



Machine Id
F450 7002

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)



DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 15W40. Please confirm.

Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

Test for glycol is positive. There is a light concentration of glycol present in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		PC	---	---
Sample Date	Client Info		03 Oct 2023	---	---
Machine Age	hrs Client Info		0	---	---
Oil Age	hrs Client Info		0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ATTENTION	---	---

CONTAMINATION	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	---	---

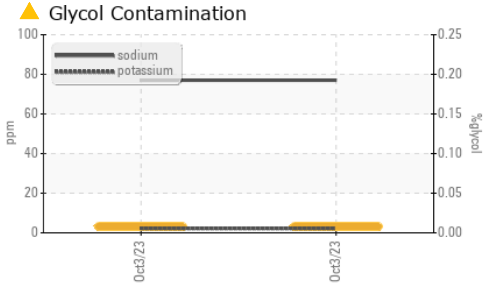
WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m)	>100	31	---	---
Chromium	ppm ASTM D5185(m)	>20	<1	---	---
Nickel	ppm ASTM D5185(m)	>4	<1	---	---
Titanium	ppm ASTM D5185(m)		0	---	---
Silver	ppm ASTM D5185(m)	>3	<1	---	---
Aluminum	ppm ASTM D5185(m)	>20	4	---	---
Lead	ppm ASTM D5185(m)	>40	2	---	---
Copper	ppm ASTM D5185(m)	>330	2	---	---
Tin	ppm ASTM D5185(m)	>15	0	---	---
Antimony	ppm ASTM D5185(m)		0	---	---
Vanadium	ppm ASTM D5185(m)		0	---	---
Beryllium	ppm ASTM D5185(m)		0	---	---
Cadmium	ppm ASTM D5185(m)		0	---	---

ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)	250	2	---	---
Barium	ppm ASTM D5185(m)	10	<1	---	---
Molybdenum	ppm ASTM D5185(m)	100	62	---	---
Manganese	ppm ASTM D5185(m)		0	---	---
Magnesium	ppm ASTM D5185(m)	450	937	---	---
Calcium	ppm ASTM D5185(m)	3000	1021	---	---
Phosphorus	ppm ASTM D5185(m)	1150	942	---	---
Zinc	ppm ASTM D5185(m)	1350	1159	---	---
Sulfur	ppm ASTM D5185(m)	4250	2411	---	---
Lithium	ppm ASTM D5185(m)		<1	---	---

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m)	>25	6	---	---
Sodium	ppm ASTM D5185(m)	>158	▲ 77	---	---
Potassium	ppm ASTM D5185(m)	>20	2	---	---
Glycol	% ASTM D7922*		▲ 0.013	---	---

INFRA-RED	method	limit/base	current	history1	history2
Soot %	% ASTM D7844*	>3	0	---	---
Nitration	Abs/cm ASTM D7624*	>20	6.1	---	---
Sulfation	Abs./1mm ASTM D7415*	>30	18.4	---	---

