



# WEAR CHECK

## OIL ANALYSIS REPORT

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

Machine Id  
**59208**  
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>WC0939042</b>	WC0826817	WC0826881
Sample Date		Client Info		<b>18 Jul 2024</b>	26 Mar 2024	12 Sep 2023
Machine Age	mls	Client Info		<b>503127</b>	477193	430349
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>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>31</b>	23	14
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<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>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	7	2
Lead	ppm	ASTM D5185m	>40	<b>4</b>	9	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	6	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	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.

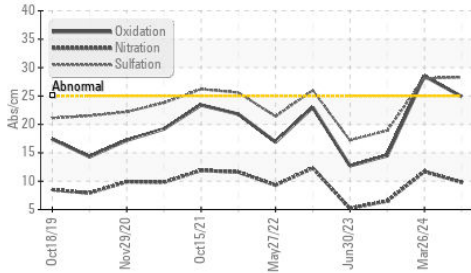
Silicon	ppm	ASTM D5185m	>25	<b>7</b>	6	4
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	3
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.5	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.8</b>	11.7	6.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>28.3</b>	28.1	18.9
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

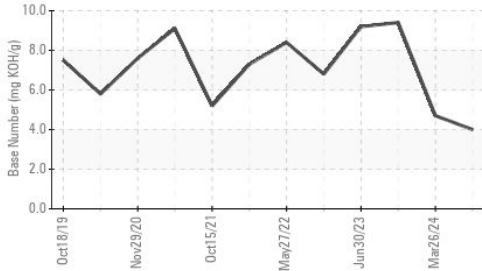
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>118	<b>2</b>	1	<1
Boron	ppm	ASTM D5185m		<b>61</b>	86	<1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>91</b>	114	60
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>424</b>	723	969
Calcium	ppm	ASTM D5185m		<b>1340</b>	1432	1037
Phosphorus	ppm	ASTM D5185m		<b>907</b>	691	1034
Zinc	ppm	ASTM D5185m		<b>1160</b>	850	1312
Sulfur	ppm	ASTM D5185m		<b>2739</b>	2293	3285
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.9</b>	28.5	14.5
Base Number (BN)	mg KOH/g	ASTM D2896		<b>4.0</b>	4.7	9.4
Visc @ 100°C	cSt	ASTM D445		<b>13.4</b>	13.2	13.2

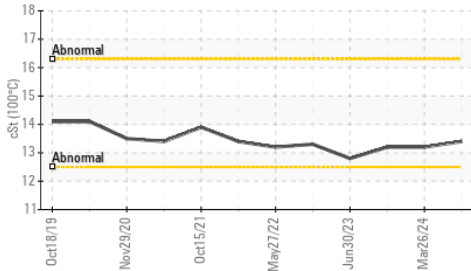
**FT-IR (Direct Trend)**



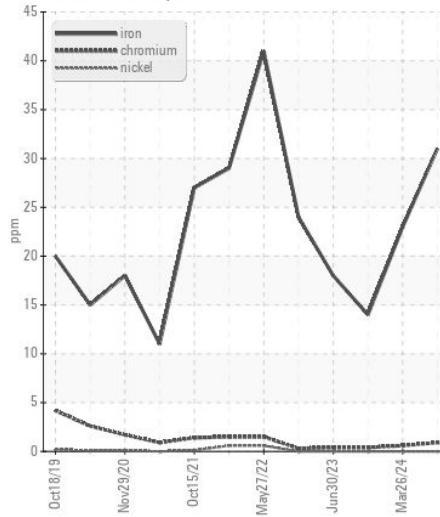
**Base Number**



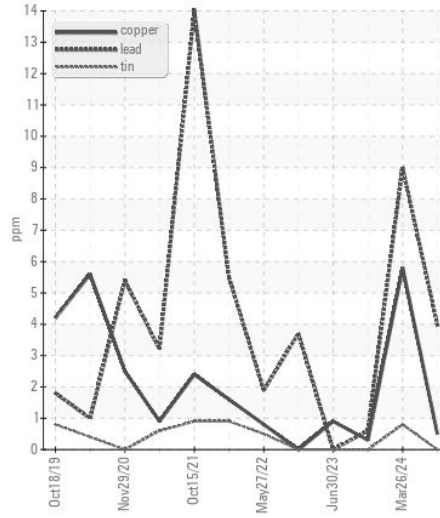
**Viscosity @ 100°C**



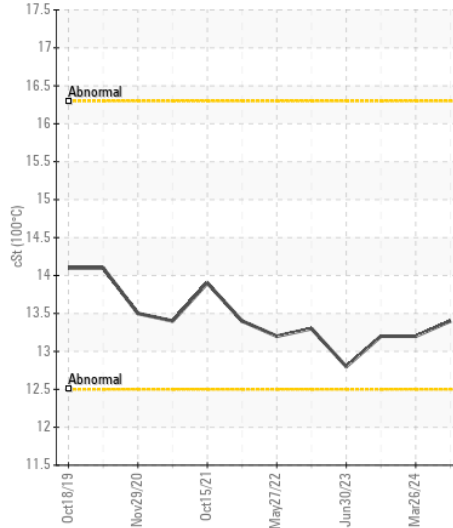
**Ferrous Alloys**



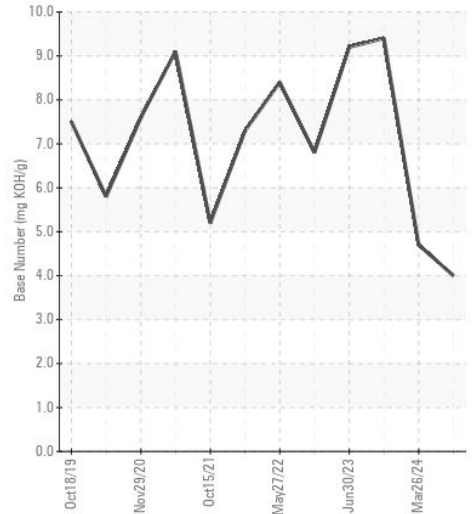
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0939042  
**Lab Number** : 06241251  
**Unique Number** : 11130085  
**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

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)