



# OIL ANALYSIS REPORT

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

Machine Id  
**2-270**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0871771</b>	WC0834200	WC0847591
Sample Date		Client Info		<b>13 Mar 2024</b>	07 Jan 2024	06 Oct 2023
Machine Age	hrs	Client Info		<b>3894</b>	0	2734
Oil Age	hrs	Client Info		<b>751</b>	0	1168
Filter Age	hrs	Client Info		<b>751</b>	0	1168
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>12</b>	12	23
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	6	14
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	2
Copper	ppm	ASTM D5185m	>330	<b>14</b>	33	112
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

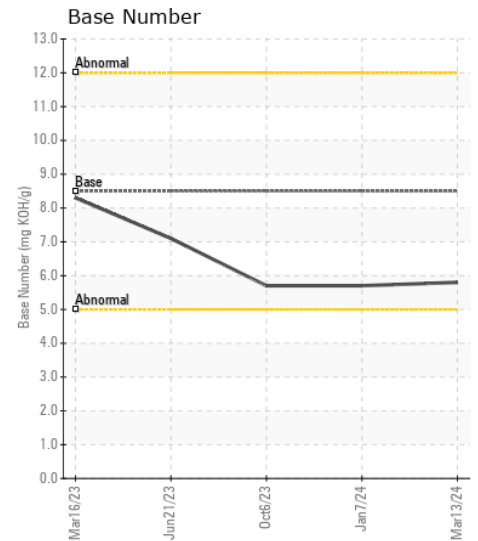
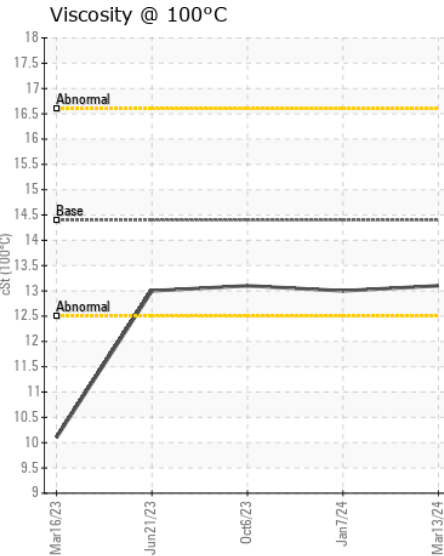
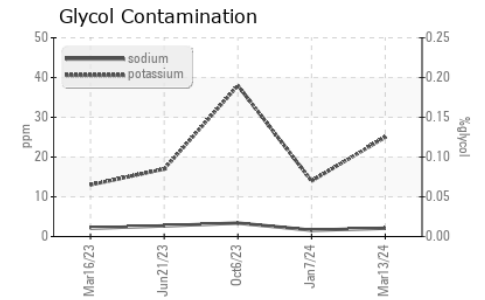
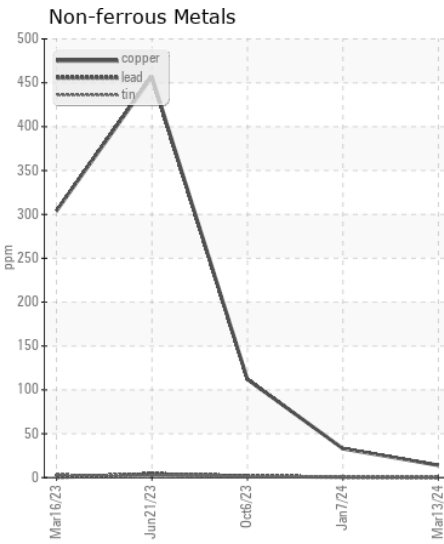
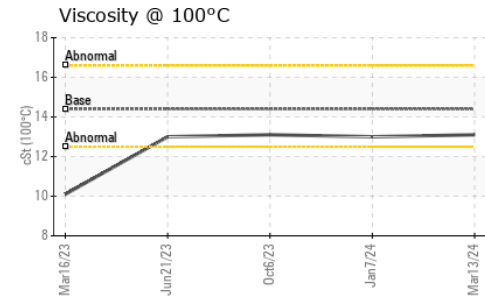
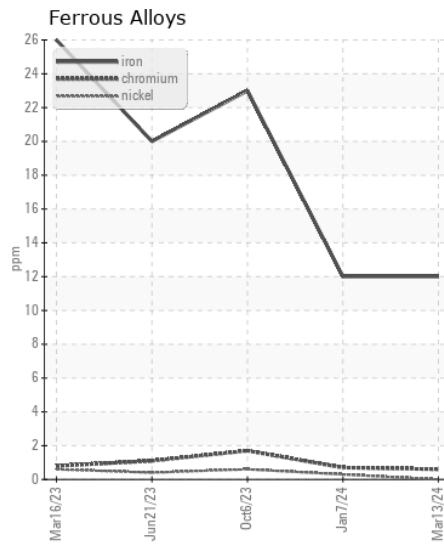
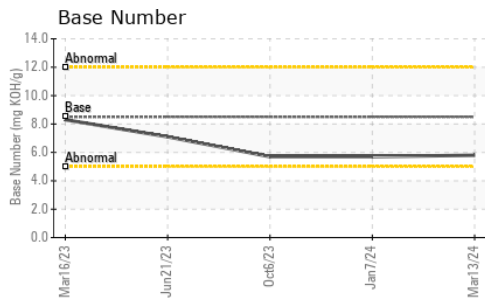
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	6	12
Potassium	ppm	ASTM D5185m	>20	<b>25</b>	14	38
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	*ASTM D2982		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.2</b>	9.5	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.8</b>	20.4	20.6
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	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	>158	<b>2</b>	2	3
Boron	ppm	ASTM D5185m	250	<b>36</b>	25	20
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	3
Molybdenum	ppm	ASTM D5185m	100	<b>46</b>	10	12
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	450	<b>748</b>	773	693
Calcium	ppm	ASTM D5185m	3000	<b>1349</b>	1341	1373
Phosphorus	ppm	ASTM D5185m	1150	<b>719</b>	760	665
Zinc	ppm	ASTM D5185m	1350	<b>838</b>	866	775
Sulfur	ppm	ASTM D5185m	4250	<b>3244</b>	2716	2195
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.6</b>	16.8	17.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>5.8</b>	5.7	5.7
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.1</b>	13.0	13.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0871771 **Received** : 20 Mar 2024  
**Lab Number** : 06124224 **Tested** : 23 Mar 2024  
**Unique Number** : 10938375 **Diagnosed** : 23 Mar 2024 - Don Baldrige  
**Test Package** : FLEET ( Additional Tests: Glycol )

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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)