



# WEAR CHECK

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**42655**  
 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>WC0829805</b>	WC0826835	WC0826864
Sample Date		Client Info		<b>24 May 2024</b>	24 Feb 2024	26 Aug 2023
Machine Age	mls	Client Info		<b>477011</b>	448887	386022
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	>100	<b>17</b>	21	21
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>8</b>	15	7
Lead	ppm	ASTM D5185m	>40	<b>3</b>	3	11
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	5	1
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

There is no indication of any contamination in the oil.

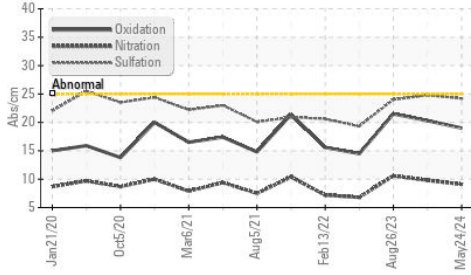
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	7	5
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	15	57
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	9.8	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.2</b>	24.8	24.0
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

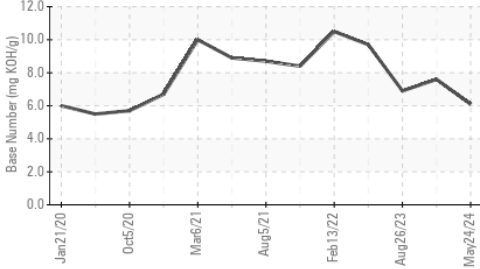
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>118	<b>3</b>	3	17
Boron	ppm	ASTM D5185m		<b>153</b>	176	3
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>102</b>	121	63
Manganese	ppm	ASTM D5185m		<b>0</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>455</b>	736	1005
Calcium	ppm	ASTM D5185m		<b>1370</b>	1490	1076
Phosphorus	ppm	ASTM D5185m		<b>875</b>	784	1053
Zinc	ppm	ASTM D5185m		<b>1135</b>	925	1390
Sulfur	ppm	ASTM D5185m		<b>2680</b>	2633	3127
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.0</b>	20.3	21.5
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.1</b>	7.6	6.9
Visc @ 100°C	cSt	ASTM D445		<b>13.3</b>	13.4	13.3

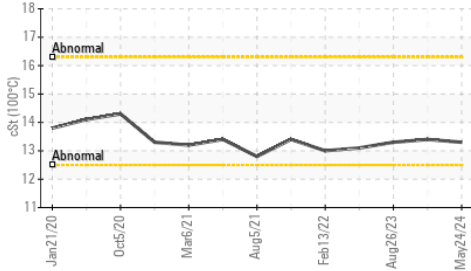
**FT-IR (Direct Trend)**



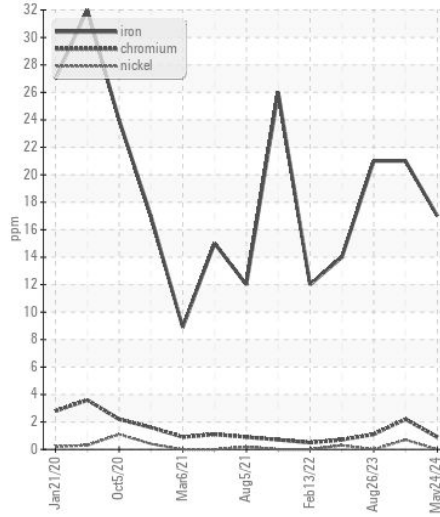
**Base Number**



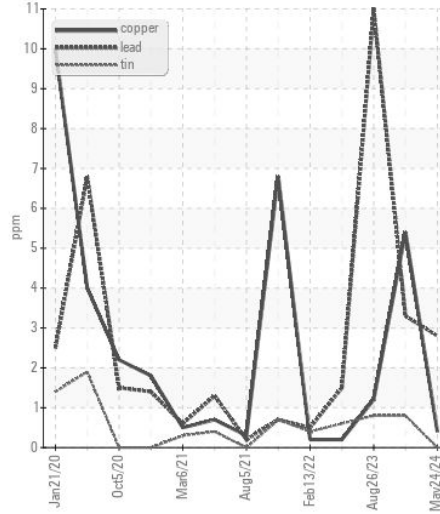
**Viscosity @ 100°C**



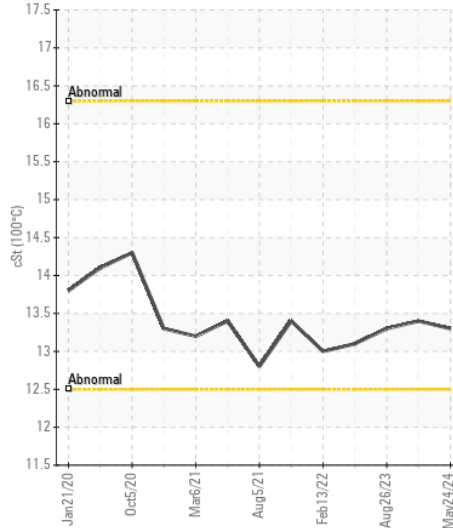
**Ferrous Alloys**



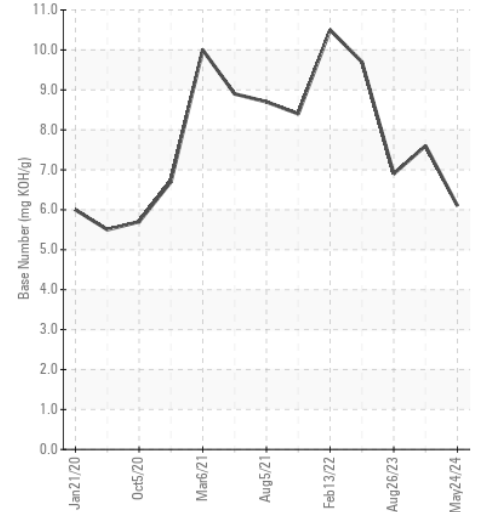
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0829805  
**Lab Number** : 06241241  
**Unique Number** : 11130075  
**Test Package** : FLEET

**Received** : 18 Jul 2024  
**Tested** : 19 Jul 2024  
**Diagnosed** : 19 Jul 2024 - Wes Davis

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

Contact: Audrey Hopkins  
 Audrey.Hopkins@salemcorp.com

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)

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