



# OIL ANALYSIS REPORT

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

Machine Id  
**11114**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 5W40 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0936738</b>	WC0916021	WC0882319
Sample Date		Client Info		<b>10 Jun 2024</b>	20 Mar 2024	30 Nov 2023
Machine Age	mls	Client Info		<b>211713</b>	197412	0
Oil Age	mls	Client Info		<b>10000</b>	0	0
Filter Age	mls	Client Info		<b>10000</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>38</b>	20	28
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>9</b>	6	7
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	<1	2
Tin	ppm	ASTM D5185m	>15	<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

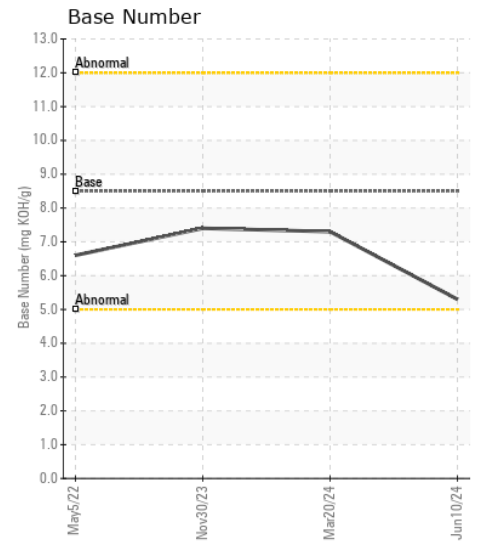
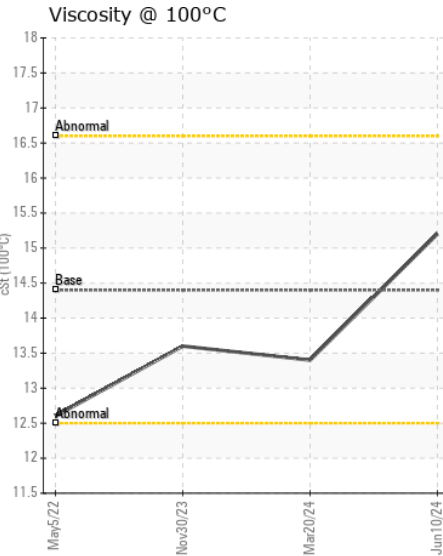
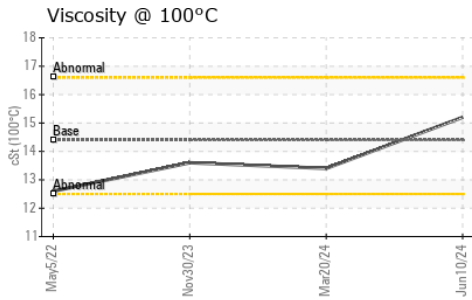
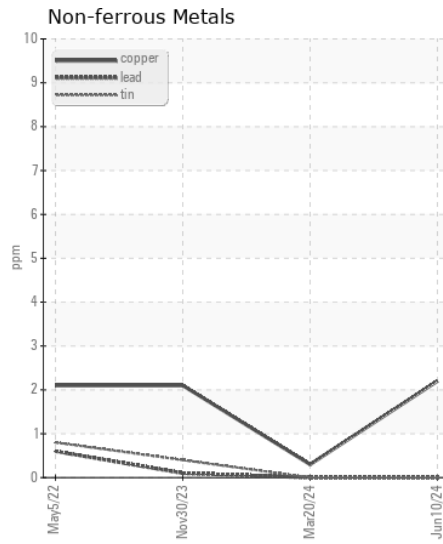
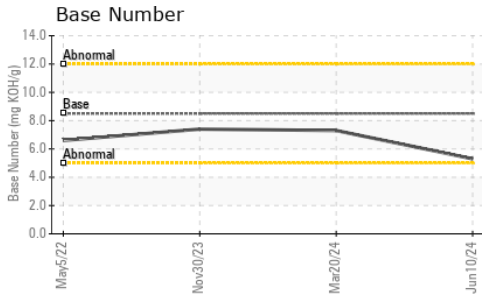
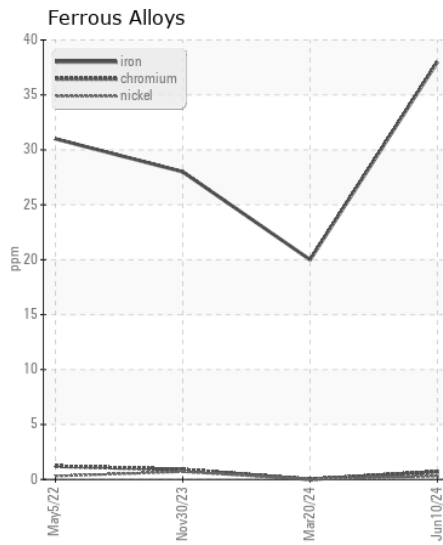
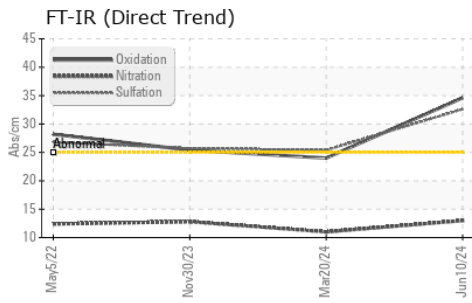
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>13</b>	7	11
Potassium	ppm	ASTM D5185m	>20	<b>15</b>	6	16
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>	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>13.0</b>	11.0	12.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>32.6</b>	25.4	25.7
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	>44	<b>4</b>	1	1
Boron	ppm	ASTM D5185m	250	<b>112</b>	228	221
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	13
Molybdenum	ppm	ASTM D5185m	100	<b>107</b>	135	129
Manganese	ppm	ASTM D5185m		<b>1</b>	0	<1
Magnesium	ppm	ASTM D5185m	450	<b>522</b>	730	693
Calcium	ppm	ASTM D5185m	3000	<b>1703</b>	1878	1539
Phosphorus	ppm	ASTM D5185m	1150	<b>1148</b>	788	728
Zinc	ppm	ASTM D5185m	1350	<b>1402</b>	908	871
Sulfur	ppm	ASTM D5185m	4250	<b>3705</b>	3030	2637
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>34.6</b>	24.0	25.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>5.3</b>	7.3	7.4
Visc @ 100°C	cSt	ASTM D445	14.4	<b>15.2</b>	13.4	13.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0936738  
**Lab Number** : 06212780  
**Unique Number** : 11085644  
**Test Package** : FLEET

**Received** : 17 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Angela Borella

**SALEM NATIONALEASE CORPORATION**  
 198 PARK PLAZA DRIVE  
 WINSTON SALEM, NC  
 US 27105

Contact: Audrey Hopkins  
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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)

F: x: