



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
54163
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 10W30 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0904880	WC0892040	---
Sample Date		Client Info		03 May 2024	04 Mar 2024	---
Machine Age	kms	Client Info		64370	35848	---
Oil Age	kms	Client Info		28522	33480	---
Filter Age	kms	Client Info		28522	33480	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	23	61	---
Chromium	ppm	ASTM D5185(m)	>20	2	4	---
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>3	0	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	10	7	---
Lead	ppm	ASTM D5185(m)	>40	1	4	---
Copper	ppm	ASTM D5185(m)	>330	4	19	---
Tin	ppm	ASTM D5185(m)	>15	1	3	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

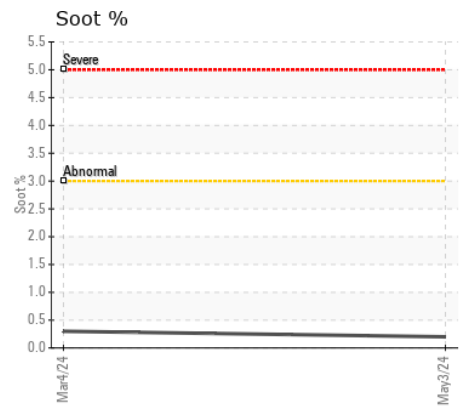
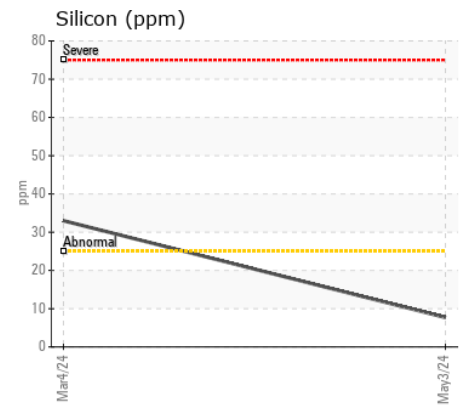
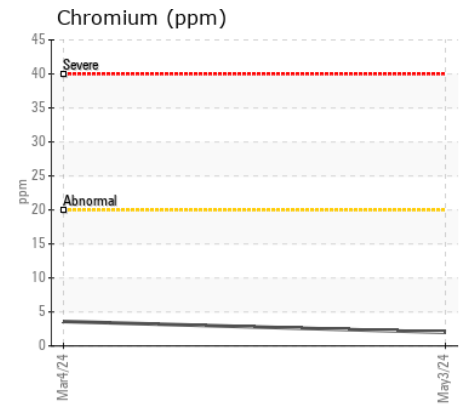
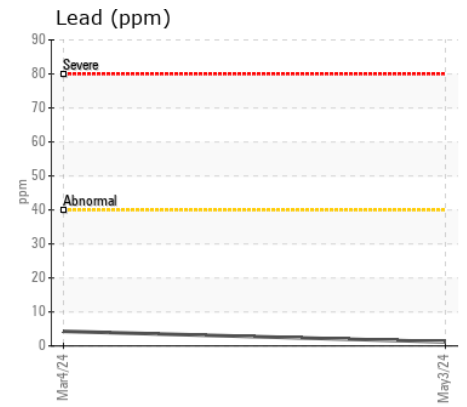
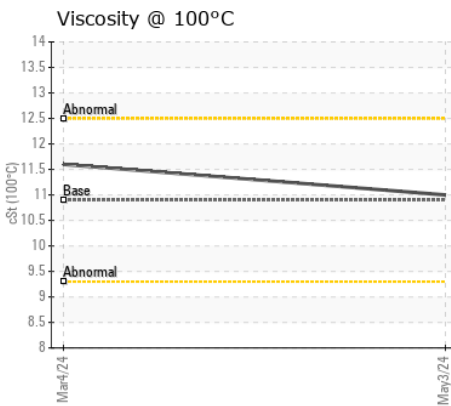
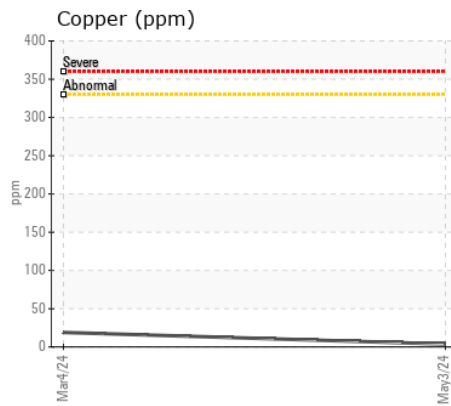
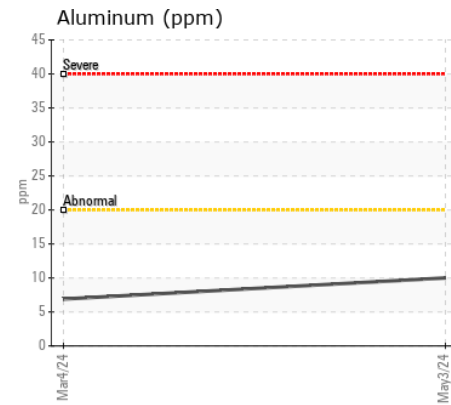
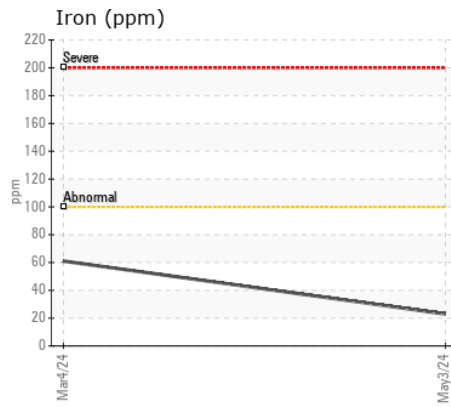
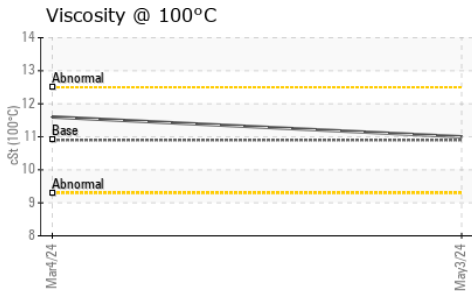
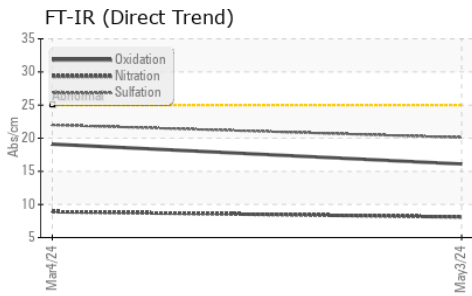
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	33	---
Potassium	ppm	ASTM D5185(m)	>20	24	29	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	0.0	---
Soot %	%	ASTM D7844*	>3	0.2	0.3	---
Nitration	Abs/cm	ASTM D7624*	>20	8.1	8.9	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.1	22.0	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		2	4	---
Boron	ppm	ASTM D5185(m)	250	6	38	---
Barium	ppm	ASTM D5185(m)	10	<1	5	---
Molybdenum	ppm	ASTM D5185(m)	100	61	66	---
Manganese	ppm	ASTM D5185(m)		1	5	---
Magnesium	ppm	ASTM D5185(m)	450	948	500	---
Calcium	ppm	ASTM D5185(m)	3000	1116	1802	---
Phosphorus	ppm	ASTM D5185(m)	1150	996	1014	---
Zinc	ppm	ASTM D5185(m)	1350	1199	1235	---
Sulfur	ppm	ASTM D5185(m)	4250	2377	2532	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.1	19.1	---
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.0	11.6	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0904880 **Received** : 14 May 2024
Lab Number : 02635222 **Tested** : 14 May 2024
Unique Number : 5776375 **Diagnosed** : 14 May 2024 - Wes Davis
Test Package : MOB 1

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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.