OIL ANALYSIS REPORT

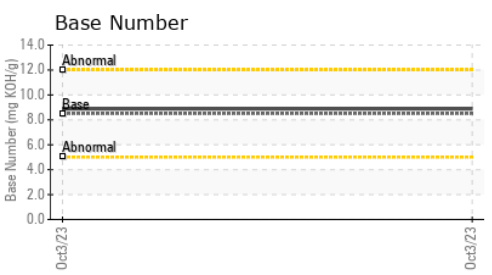
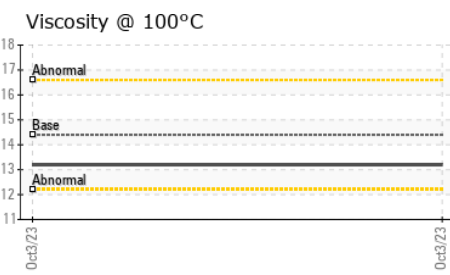
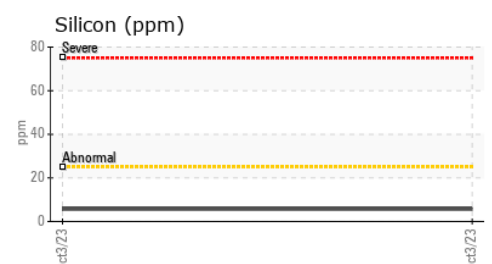
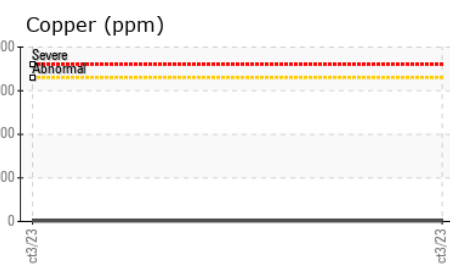
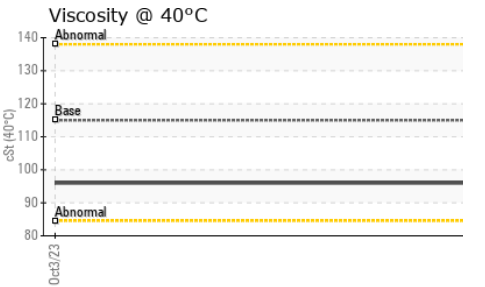
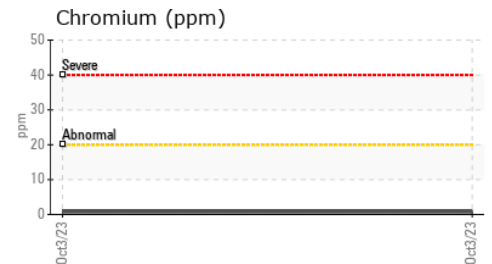
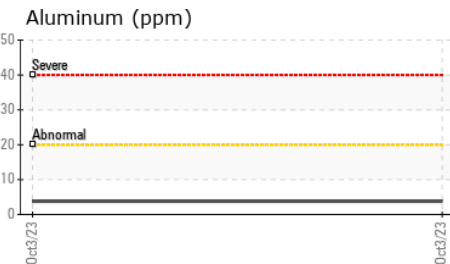
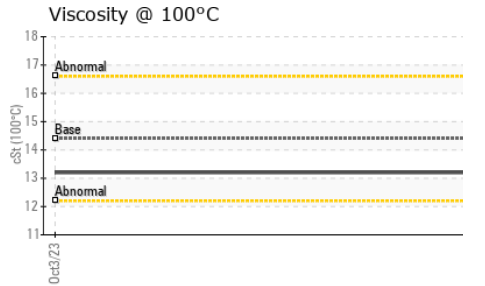
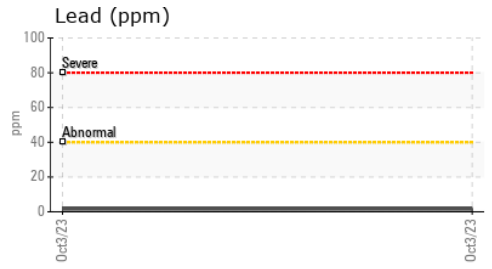
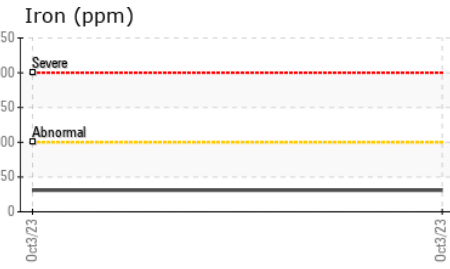
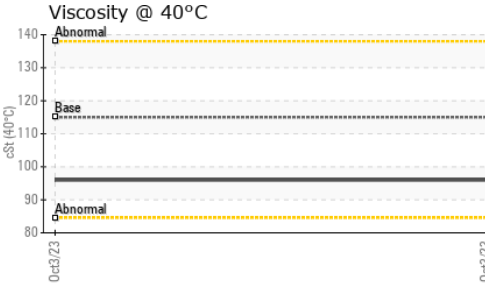


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	13.8	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	8.5	8.88	---	---

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	115	96.0	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.2	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	126	136	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Petro-Canada Technical/Behshad Sabah
Sample No. : PC **Received** : 04 Oct 2023
Lab Number : 02586646 **Diagnosed** : 05 Oct 2023
Unique Number : 5655712 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: Glycol, KV40, 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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