



# WEAR CHECK

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**22315**  
Component  
**Diesel Engine**  
Fluid  
**SHELL ROTELLA T 10W30 (--- 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>WC0955675</b>	WC0909737	WC0909718
Sample Date		Client Info		<b>20 Jun 2024</b>	14 May 2024	29 Mar 2024
Machine Age	mls	Client Info		<b>55064</b>	49057	3901
Oil Age	mls	Client Info		<b>6007</b>	1900	412
Filter Age	mls	Client Info		<b>6007</b>	1900	412
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

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>11</b>	9	3
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	3	2
Lead	ppm	ASTM D5185m	>40	<b>2</b>	1	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

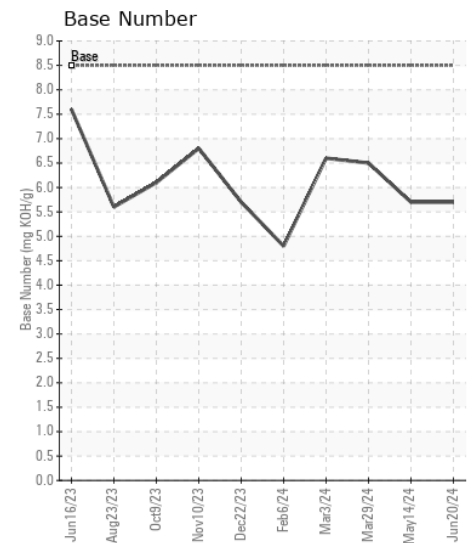
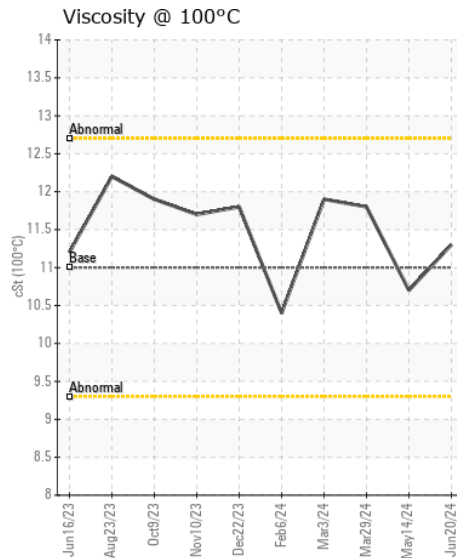
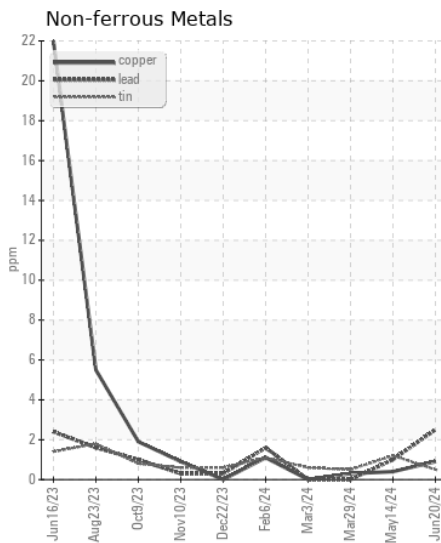
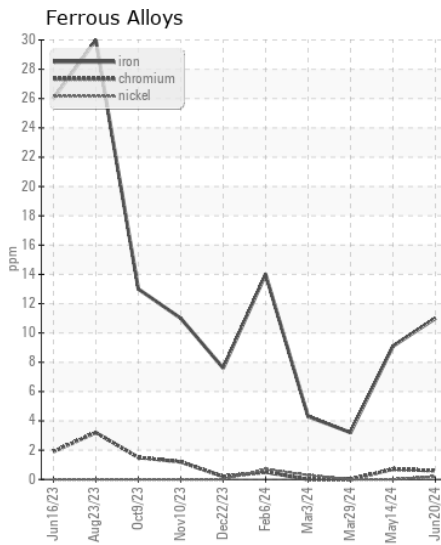
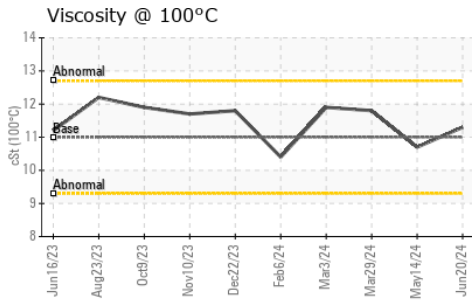
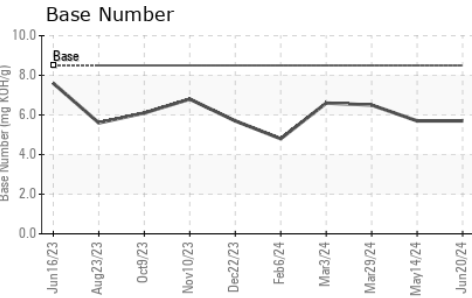
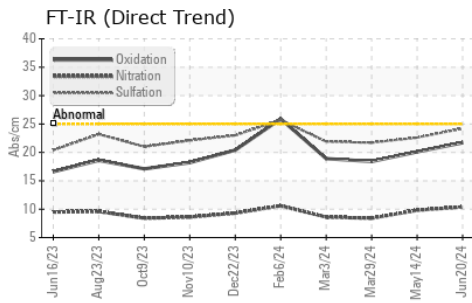
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>15</b>	10	7
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>0.6</b>	0.6	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.4</b>	9.8	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.2</b>	22.6	21.7
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>2</b>	2	2
Boron	ppm	ASTM D5185m	269	<b>45</b>	45	132
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>15</b>	21	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	20	<b>221</b>	312	26
Calcium	ppm	ASTM D5185m	1521	<b>2083</b>	1941	2168
Phosphorus	ppm	ASTM D5185m	948	<b>1000</b>	977	982
Zinc	ppm	ASTM D5185m	893	<b>1242</b>	1251	1160
Sulfur	ppm	ASTM D5185m		<b>3902</b>	3745	3842
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.7</b>	20.1	18.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>5.7</b>	5.7	6.5
Visc @ 100°C	cSt	ASTM D445	11.0	<b>11.3</b>	10.7	11.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0955675  
**Lab Number** : 06219069  
**Unique Number** : 11097266  
**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)