



# WEAR CHECK

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**46531**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL 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>WC0919256</b>	WC0795602	WC0742359
Sample Date		Client Info		<b>13 May 2024</b>	19 Dec 2023	02 Dec 2022
Machine Age	mls	Client Info		<b>0</b>	19602	6177
Oil Age	mls	Client Info		<b>0</b>	13000	0
Filter Age	mls	Client Info		<b>0</b>	13000	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>21</b>	32	31
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>8</b>	15	12
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>3</b>	7	13
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

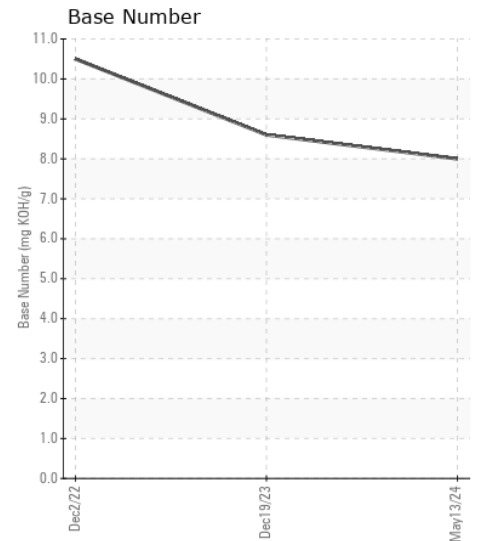
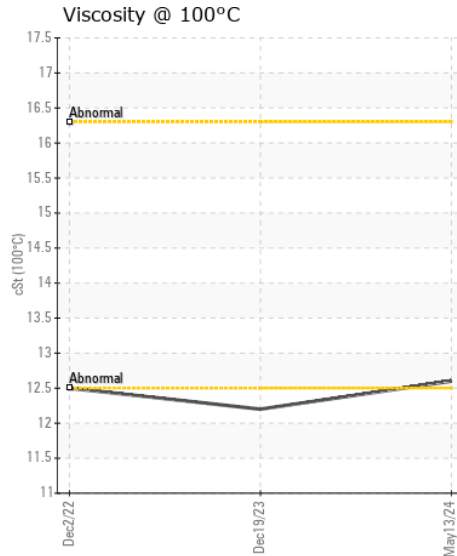
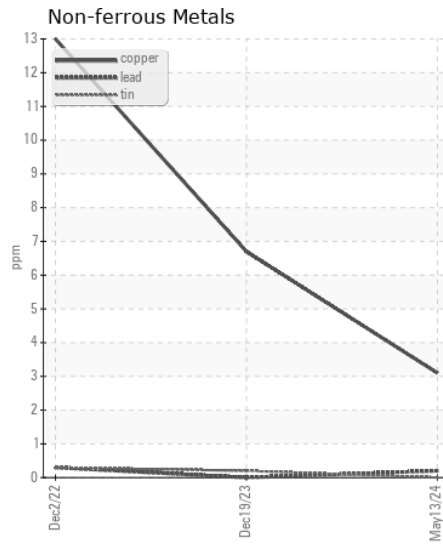
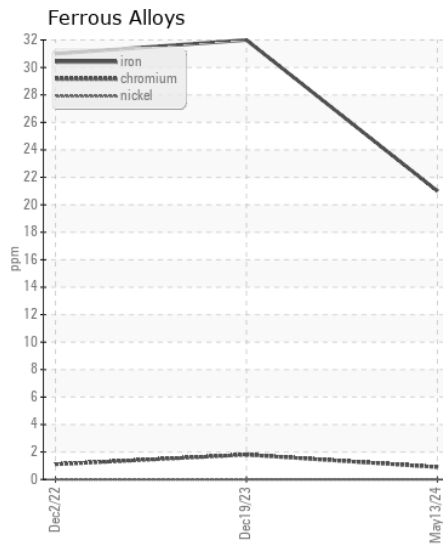
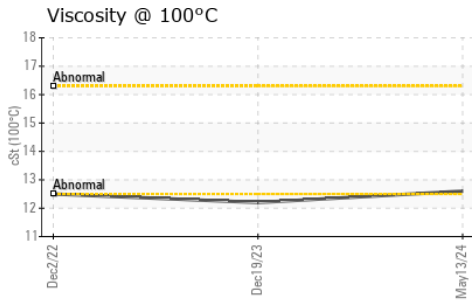
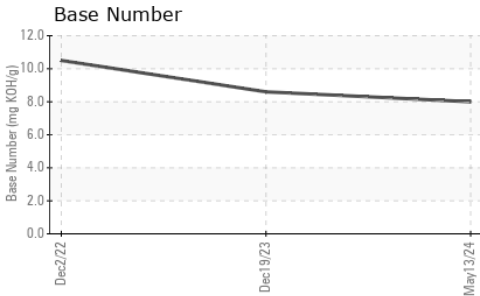
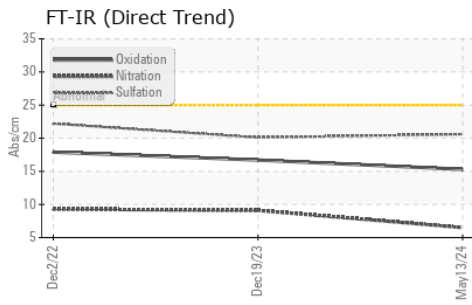
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	11	28
Potassium	ppm	ASTM D5185m	>20	<b>17</b>	43	31
Fuel		WC Method	>5	<b>&lt;1.0</b>	1.2	<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>0.2</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.5</b>	9.1	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.6</b>	20.1	22.2
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	>118	<b>&lt;1</b>	2	5
Boron	ppm	ASTM D5185m		<b>260</b>	4	52
Barium	ppm	ASTM D5185m		<b>0</b>	0	3
Molybdenum	ppm	ASTM D5185m		<b>83</b>	54	40
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	2	8
Magnesium	ppm	ASTM D5185m		<b>662</b>	901	541
Calcium	ppm	ASTM D5185m		<b>1451</b>	1073	1586
Phosphorus	ppm	ASTM D5185m		<b>1133</b>	977	752
Zinc	ppm	ASTM D5185m		<b>1421</b>	1161	879
Sulfur	ppm	ASTM D5185m		<b>4139</b>	3001	2811
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.3</b>	16.7	17.9
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.0</b>	8.6	10.5
Visc @ 100°C	cSt	ASTM D445		<b>12.6</b>	12.2	12.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0919256  
**Lab Number** : 06193280  
**Unique Number** : 11050032  
**Test Package** : FLEET

**Received** : 28 May 2024  
**Tested** : 30 May 2024  
**Diagnosed** : 30 May 2024 - Wes Davis

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

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F: x:

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)