



# OIL ANALYSIS REPORT

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

Machine Id  
**INTERNATIONAL 13067**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (20 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0842043</b>	WC0742092	WC0645268
Sample Date		Client Info		<b>14 Feb 2024</b>	23 Mar 2023	17 Jan 2022
Machine Age	mls	Client Info		<b>94160</b>	90550	83498
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

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>130	<b>15</b>	30	11
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	3	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>5</b>	17	5
Lead	ppm	ASTM D5185m	>20	<b>1</b>	0	<1
Copper	ppm	ASTM D5185m	>125	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
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

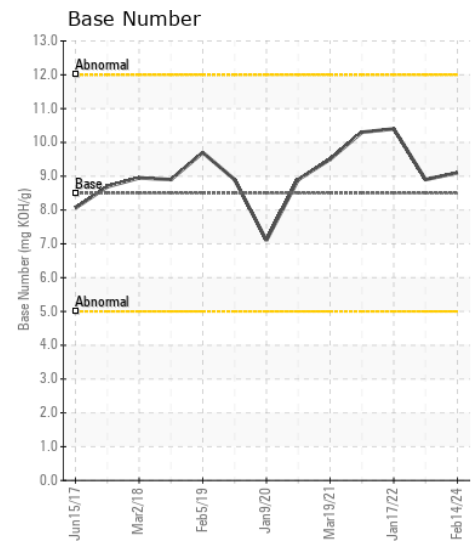
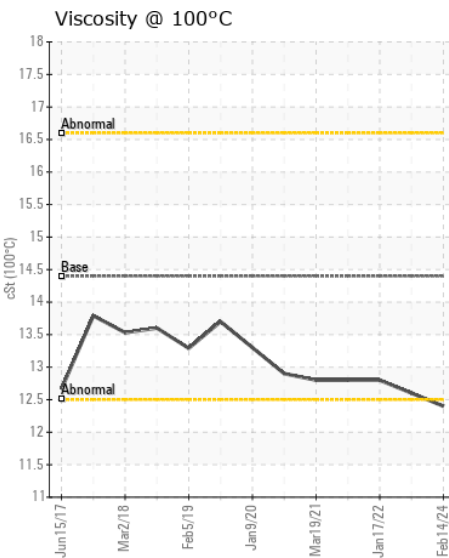
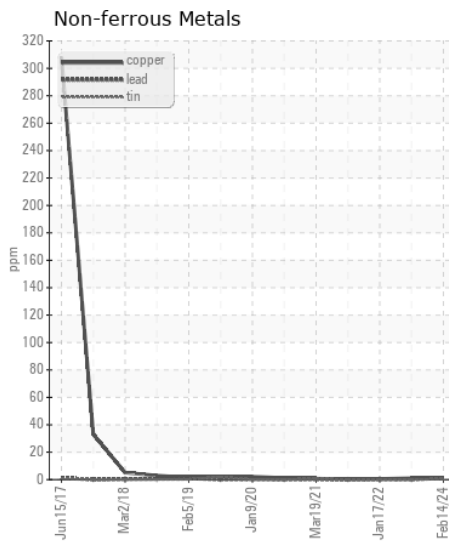
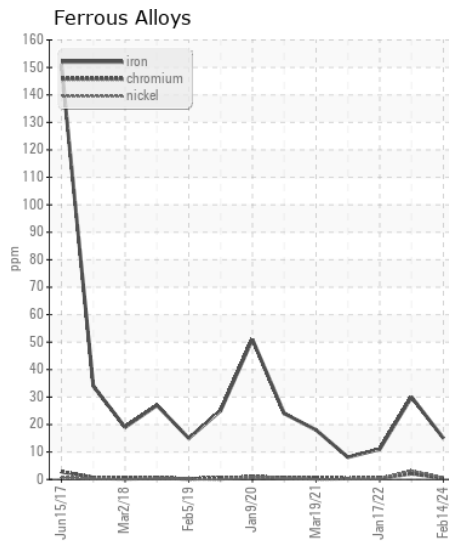
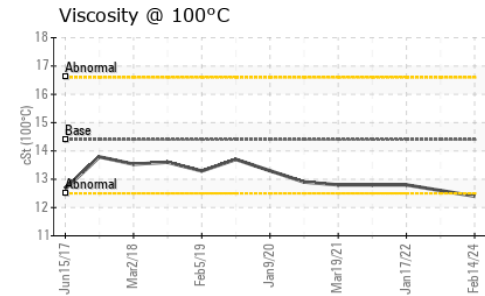
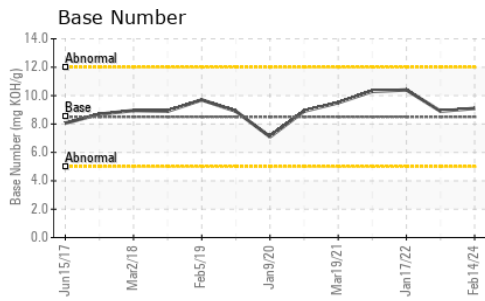
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	4	2
Fuel		WC Method	>3.0	<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	>6	<b>0.2</b>	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.4</b>	10.0	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.8</b>	20.1	20.9
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	>158	<b>1</b>	1	2
Boron	ppm	ASTM D5185m	250	<b>7</b>	2	3
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>60</b>	61	57
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m	450	<b>935</b>	1007	870
Calcium	ppm	ASTM D5185m	3000	<b>1034</b>	1109	1054
Phosphorus	ppm	ASTM D5185m	1150	<b>1056</b>	1103	961
Zinc	ppm	ASTM D5185m	1350	<b>1243</b>	1350	1202
Sulfur	ppm	ASTM D5185m	4250	<b>3361</b>	4122	2921
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.9</b>	16.4	16.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>9.1</b>	8.9	10.4
Visc @ 100°C	cSt	ASTM D445	14.4	<b>12.4</b>	12.6	12.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0842043  
**Lab Number** : 06099704  
**Unique Number** : 10897934  
**Test Package** : FLEET

**Received** : 26 Feb 2024  
**Tested** : 27 Feb 2024  
**Diagnosed** : 27 Feb 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)