



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**2323**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 5W40 (--- QTS)**

## 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		<b>RW0005210</b>	RW0004812	---
Sample Date		Client Info		<b>02 Jul 2024</b>	25 Jan 2024	---
Machine Age	mls	Client Info		<b>13273</b>	4237	---
Oil Age	mls	Client Info		<b>4525</b>	0	---
Filter Age	mls	Client Info		<b>4525</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>30</b>	51	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	4	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m	>330	<b>75</b>	104	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

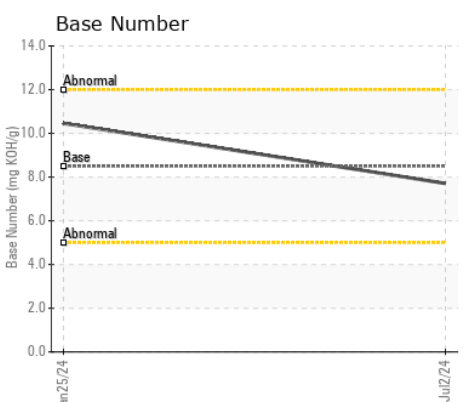
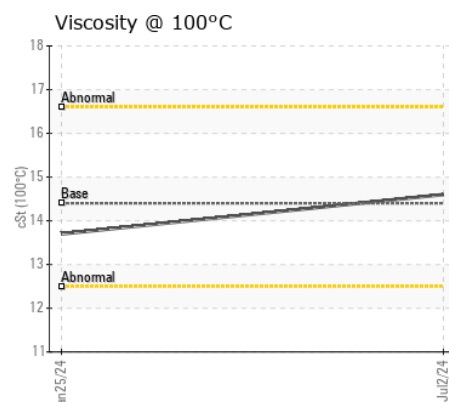
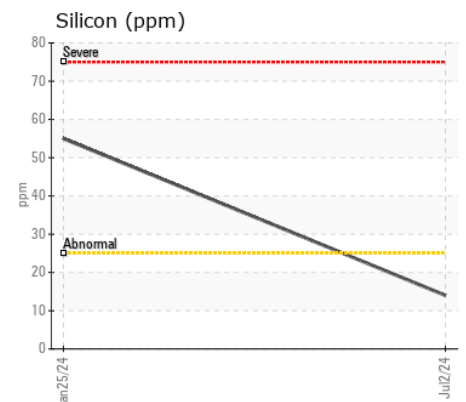
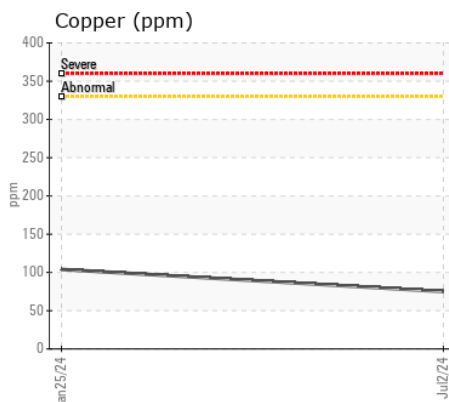
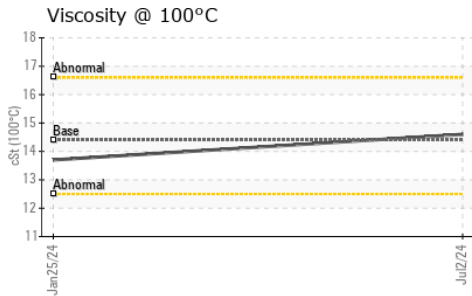
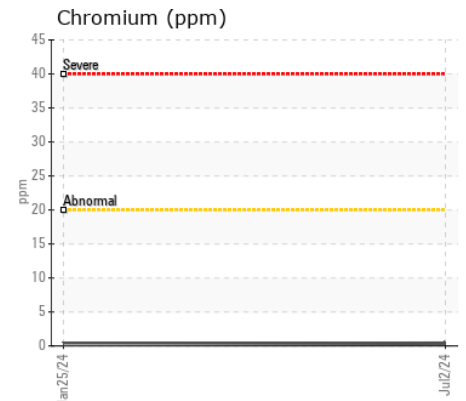
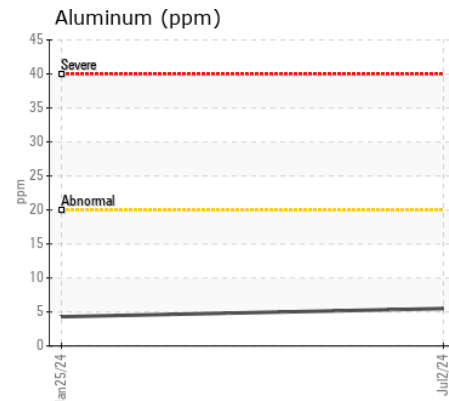
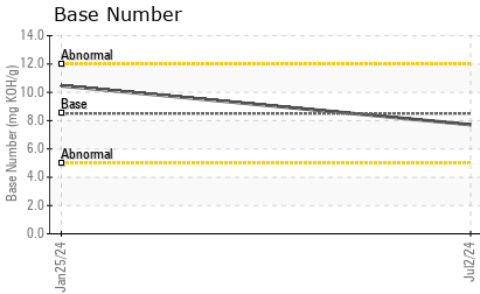
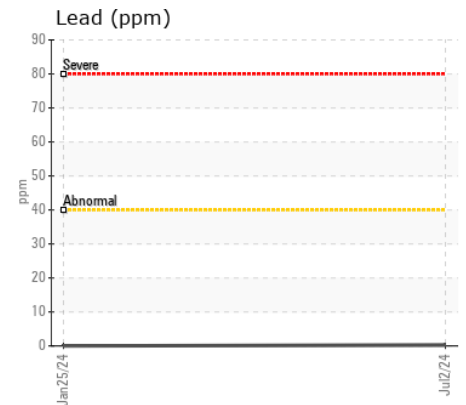
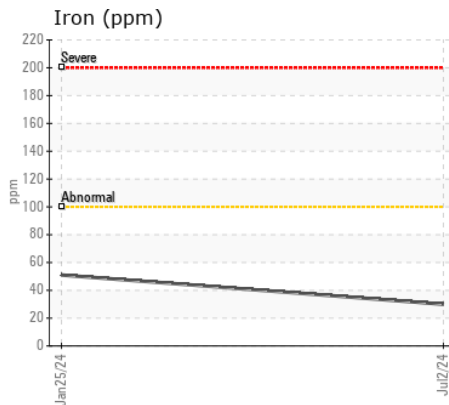
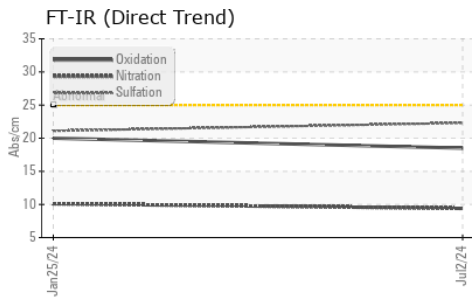
