

Machine Id
1314
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. No other corrective action is recommended at this time.

WEAR

All component wear rates are normal.

CONTAMINATION

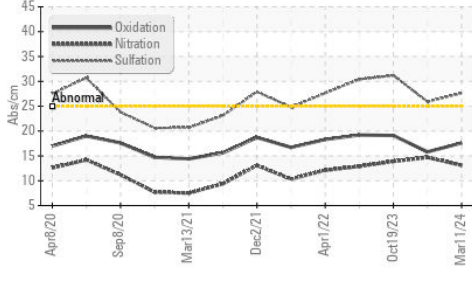
Light fuel dilution occurring. Water treatment chemicals present, indicating slow coolant leak. Light concentration of carbon/soot present in the oil. Test for glycol is negative. No other contaminants were detected in the oil.

FLUID CONDITION

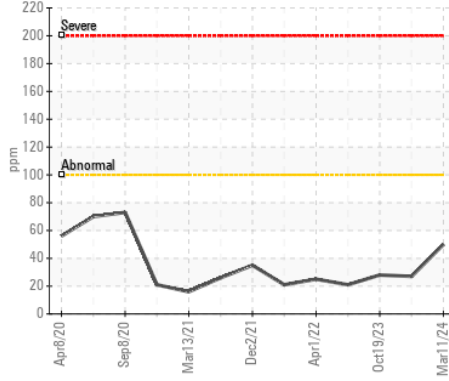
The condition of the oil is acceptable for the time in service (see recommendation). The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0082783	PC0082838	PC0062033
Sample Date		Client Info		11 Mar 2024	28 Dec 2023	19 Oct 2023
Machine Age	kms	Client Info		687656	674350	662386
Oil Age	kms	Client Info		12952	11964	15448
Filter Age	kms	Client Info		12952	11964	15448
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>100	50	27	28
Chromium	ppm	ASTM D5185(m)	>20	4	2	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)		<1	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	7	6	3
Lead	ppm	ASTM D5185(m)	>40	4	2	1
Copper	ppm	ASTM D5185(m)	>330	169	27	8
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	11	41	11
Potassium	ppm	ASTM D5185(m)	>20	2	▲ 8	4
Fuel	%	ASTM D7593*	>5	1.1	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	▲ 0.027	0.0
Soot %	%	ASTM D7844*	>3	▲ 3.7	2.2	▲ 4.1
Nitration	Abs/cm	ASTM D7624*	>20	13.1	14.7	13.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.6	25.9	31.2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		● 309	● 1670	● 284
Boron	ppm	ASTM D5185(m)	0	7	32	11
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	71	118	60
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	1010	990	908	792
Calcium	ppm	ASTM D5185(m)	1070	1228	1026	1355
Phosphorus	ppm	ASTM D5185(m)	1150	1017	1005	1006
Zinc	ppm	ASTM D5185(m)	1270	1220	1162	1226
Sulfur	ppm	ASTM D5185(m)	2060	2536	2677	2517
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.6	15.8	19.1
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	105	110	111
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	14.4	14.9	14.8
Viscosity Index (VI)	Scale	ASTM D2270*	139	140	140	137

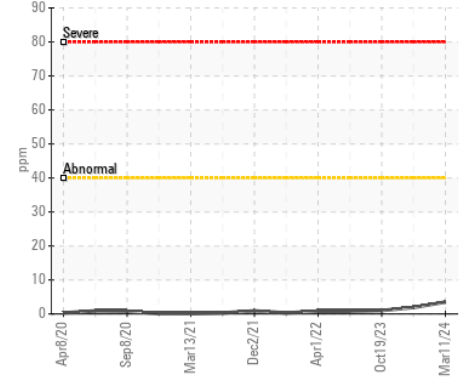
▲ FT-IR (Direct Trend)



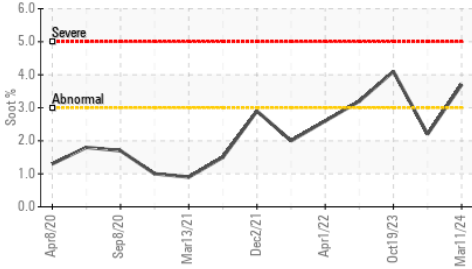
Iron (ppm)



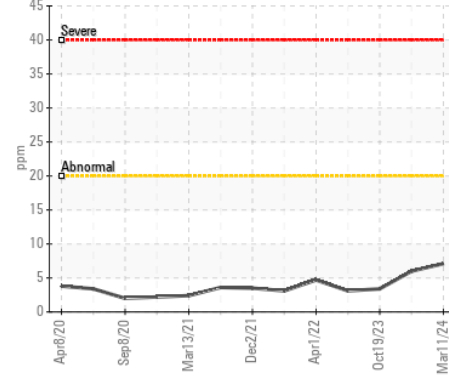
Lead (ppm)



