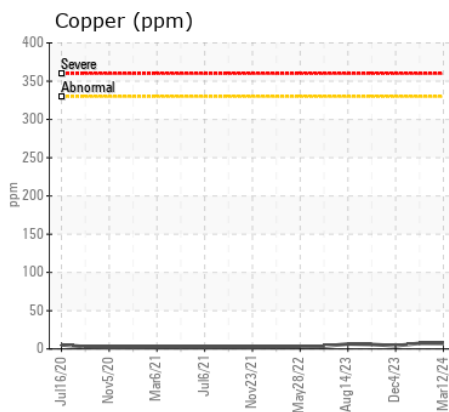
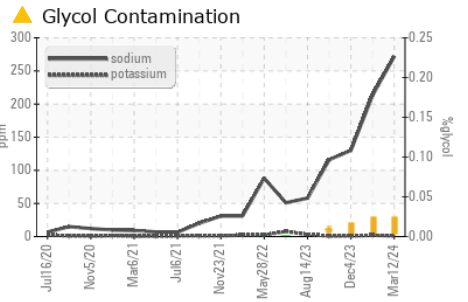
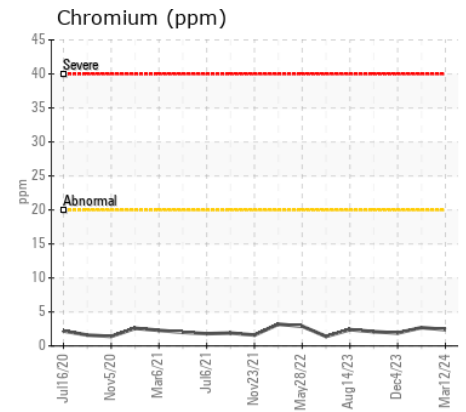
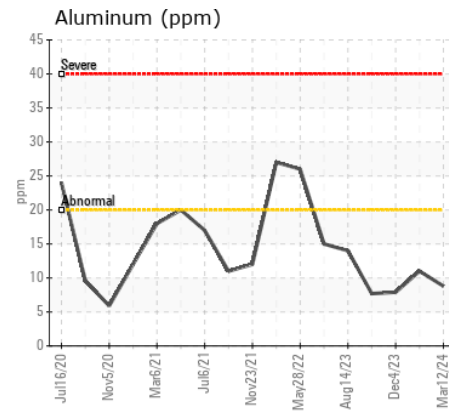
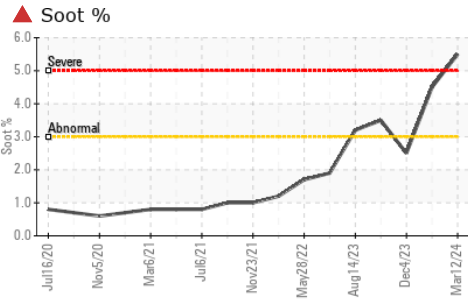
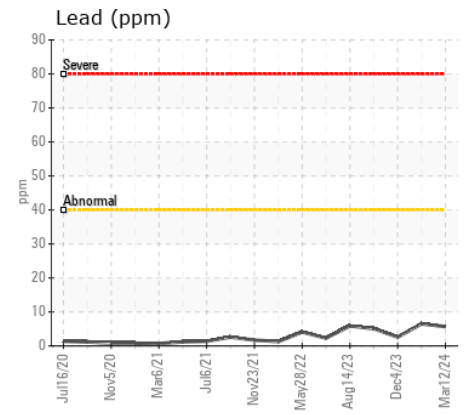
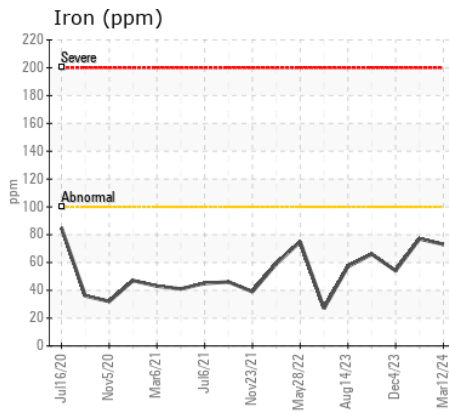
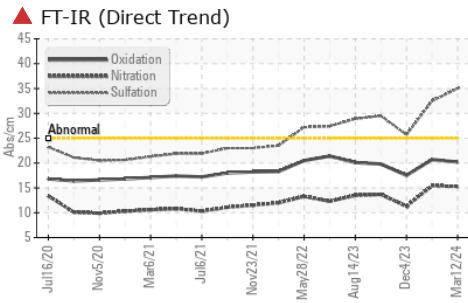
CONTAMINATION

Fuel content negligible. Test for glycol is positive. There is a light concentration of glycol present in the oil. There is an abnormal amount of solids and carbon present in the oil.

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0082785	PC0082830	PC0077853
Sample Date		Client Info		12 Mar 2024	08 Jan 2024	04 Dec 2023
Machine Age	kms	Client Info		1005281	991610	984459
Oil Age	kms	Client Info		13671	15557	8406
Filter Age	kms	Client Info		13671	15557	8406
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				SEVERE	ABNORMAL	ATTENTION
Iron	ppm	ASTM D5185(m)	>100	73	77	54
Chromium	ppm	ASTM D5185(m)	>20	2	3	2
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	9	11	8
Lead	ppm	ASTM D5185(m)	>40	6	6	3
Copper	ppm	ASTM D5185(m)	>330	7	7	4
Tin	ppm	ASTM D5185(m)	>15	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	9	9	7
Potassium	ppm	ASTM D5185(m)	>20	1	2	1
Fuel	%	ASTM D7593*	>5	0.7	1.1	1.4
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		▲ 0.025	▲ 0.025	▲ 0.017
Soot %	%	ASTM D7844*	>3	▲ 5.5	▲ 4.5	2.5
Nitration	Abs/cm	ASTM D7624*	>20	15.3	15.4	11.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	35.0	▲ 32.5	25.7
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		● 272	● 213	● 130
Boron	ppm	ASTM D5185(m)	0	10	10	8
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	71	70	68
Manganese	ppm	ASTM D5185(m)	0	0	<1	0
Magnesium	ppm	ASTM D5185(m)	1010	1021	1020	1037
Calcium	ppm	ASTM D5185(m)	1070	1200	1209	1204
Phosphorus	ppm	ASTM D5185(m)	1150	1042	1079	1101
Zinc	ppm	ASTM D5185(m)	1270	1249	1265	1309
Sulfur	ppm	ASTM D5185(m)	2060	2495	2669	2658
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.2	20.7	17.5
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	122	114	104
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	16.4	15.4	14.3
Viscosity Index (VI)	Scale	ASTM D2270*	139	144	141	140



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0082785 **Received** : 05 Apr 2024
Lab Number : 02626863 **Tested** : 10 Apr 2024
Unique Number : 5759995 **Diagnosed** : 10 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, 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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