



# OIL ANALYSIS REPORT

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

Machine Id  
**FREIGHTLINER 10215**  
Component  
**Diesel Engine**  
Fluid  
**SHELL ROTELLA T 15W40 (44 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0925907</b>	WC0820932	WC0670813
Sample Date		Client Info		<b>19 Apr 2024</b>	22 Jun 2023	17 Nov 2022
Machine Age	mls	Client Info		<b>66457</b>	43354	30916
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</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>	NORMAL	NORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>80	<b>14</b>	4	7
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<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	>30	<b>8</b>	4	3
Lead	ppm	ASTM D5185m	>30	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>150	<b>3</b>	2	7
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

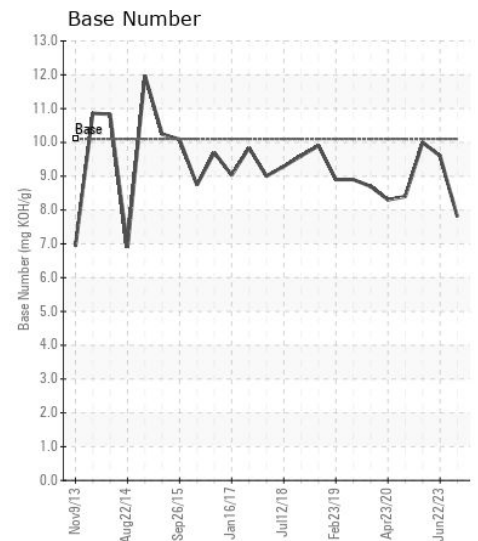
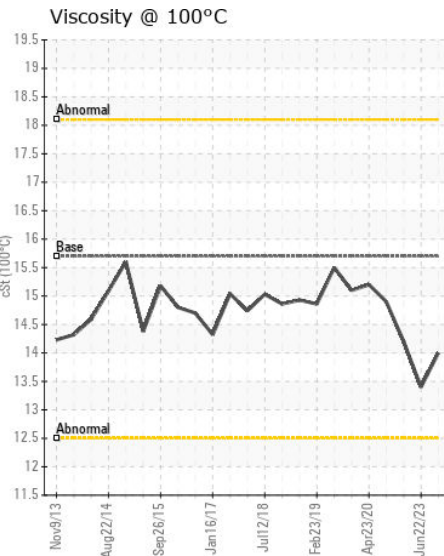
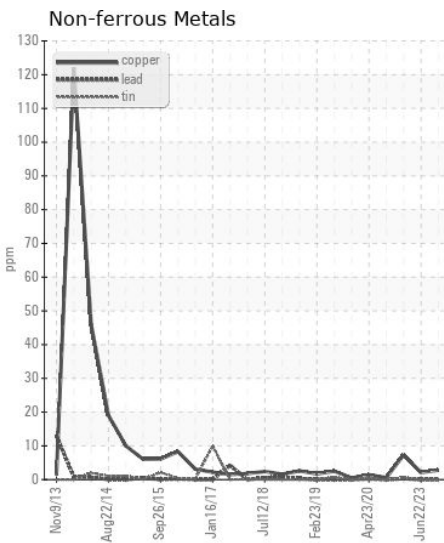
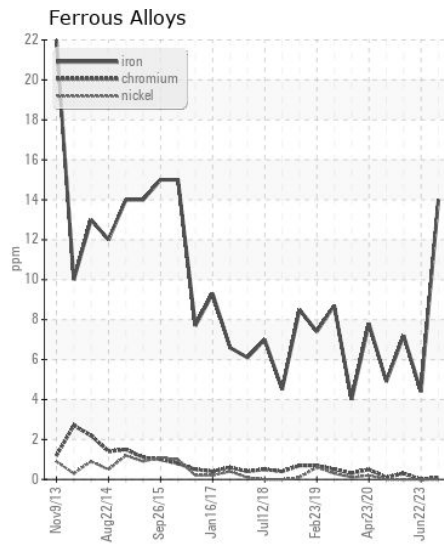
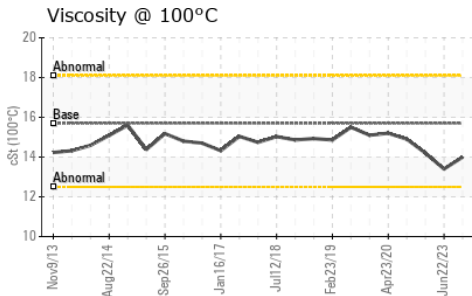
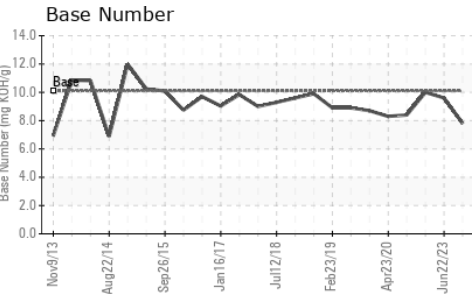
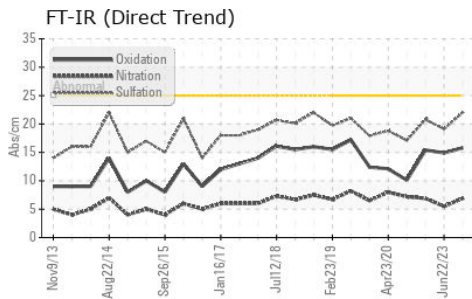
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>6</b>	2	3
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	5	0
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>0.4</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.9</b>	5.5	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.0</b>	19.1	20.8
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>2</b>	4	0
Boron	ppm	ASTM D5185m	316	<b>282</b>	0	0
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	4	0
Molybdenum	ppm	ASTM D5185m	1.2	<b>79</b>	57	60
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	24	<b>515</b>	853	946
Calcium	ppm	ASTM D5185m	2292	<b>1386</b>	965	1084
Phosphorus	ppm	ASTM D5185m	1064	<b>1076</b>	899	1011
Zinc	ppm	ASTM D5185m	1160	<b>1310</b>	1134	1216
Sulfur	ppm	ASTM D5185m	4996	<b>3845</b>	3476	3687
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.8</b>	14.9	15.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>7.8</b>	9.6	10.0
Visc @ 100°C	cSt	ASTM D445	15.7	<b>14.0</b>	13.4	14.2



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0925907  
**Lab Number** : 06159682  
**Unique Number** : 10995105  
**Test Package** : FLEET

**Received** : 24 Apr 2024  
**Tested** : 25 Apr 2024  
**Diagnosed** : 25 Apr 2024 - Wes Davis

**SALEM NATIONALEASE CORPORATION**  
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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)