



# OIL ANALYSIS REPORT

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

Machine Id  
**12258**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL 15W40 (--- QTS)**

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## WEAR

All component wear rates are normal.

## CONTAMINATION

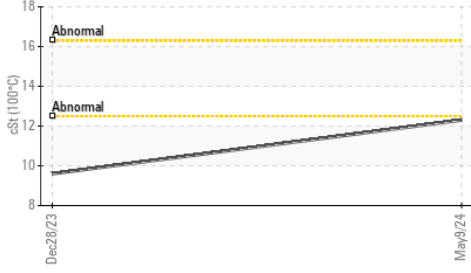
There is no indication of any contamination in the oil.

## FLUID CONDITION

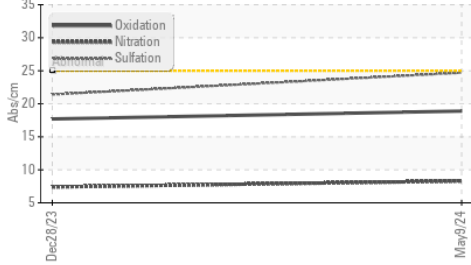
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0913897</b>	WC0882281	---
Sample Date		Client Info		<b>09 May 2024</b>	28 Dec 2023	---
Machine Age	mls	Client Info		<b>10759</b>	5818	---
Oil Age	mls	Client Info		<b>10759</b>	0	---
Filter Age	mls	Client Info		<b>10759</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	N/A	---
Filter Changed		Client Info		<b>Changed</b>	N/A	---
Sample Status				<b>MARGINAL</b>	ABNORMAL	---
Iron	ppm	ASTM D5185m	>100	<b>31</b>	63	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	14	---
Lead	ppm	ASTM D5185m	>40	<b>2</b>	2	---
Copper	ppm	ASTM D5185m	>330	<b>144</b>	117	---
Tin	ppm	ASTM D5185m	>15	<b>2</b>	3	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Silicon	ppm	ASTM D5185m	>25	<b>17</b>	▲ 57	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	4	---
Fuel	%	ASTM D3524	>5	<b>&lt;1.0</b>	0.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.3</b>	7.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.7</b>	21.4	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---
Sodium	ppm	ASTM D5185m	>118	<b>3</b>	3	---
Boron	ppm	ASTM D5185m		<b>292</b>	159	---
Barium	ppm	ASTM D5185m		<b>2</b>	7	---
Molybdenum	ppm	ASTM D5185m		<b>111</b>	20	---
Manganese	ppm	ASTM D5185m		<b>1</b>	3	---
Magnesium	ppm	ASTM D5185m		<b>528</b>	41	---
Calcium	ppm	ASTM D5185m		<b>1546</b>	1044	---
Phosphorus	ppm	ASTM D5185m		<b>759</b>	836	---
Zinc	ppm	ASTM D5185m		<b>840</b>	1029	---
Sulfur	ppm	ASTM D5185m		<b>2860</b>	2958	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.9</b>	17.7	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.0</b>	4.4	---
Visc @ 100°C	cSt	ASTM D445		▲ <b>12.3</b>	● 9.6	---

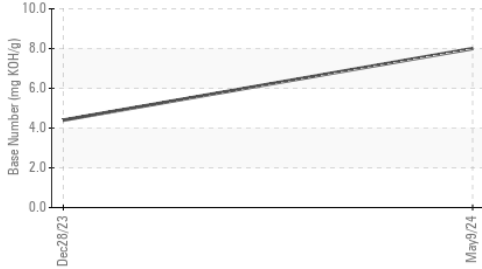
▲ Viscosity @ 100°C



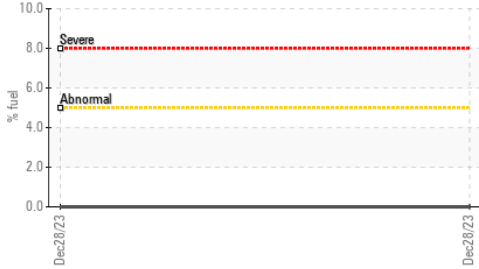
FT-IR (Direct Trend)



