MOB Luber-finer®

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
404
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- QTS)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Cylinder, crank, or cam shaft wear is indicated. Valve wear is indicated.

CONTAMINATION

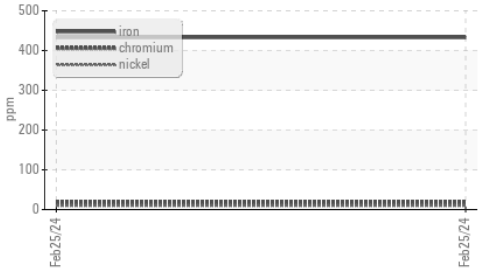
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

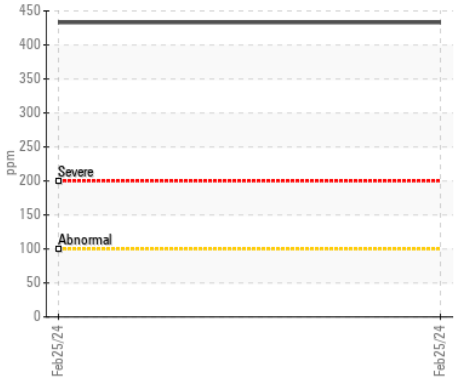
The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LF0001765	---	---
Sample Date		Client Info		25 Feb 2024	---	---
Machine Age	mls	Client Info		0	---	---
Oil Age	mls	Client Info		0	---	---
Filter Age	mls	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>100	▲ 433	---	---
Chromium	ppm	ASTM D5185m	>20	18	---	---
Nickel	ppm	ASTM D5185m	>4	▲ 10	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	● 31	---	---
Lead	ppm	ASTM D5185m	>40	4	---	---
Copper	ppm	ASTM D5185m	>330	16	---	---
Tin	ppm	ASTM D5185m	>15	2	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>25	▲ 76	---	---
Potassium	ppm	ASTM D5185m	>20	5	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	1.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	10.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185m	>216	6	---	---
Boron	ppm	ASTM D5185m	250	58	---	---
Barium	ppm	ASTM D5185m	10	0	---	---
Molybdenum	ppm	ASTM D5185m	100	63	---	---
Manganese	ppm	ASTM D5185m		4	---	---
Magnesium	ppm	ASTM D5185m	450	560	---	---
Calcium	ppm	ASTM D5185m	3000	1853	---	---
Phosphorus	ppm	ASTM D5185m	1150	868	---	---
Zinc	ppm	ASTM D5185m	1350	1103	---	---
Sulfur	ppm	ASTM D5185m	4250	2470	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.3	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	13.8	---	---

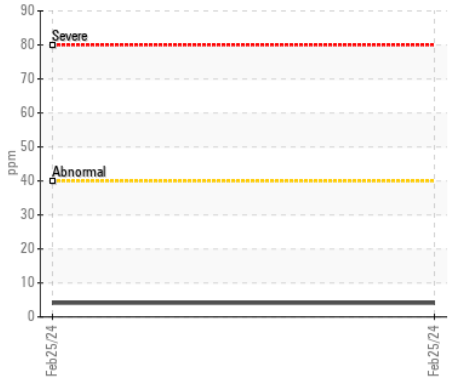
Ferrous Alloys



Iron (ppm)

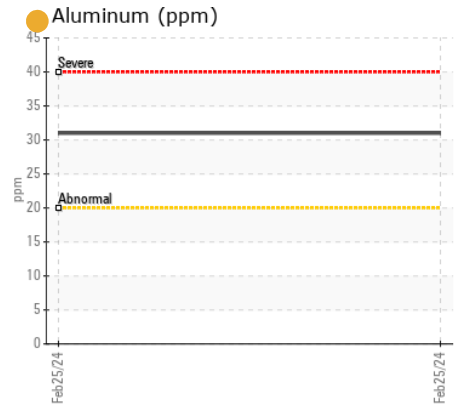


Lead (ppm)

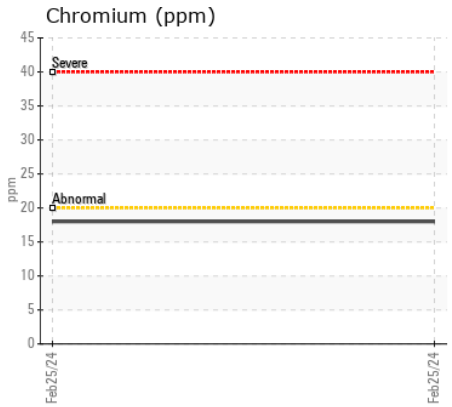


Silicon (ppm)

