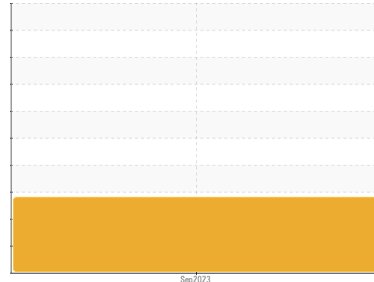




Machine Id
INTERNATIONAL NO UNIT PC0081376

Component
Diesel Engine

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



DIAGNOSIS

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.

Wear

All component wear rates are normal.

Contamination

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

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.

SAMPLE INFORMATION method limit/base current history1 history2

Sample Number	Client Info	PC0081376	---	---
Sample Date	Client Info	29 Sep 2023	---	---
Machine Age	kms	Client Info	281312	---
Oil Age	kms	Client Info	4350	---
Oil Changed	Client Info	Changed	---	---
Sample Status		SEVERE	---	---

CONTAMINATION method limit/base current history1 history2

Glycol	WC Method	NEG	---	---
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WEAR METALS method limit/base current history1 history2

Iron	ppm	ASTM D5185(m)	>100	46	---	---
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	6	---	---
Lead	ppm	ASTM D5185(m)	>40	<1	---	---
Copper	ppm	ASTM D5185(m)	>330	<1	---	---
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	4	---	---
Barium	ppm	ASTM D5185(m)	10	0	---	---
Molybdenum	ppm	ASTM D5185(m)	100	52	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)	450	771	---	---
Calcium	ppm	ASTM D5185(m)	3000	833	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	792	---	---
Zinc	ppm	ASTM D5185(m)	1350	942	---	---
Sulfur	ppm	ASTM D5185(m)	4250	1966	---	---
Lithium	ppm	ASTM D5185(m)		<1	---	---

CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185(m)	>25	4	---	---
Sodium	ppm	ASTM D5185(m)	>158	10	---	---
Potassium	ppm	ASTM D5185(m)	>20	2	---	---
Fuel	%	ASTM D7593*	>2.0	15.5	---	---

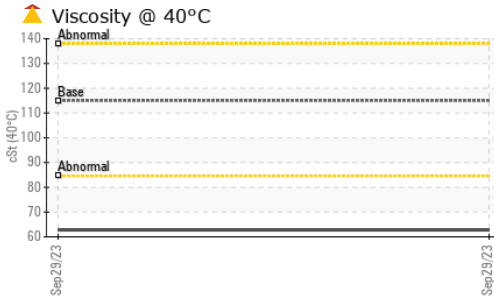
INFRA-RED method limit/base current history1 history2

Soot %	%	ASTM D7844*	>3	1.5	---	---
Nitration	Abs/cm	ASTM D7624*	>20	12.7	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	28.1	---	---

