



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
1206
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (24 LTR)

RECOMMENDATION

Check for low coolant level. The oil change at the time of sampling has been noted. 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		PC0082757	PC0018627	PC0040192
Sample Date		Client Info		17 Apr 2024	22 Apr 2022	16 Jan 2022
Machine Age	kms	Client Info		687181	560442	743006
Oil Age	kms	Client Info		12857	14629	12000
Filter Age	kms	Client Info		12857	14629	12000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	42	56	16
Chromium	ppm	ASTM D5185(m)	>20	2	3	1
Nickel	ppm	ASTM D5185(m)	>4	0	1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	1	<1
Aluminum	ppm	ASTM D5185(m)	>20	4	5	3
Lead	ppm	ASTM D5185(m)	>40	2	1	<1
Copper	ppm	ASTM D5185(m)	>330	6	11	3
Tin	ppm	ASTM D5185(m)	>15	0	1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

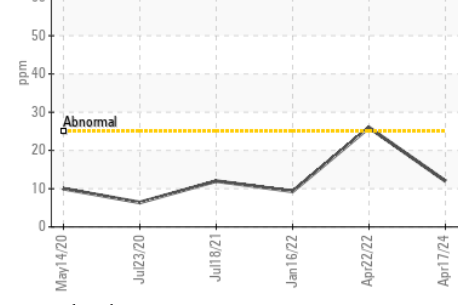
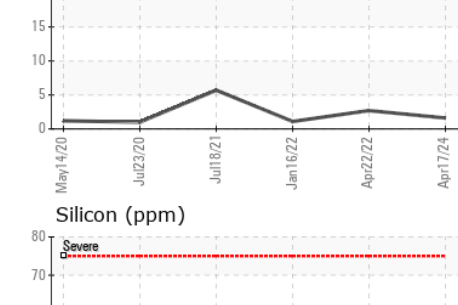
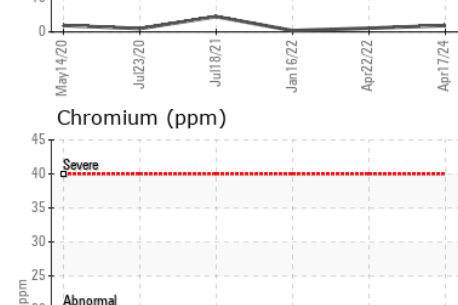
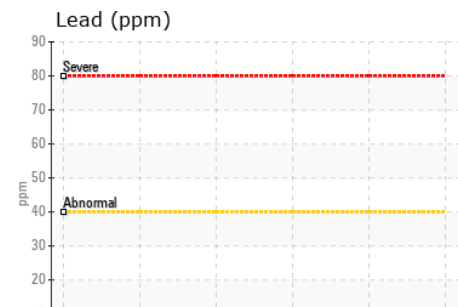
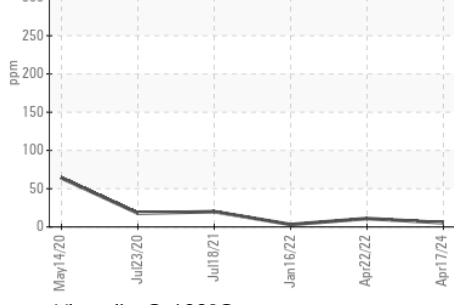
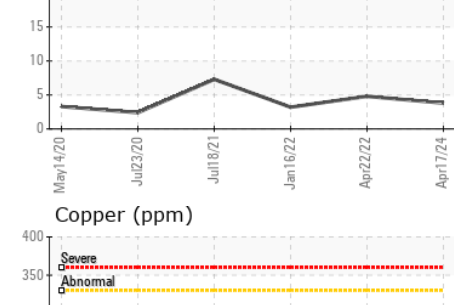
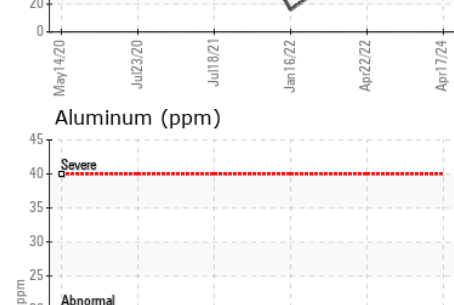
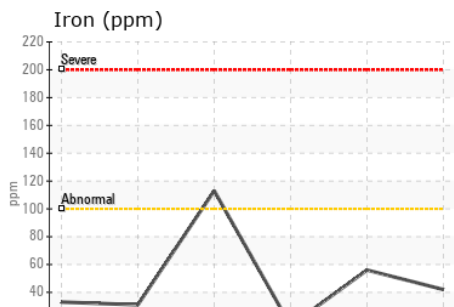
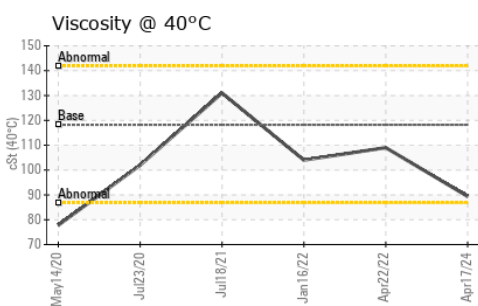
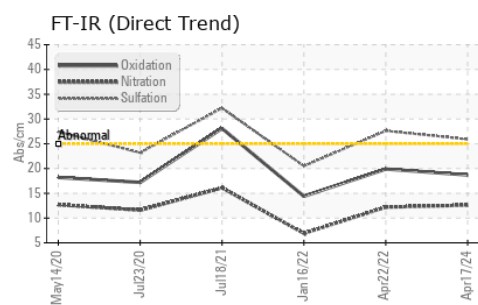
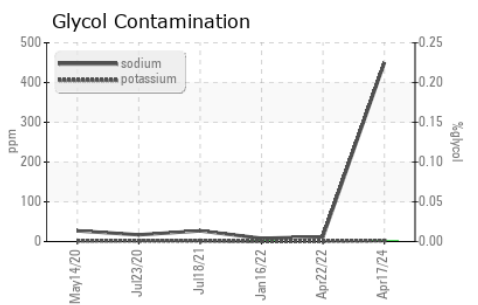
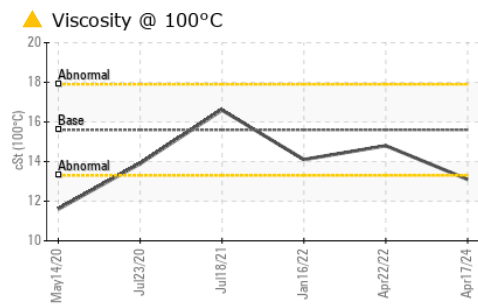
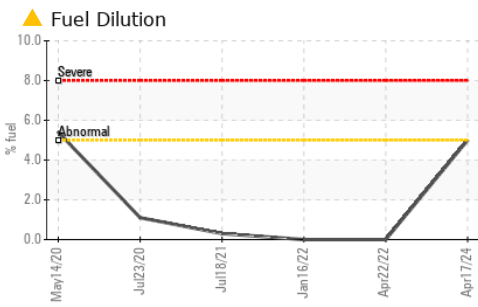
There is a moderate amount of fuel present in the oil. Water treatment chemicals present, indicating slow coolant leak. Tests confirm the presence of fuel in the oil. Test for glycol is negative.

