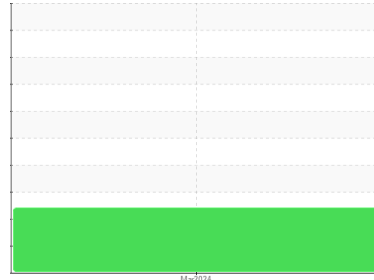




OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
4871
 Component
Diesel Engine
 Fluid
SAE 5W20 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter 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.

Wear

Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component.

Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0899671	---	---
Sample Date	Client Info	30 Mar 2024	---	---
Machine Age	kms Client Info	366780	---	---
Oil Age	kms Client Info	11338	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	---	---
Water	WC Method >0.2	NEG	---	---
Glycol	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	0	---	---
Iron	ppm ASTM D5185(m) >100	▲ 158	---	---
Chromium	ppm ASTM D5185(m) >20	3	---	---
Nickel	ppm ASTM D5185(m) >4	2	---	---
Titanium	ppm ASTM D5185(m)	0	---	---
Silver	ppm ASTM D5185(m) >3	0	---	---
Aluminum	ppm ASTM D5185(m) >20	12	---	---
Lead	ppm ASTM D5185(m) >40	0	---	---
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)	5	---	---
Barium	ppm ASTM D5185(m)	0	---	---
Molybdenum	ppm ASTM D5185(m)	55	---	---
Manganese	ppm ASTM D5185(m)	2	---	---
Magnesium	ppm ASTM D5185(m)	381	---	---
Calcium	ppm ASTM D5185(m)	882	---	---
Phosphorus	ppm ASTM D5185(m)	519	---	---
Zinc	ppm ASTM D5185(m)	598	---	---
Sulfur	ppm ASTM D5185(m)	1527	---	---
Lithium	ppm ASTM D5185(m)	<1	---	---

CONTAMINANTS

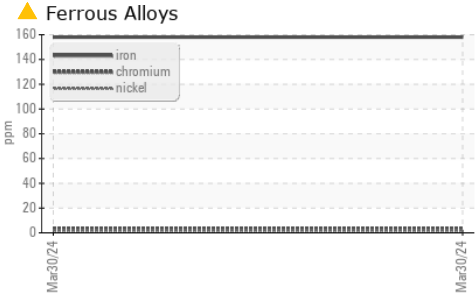
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	▲ 29	---	---
Sodium	ppm ASTM D5185(m)	8	---	---
Potassium	ppm ASTM D5185(m) >20	2	---	---

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	0	---	---
Nitration	Abs/cm ASTM D7624* >20	14.5	---	---
Sulfation	Abs/.1mm ASTM D7415* >30	26.9	---	---



