



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**CR5503**  
Component  
**Diesel Engine**  
Fluid  
**SHELL ROTELLA T 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0952088</b>	WC0877403	WC0833321
Sample Date		Client Info		<b>14 Jun 2024</b>	19 Jan 2024	03 Sep 2023
Machine Age	hrs	Client Info		<b>10882</b>	10142	9050
Oil Age	hrs	Client Info		<b>740</b>	0	0
Filter Age	hrs	Client Info		<b>740</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>7</b>	4	4
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	2	1
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	1	2
Copper	ppm	ASTM D5185m	>330	<b>3</b>	2	2
Tin	ppm	ASTM D5185m	>15	<b>1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

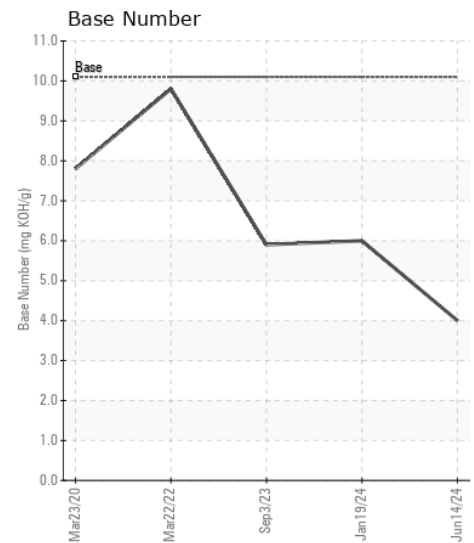
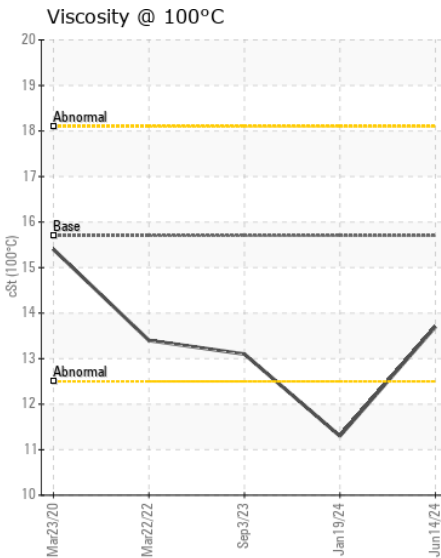
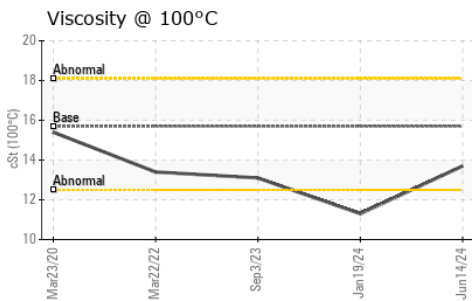
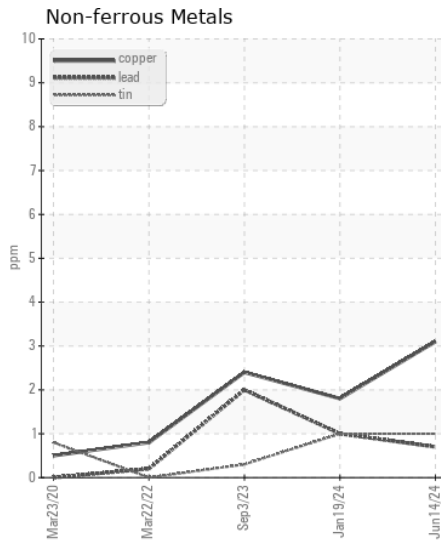
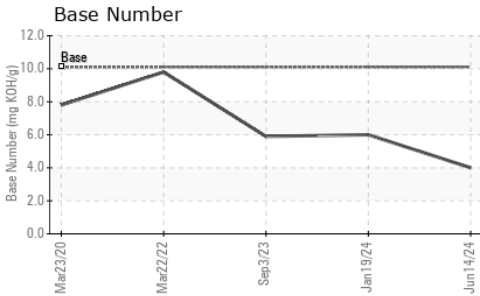
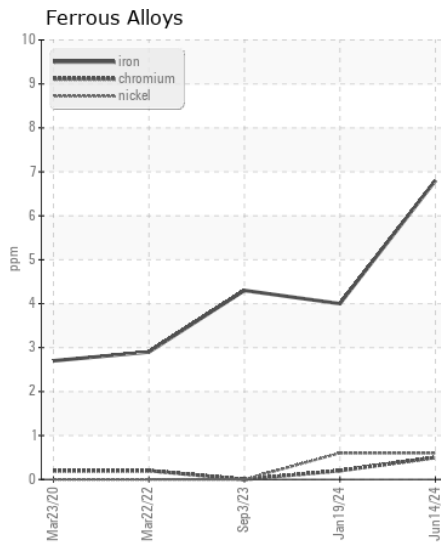
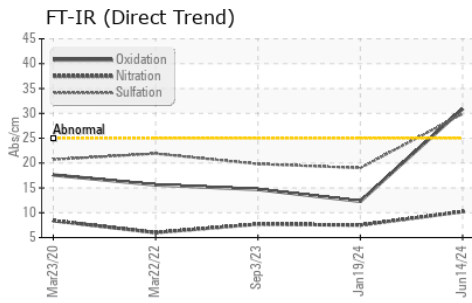
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	2	2
Fuel		WC Method	>5	<b>&lt;1.0</b>	1.3	<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>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.2</b>	7.5	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>29.9</b>	19.0	19.8
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>0</b>	0	3
Boron	ppm	ASTM D5185m	316	<b>88</b>	23	69
Barium	ppm	ASTM D5185m	0.0	<b>1</b>	13	0
Molybdenum	ppm	ASTM D5185m	1.2	<b>24</b>	24	56
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	24	<b>445</b>	139	500
Calcium	ppm	ASTM D5185m	2292	<b>1613</b>	2091	1888
Phosphorus	ppm	ASTM D5185m	1064	<b>1101</b>	933	897
Zinc	ppm	ASTM D5185m	1160	<b>1216</b>	1059	1132
Sulfur	ppm	ASTM D5185m	4996	<b>3268</b>	4016	4097
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>30.9</b>	12.3	14.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>4.0</b>	6.0	5.9
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.7</b>	11.3	13.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0952088 **Received** : 24 Jun 2024  
**Lab Number** : 06219216 **Tested** : 25 Jun 2024  
**Unique Number** : 11097413 **Diagnosed** : 26 Jun 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: TBN )

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)

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