



# OIL ANALYSIS REPORT

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

Machine Id  
**61004**  
Component  
**Diesel Engine**  
Fluid  
**EXXON 15W40 (--- 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>WC0852164</b>	WC0852109	WC0684347
Sample Date		Client Info		<b>29 Dec 2023</b>	14 Sep 2023	27 May 2022
Machine Age	mls	Client Info		<b>15183</b>	0	23000
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	>100	<b>10</b>	14	13
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	10	6
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>3</b>	5	5
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

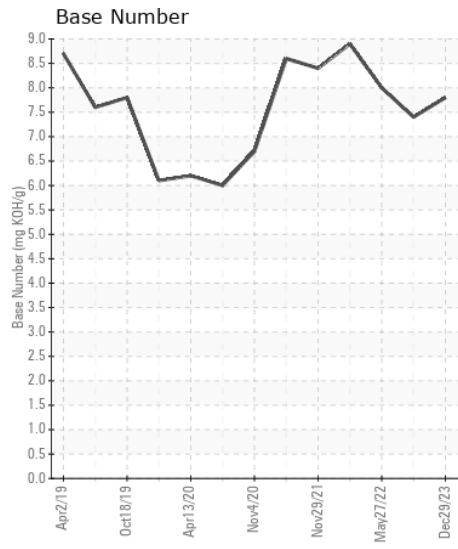
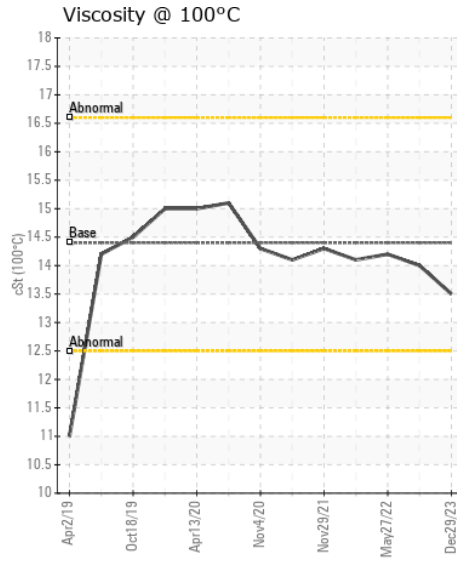
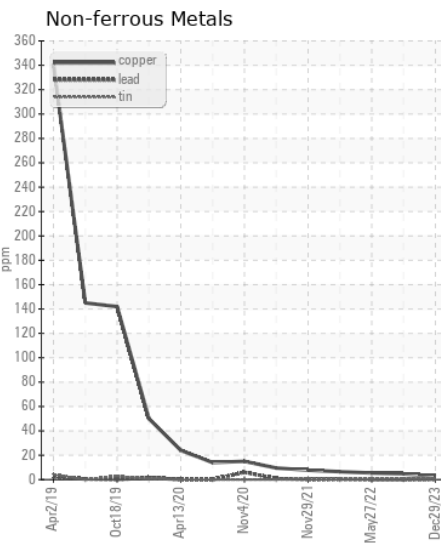
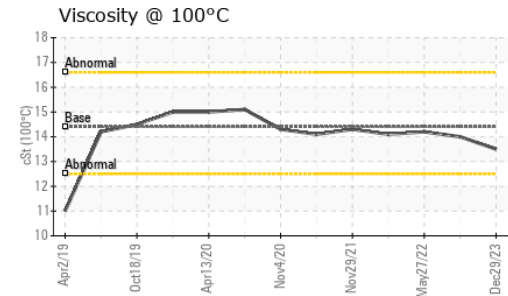
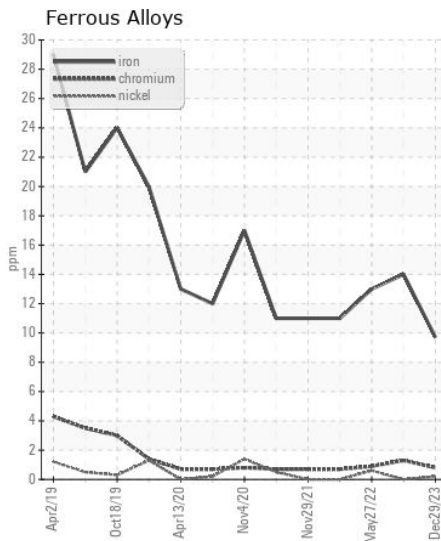
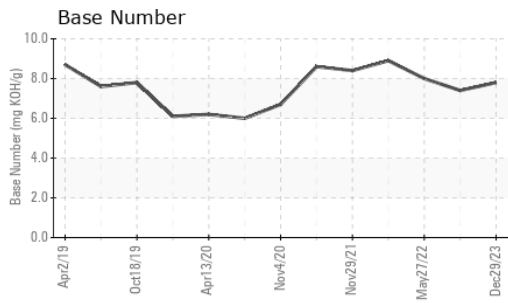
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	3
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>0.5</b>	0.7	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.0</b>	9.1	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.9</b>	21.4	22.3
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>&lt;1</b>	2	1
Boron	ppm	ASTM D5185m		<b>6</b>	0	2
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>79</b>	69	66
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>962</b>	1107	984
Calcium	ppm	ASTM D5185m		<b>1043</b>	1262	1114
Phosphorus	ppm	ASTM D5185m		<b>1062</b>	1074	1043
Zinc	ppm	ASTM D5185m		<b>1243</b>	1379	1334
Sulfur	ppm	ASTM D5185m		<b>2982</b>	3806	2985
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.1</b>	17.1	17.7
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.8</b>	7.4	8.0
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.5</b>	14.0	14.2



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0852164 **Received** : 17 Jan 2024  
**Lab Number** : 06063379 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10834761 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**SALEM NATIONALEASE CORPORATION**  
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Certificate L2367  
 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)