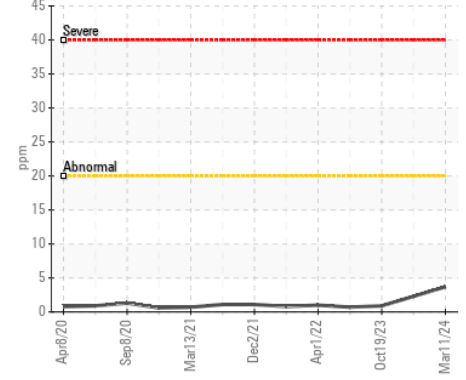
▲ Soot %



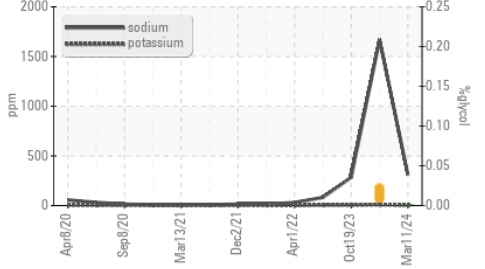
Aluminum (ppm)



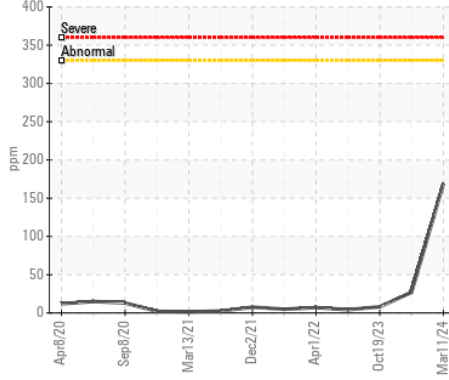
Chromium (ppm)



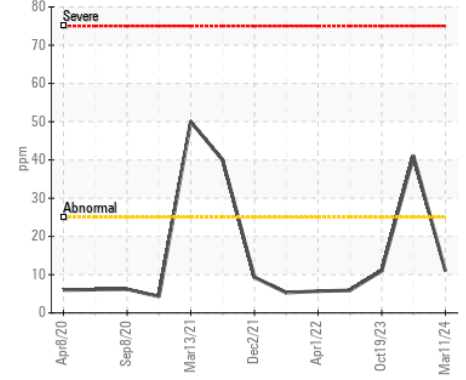
Glycol Contamination



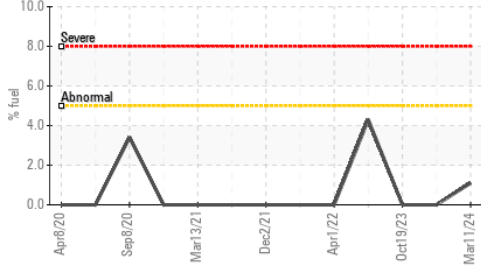
Copper (ppm)



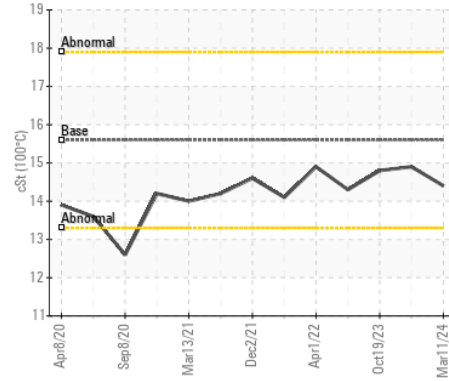
Silicon (ppm)



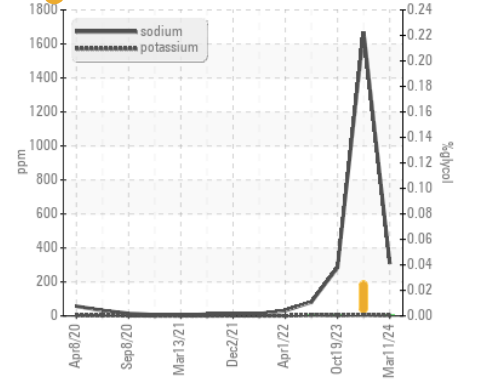
Fuel Dilution



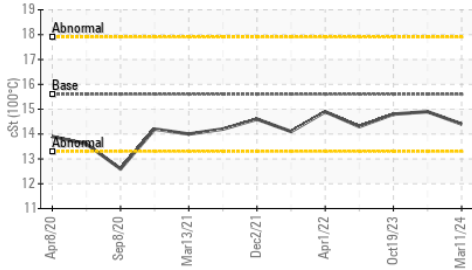
Viscosity @ 100°C



● Glycol Contamination



Viscosity @ 100°C



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0082783 **Received** : 05 Apr 2024
Lab Number : 02626864 **Tested** : 10 Apr 2024
Unique Number : 5759996 **Diagnosed** : 10 Apr 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, KV40, PercentFuel, VI)

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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.