



# OIL ANALYSIS REPORT

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

Machine Id  
**4980**  
Component  
**Diesel Engine**  
Fluid  
**EXXON 15W40 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0875770</b>	WC0875747	WC0717657
Sample Date		Client Info		<b>06 Feb 2024</b>	29 Nov 2023	31 May 2023
Machine Age	mls	Client Info		<b>374565</b>	362193	332701
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	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>18</b>	55	13
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	4	0
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	2	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>5</b>	▲ 26	4
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	<1
Tin	ppm	ASTM D5185m	>15	<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

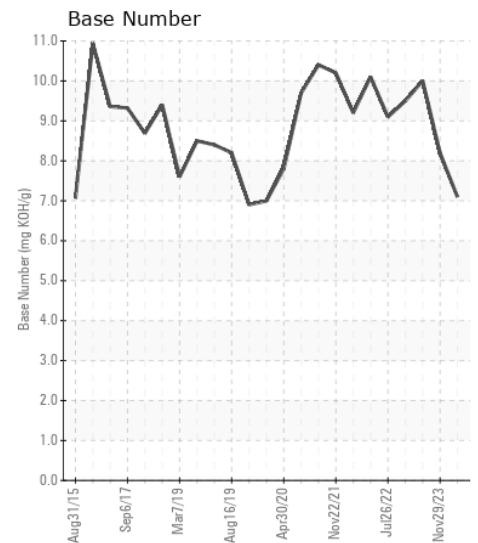
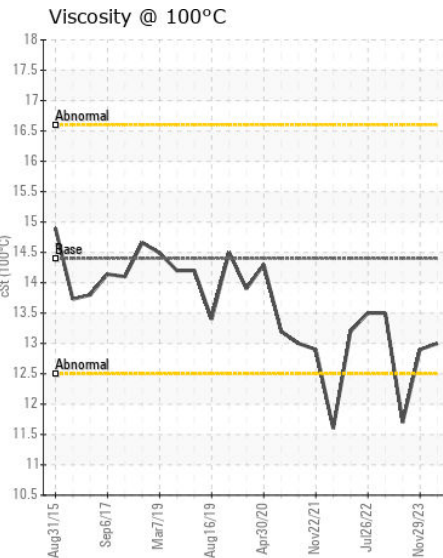
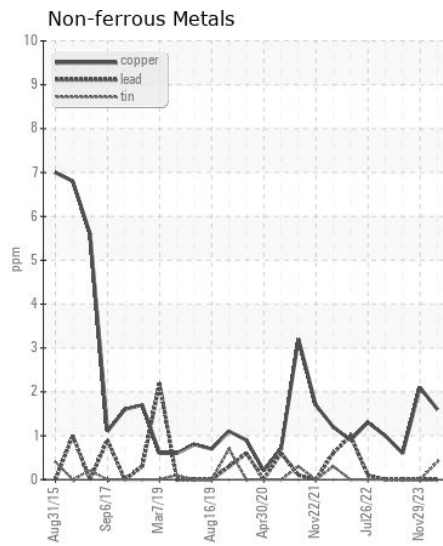
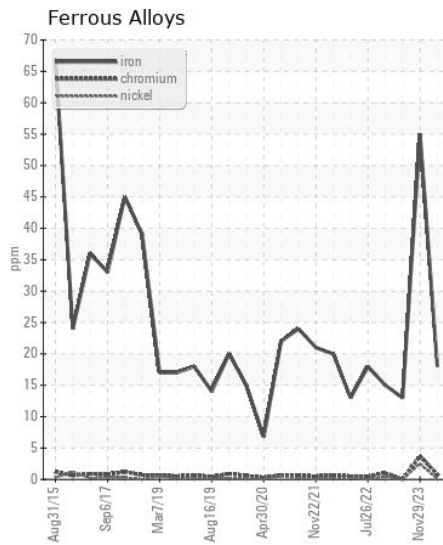
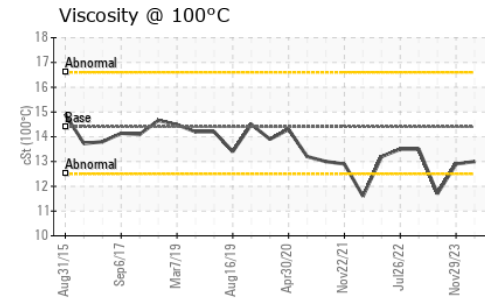
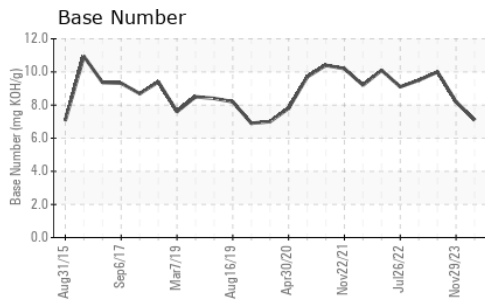
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	11	6
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	8	<1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	0.7
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>	0.5	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.6</b>	9.0	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.8</b>	20.2	23.7
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		<b>1</b>	3	3
Boron	ppm	ASTM D5185m		<b>261</b>	4	20
Barium	ppm	ASTM D5185m		<b>0</b>	6	0
Molybdenum	ppm	ASTM D5185m		<b>89</b>	84	45
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>450</b>	988	582
Calcium	ppm	ASTM D5185m		<b>1357</b>	1211	1745
Phosphorus	ppm	ASTM D5185m		<b>1061</b>	1069	791
Zinc	ppm	ASTM D5185m		<b>1255</b>	1288	984
Sulfur	ppm	ASTM D5185m		<b>3202</b>	3184	2985
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.9</b>	16.6	22.1
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.1</b>	8.2	10.0
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.0</b>	12.9	▲ 11.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0875770  
**Lab Number** : 06089343  
**Unique Number** : 10876788  
**Test Package** : FLEET

**Received** : 14 Feb 2024  
**Tested** : 15 Feb 2024  
**Diagnosed** : 16 Feb 2024 - Don Baldrige

**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)