



# WEAR CHECK

## OIL ANALYSIS REPORT

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

Machine Id  
**4501**  
Component  
**Diesel Engine**  
Fluid  
**SHELL ROTELLA T4 15W40 (--- 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>WC0866830</b>	WC0866866	WC0831978
Sample Date		Client Info		<b>13 Mar 2024</b>	18 Dec 2023	11 Sep 2023
Machine Age	hrs	Client Info		<b>5698</b>	5396	4990
Oil Age	hrs	Client Info		<b>250</b>	250	250
Filter Age	hrs	Client Info		<b>250</b>	250	250
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>	10	12
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	5	7
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>10</b>	2	3
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

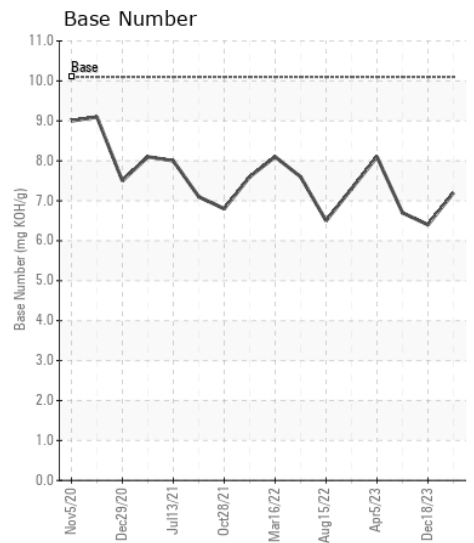
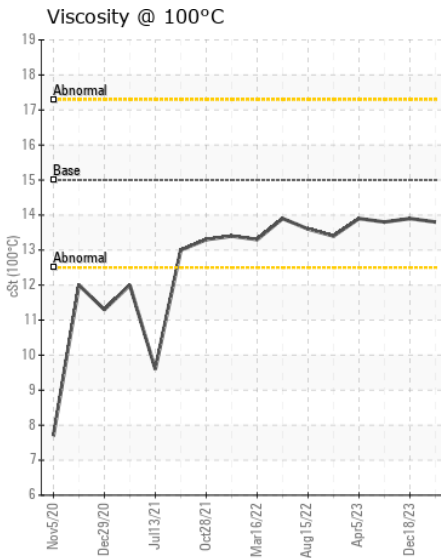
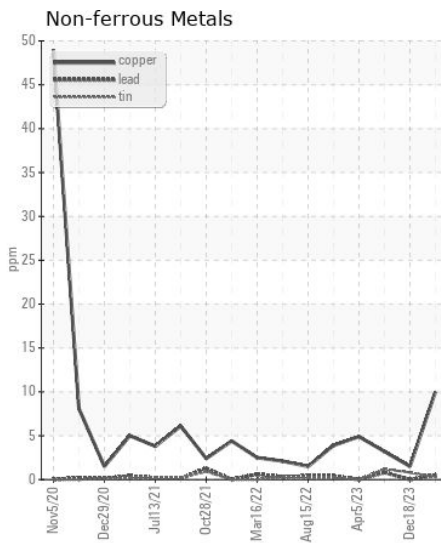
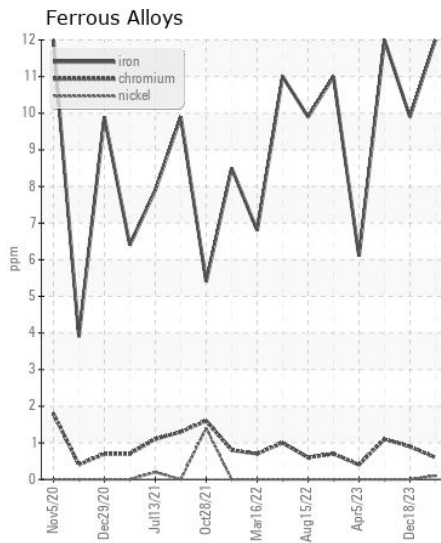
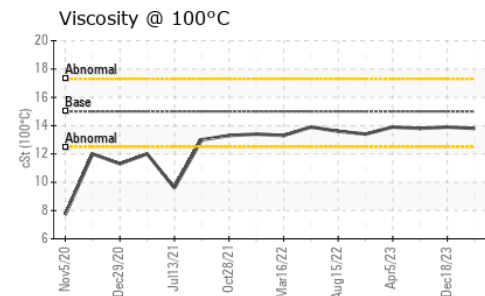
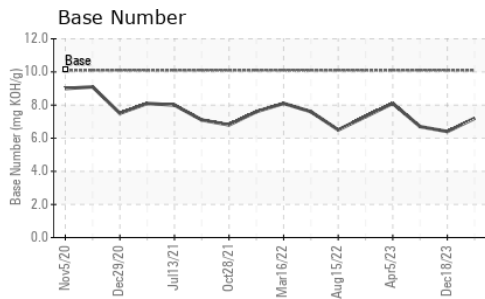
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	9	8
Potassium	ppm	ASTM D5185m	>20	<b>15</b>	15	22
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>0.2</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.1</b>	8.9	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.2</b>	21.3	20.3
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		<b>1</b>	2	3
Boron	ppm	ASTM D5185m		<b>156</b>	130	124
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>17</b>	11	21
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>58</b>	75	126
Calcium	ppm	ASTM D5185m		<b>2191</b>	2144	2221
Phosphorus	ppm	ASTM D5185m		<b>1060</b>	1048	1003
Zinc	ppm	ASTM D5185m		<b>1233</b>	1252	1248
Sulfur	ppm	ASTM D5185m		<b>3712</b>	3607	4102
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.5</b>	18.0	16.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>7.2</b>	6.4	6.7
Visc @ 100°C	cSt	ASTM D445	15	<b>13.8</b>	13.9	13.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0866830  
**Lab Number** : 06125483  
**Unique Number** : 10939634  
**Test Package** : FLEET

**Received** : 21 Mar 2024  
**Tested** : 22 Mar 2024  
**Diagnosed** : 22 Mar 2024 - Wes Davis

**GUY M TURNER & TURNER TRANSFER**  
 4505 SOUTH HOLDEN ROAD  
 GREENSBORO, NC  
 US 27406

Contact: ROGER HIXSON  
 rhixson@guyturner.com

T: (336)294-4660  
 F: (336)294-6644

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)