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>14</b>	55	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	4	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.4</b>	10.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.3</b>	21.1	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

## 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.

Sodium	ppm	ASTM D5185m	>44	<b>&lt;1</b>	4	---
Boron	ppm	ASTM D5185m	250	<b>118</b>	50	---
Barium	ppm	ASTM D5185m	10	<b>0</b>	8	---
Molybdenum	ppm	ASTM D5185m	100	<b>3</b>	56	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	5	---
Magnesium	ppm	ASTM D5185m	450	<b>99</b>	1010	---
Calcium	ppm	ASTM D5185m	3000	<b>2078</b>	792	---
Phosphorus	ppm	ASTM D5185m	1150	<b>949</b>	1036	---
Zinc	ppm	ASTM D5185m	1350	<b>1163</b>	1139	---
Sulfur	ppm	ASTM D5185m	4250	<b>3116</b>	3416	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.5</b>	20.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.71</b>	10.46	---
Visc @ 100°C	cSt	ASTM D445	14.4	<b>14.6</b>	13.7	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RW0005210 **Received** : 11 Jul 2024  
**Lab Number** : 06234023 **Tested** : 12 Jul 2024  
**Unique Number** : 11122857 **Diagnosed** : 12 Jul 2024 - Wes Davis  
**Test Package** : MOB 2

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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)