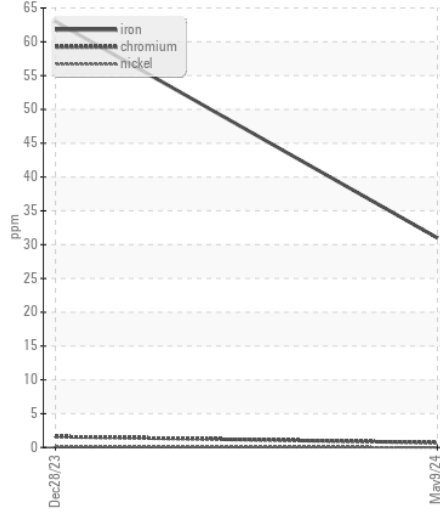
Base Number



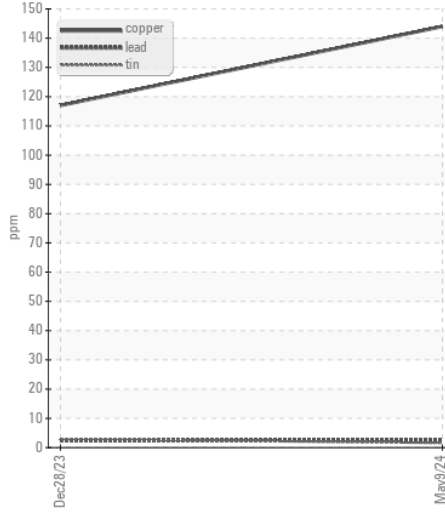
Fuel Dilution



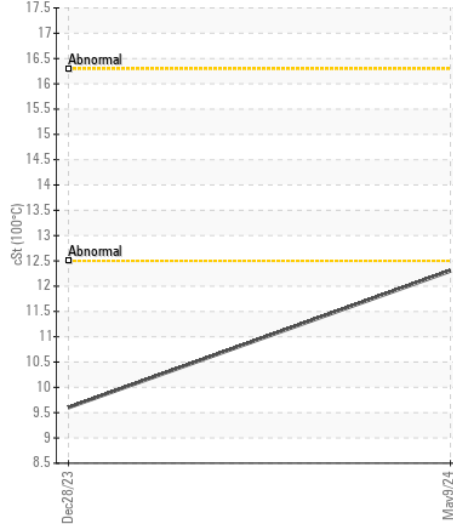
Ferrous Alloys



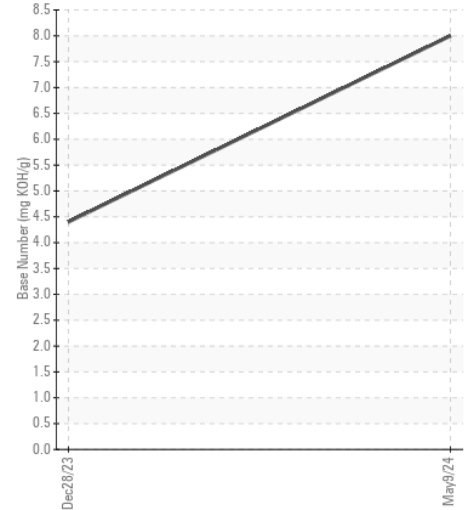
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0913897 **Received** : 29 May 2024  
**Lab Number** : 06194883 **Tested** : 03 Jun 2024  
**Unique Number** : 11057006 **Diagnosed** : 03 Jun 2024 - Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

**SALEM NATIONALEASE CORPORATION**  
 198 PARK PLAZA DRIVE  
 WINSTON SALEM, NC  
 US 27105  
 Contact: Audrey Hopkins  
 Audrey.Hopkins@salemcorp.com  
 T: (336)767-9642  
 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)