



# OIL ANALYSIS REPORT

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

Machine Id  
**9243**  
 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>WC0857621</b>	WC0817758	WC0762547
Sample Date		Client Info		<b>08 Jan 2024</b>	16 Jun 2023	20 Dec 2022
Machine Age	mls	Client Info		<b>0</b>	341322	318963
Oil Age	mls	Client Info		<b>0</b>	9124	0
Filter Age	mls	Client Info		<b>0</b>	9124	0
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>26</b>	10	9
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>12</b>	4	4
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>4</b>	2	3
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

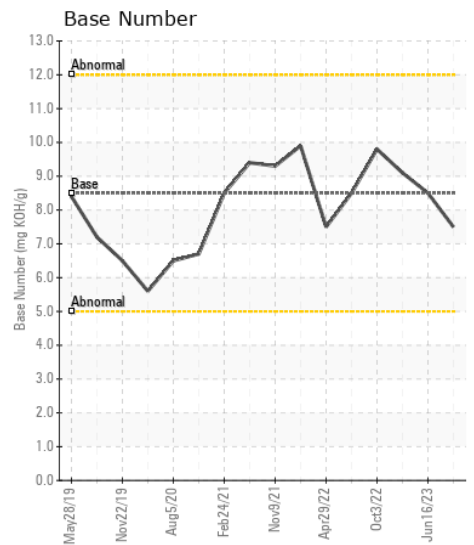
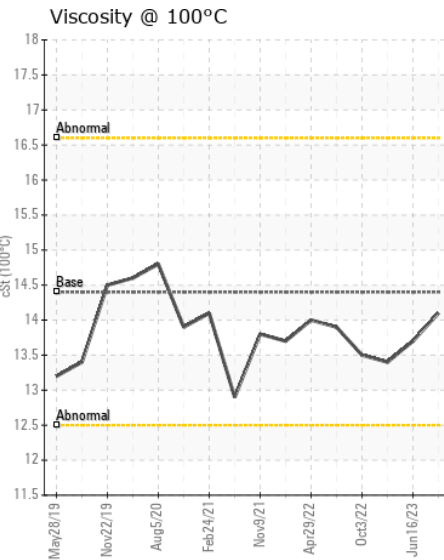
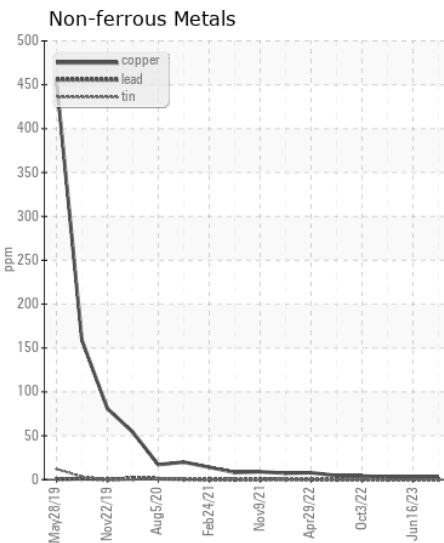
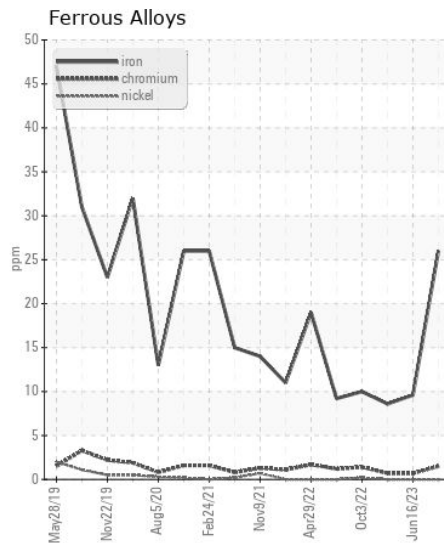
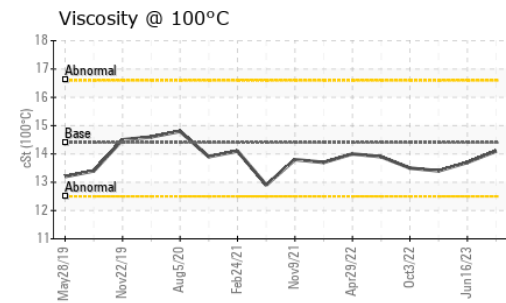
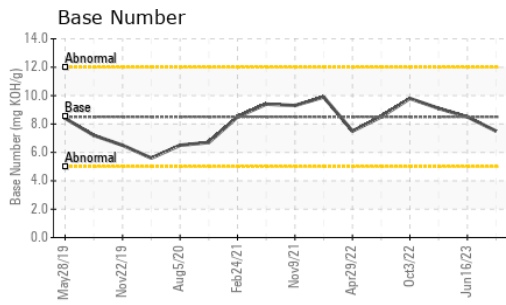
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	3	3
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.7</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.6</b>	7.5	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.6</b>	18.5	18.9
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>1</b>	0	0
Boron	ppm	ASTM D5185m	250	<b>2</b>	18	94
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>66</b>	45	63
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>1027</b>	474	912
Calcium	ppm	ASTM D5185m	3000	<b>1184</b>	1695	1136
Phosphorus	ppm	ASTM D5185m	1150	<b>1078</b>	948	986
Zinc	ppm	ASTM D5185m	1350	<b>1340</b>	1129	1192
Sulfur	ppm	ASTM D5185m	4250	<b>3074</b>	3240	3556
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.8</b>	12.5	13.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.5</b>	8.5	9.1
Visc @ 100°C	cSt	ASTM D445	14.4	<b>14.1</b>	13.7	13.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0857621 **Received** : 16 Jan 2024  
**Lab Number** : 06061642 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10833024 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

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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)