OIL ANALYSIS REPORT

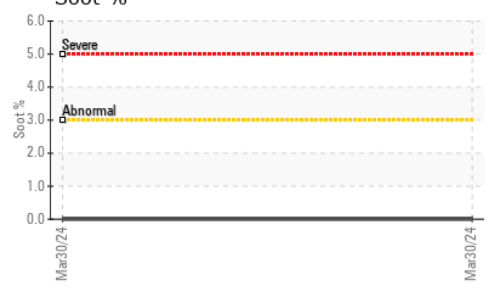
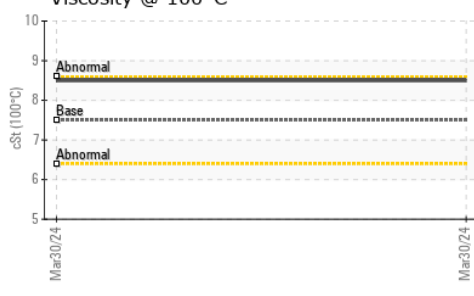
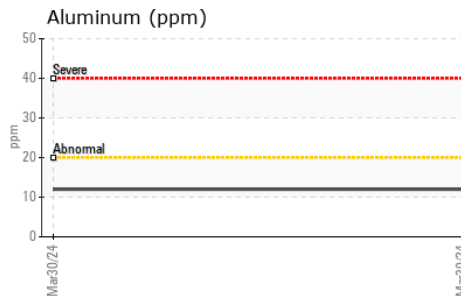
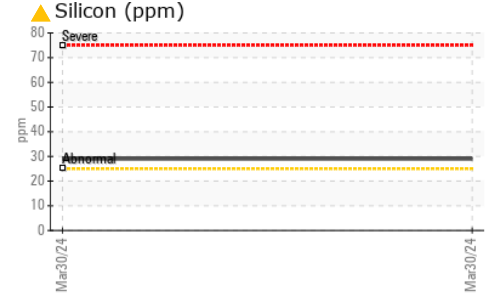
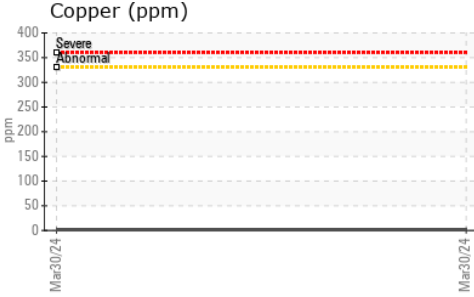
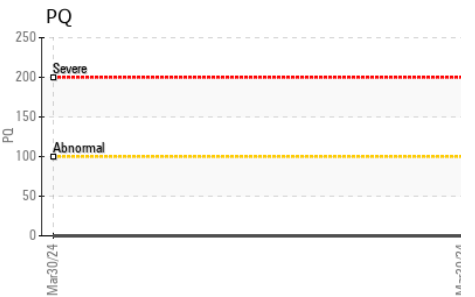
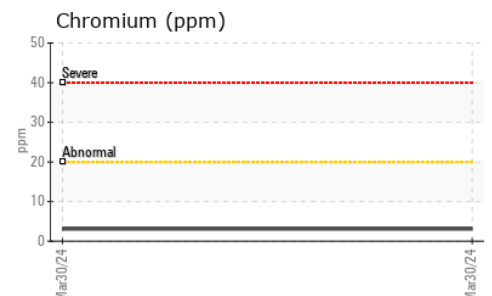
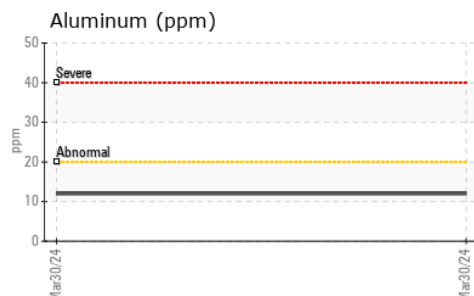
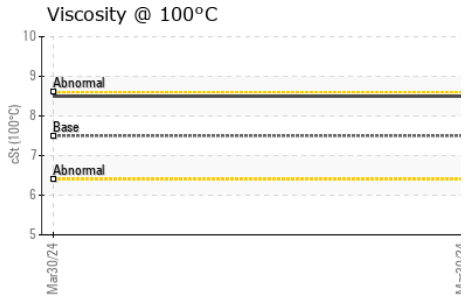
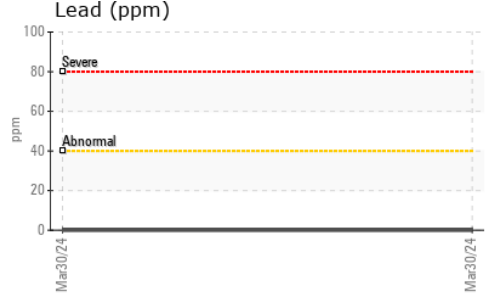
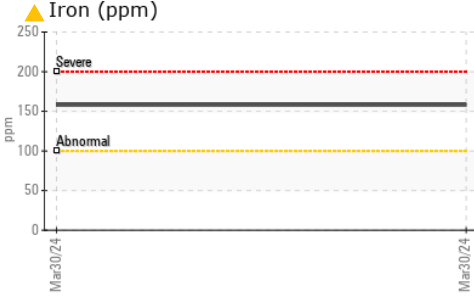
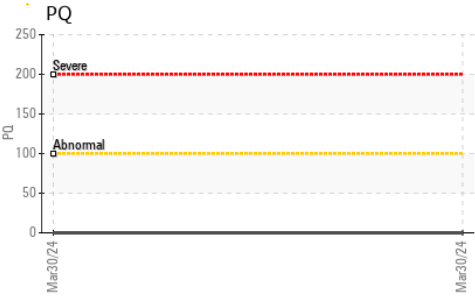


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	21.3	---	---

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 @ 100°C	cSt	ASTM D7279(m)	7.5	8.5	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0899671 **Received** : 03 Apr 2024
Lab Number : **02626365** **Tested** : 03 Apr 2024
Unique Number : 5759497 **Diagnosed** : 04 Apr 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: PQ)

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 T:
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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.