FLUID DEGRADATION method limit/base current history1 history2

Oxidation	Abs/.1mm	ASTM D7414*	>25	29.8	---	---
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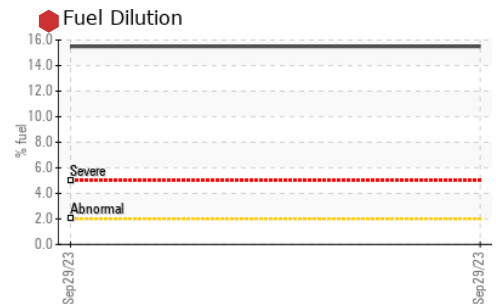
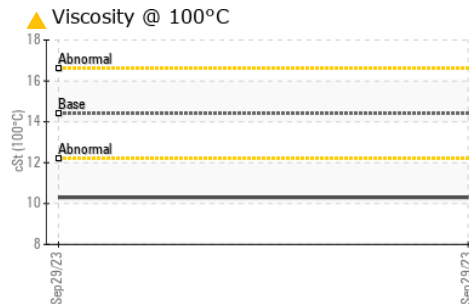
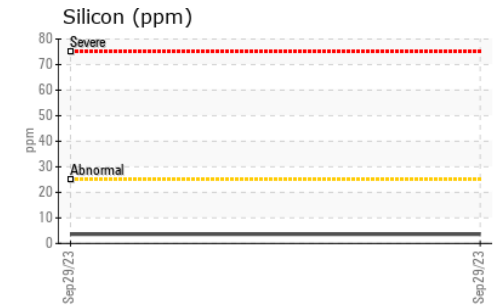
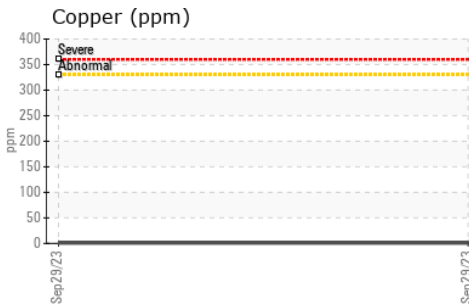
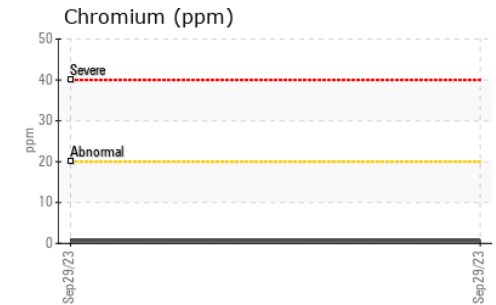
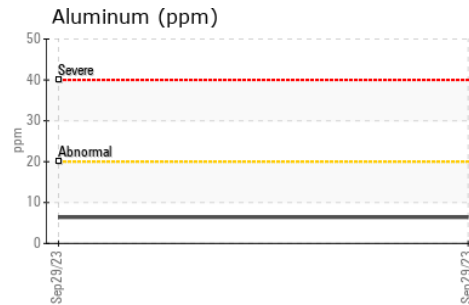
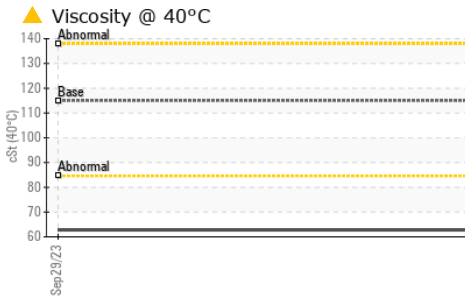
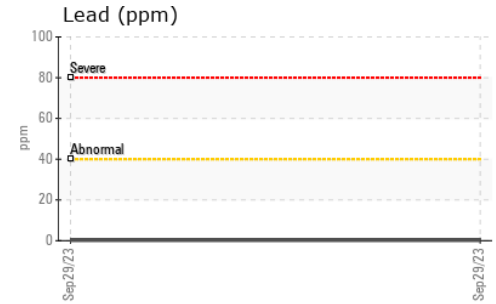
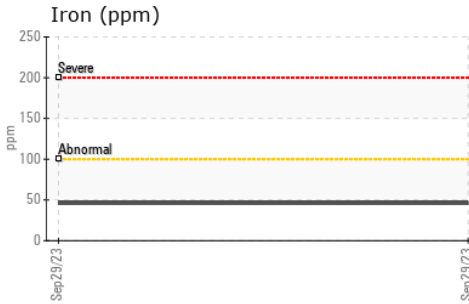
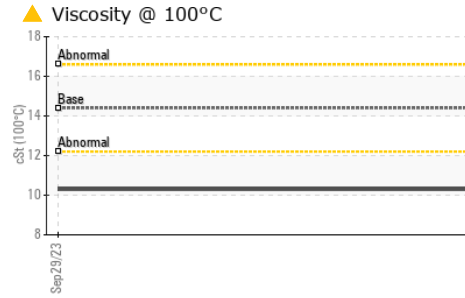
OIL ANALYSIS REPORT



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	▲ 62.8	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	▲ 10.3	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	126	152	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0081376 **Received** : 30 Oct 2023
Lab Number : **02592796** **Diagnosed** : 01 Nov 2023
Unique Number : 5669875 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: FUELDILUTION, KV40, PercentFuel, VI)

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 F:

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.