Silicon	ppm	ASTM D5185(m)	>25	12	▲ 26	9
Potassium	ppm	ASTM D5185(m)	>20	2	<1	0
Fuel	%	ASTM D7593*	>5	▲ 5	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	NEG	0.0
Soot %	%	ASTM D7844*	>3	2.3	2	0.4
Nitration	Abs/cm	ASTM D7624*	>20	12.6	12.2	6.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.9	27.6	20.5
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. The condition of the oil is acceptable for the time in service (see recommendation).

Sodium	ppm	ASTM D5185(m)		● 450	12	8
Boron	ppm	ASTM D5185(m)	0	6	2	2
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	77	70	61
Manganese	ppm	ASTM D5185(m)	0	<1	<1	2
Magnesium	ppm	ASTM D5185(m)	1010	1044	1201	1065
Calcium	ppm	ASTM D5185(m)	1070	1164	1225	1091
Phosphorus	ppm	ASTM D5185(m)	1150	1018	1220	1099
Zinc	ppm	ASTM D5185(m)	1270	1254	1437	1281
Sulfur	ppm	ASTM D5185(m)	2060	2412	2660	2942
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.7	19.9	14.4
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	89.4	109	104
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	▲ 13.1	14.8	14.1
Viscosity Index (VI)	Scale	ASTM D2270*	139	146	140	137



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0082757
Lab Number : 02633050
Unique Number : 5774203
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, KV40, PercentFuel, VI)
Received : 03 May 2024
Tested : 06 May 2024
Diagnosed : 06 May 2024 - Wes Davis
 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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