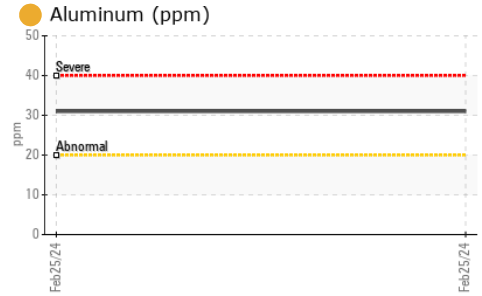
Aluminum (ppm)



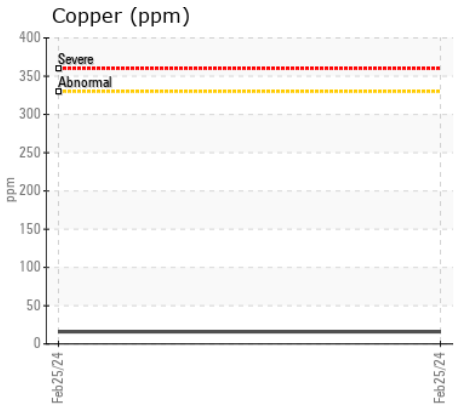
Chromium (ppm)



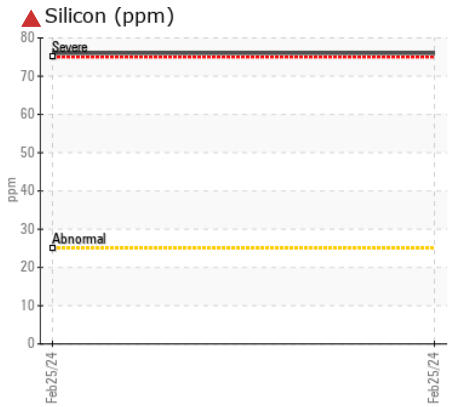
Aluminum (ppm)



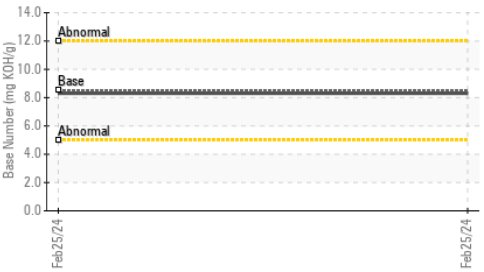
Copper (ppm)



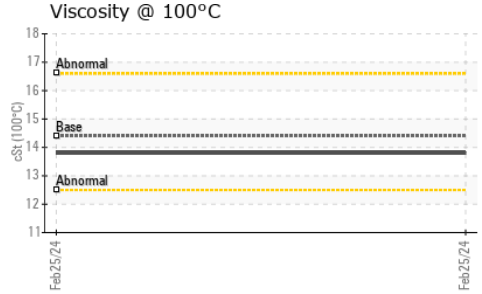
Silicon (ppm)



Base Number



Viscosity @ 100°C



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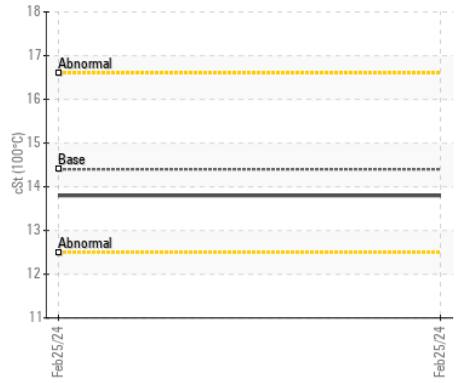
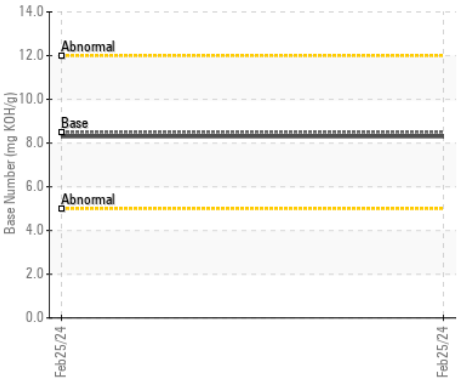


Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LF0001765
Lab Number : 06100820
Unique Number : 10899050
Test Package : MOB 1 (Additional Tests: TBN)

Received : 26 Feb 2024
Tested : 27 Feb 2024
Diagnosed : 28 Feb 2024 - Don Baldridge

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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