



# WEAR CHECK

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**5588**  
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>WC0904487</b>	WC0861108	WC0790146
Sample Date		Client Info		<b>09 Mar 2024</b>	16 Dec 2023	27 Mar 2023
Machine Age	mls	Client Info		<b>119860</b>	30000	10000
Oil Age	mls	Client Info		<b>30000</b>	30000	10000
Filter Age	mls	Client Info		<b>30000</b>	30000	10000
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>4</b>	6	6
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	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>3</b>	3	2
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	1	0
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</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.

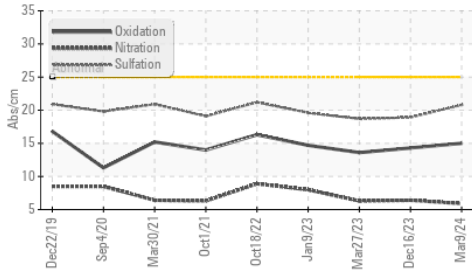
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	3	1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.9</b>	6.4	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.8</b>	18.9	18.7
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

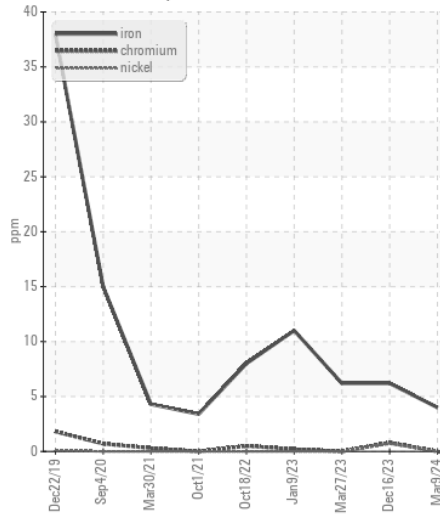
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>118	<b>2</b>	0	<1
Boron	ppm	ASTM D5185m		<b>372</b>	4	2
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>82</b>	79	60
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>425</b>	1172	962
Calcium	ppm	ASTM D5185m		<b>1384</b>	1155	1087
Phosphorus	ppm	ASTM D5185m		<b>1012</b>	1077	1039
Zinc	ppm	ASTM D5185m		<b>1147</b>	1469	1275
Sulfur	ppm	ASTM D5185m		<b>3555</b>	3713	3695
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.0</b>	14.3	13.6
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.2</b>	9.7	9.9
Visc @ 100°C	cSt	ASTM D445		<b>13.3</b>	12.8	12.6

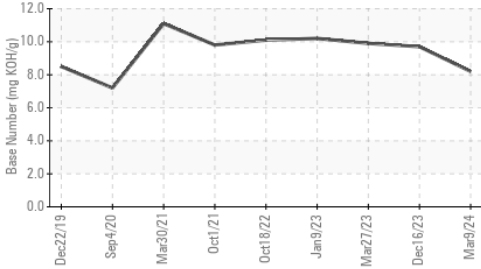
**FT-IR (Direct Trend)**



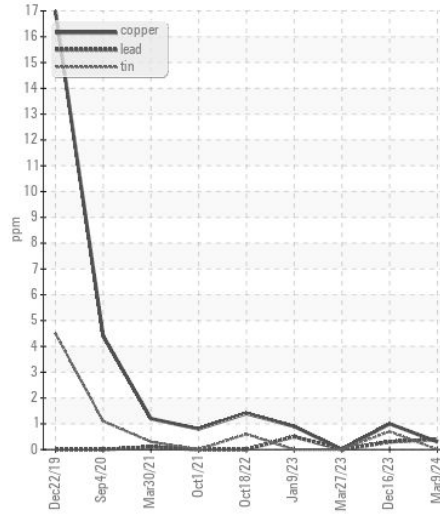
**Ferrous Alloys**



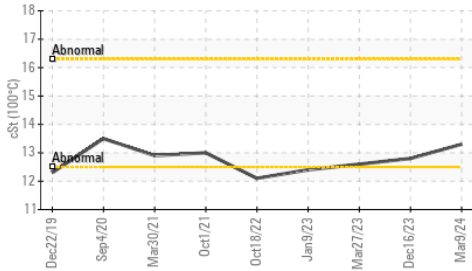
**Base Number**



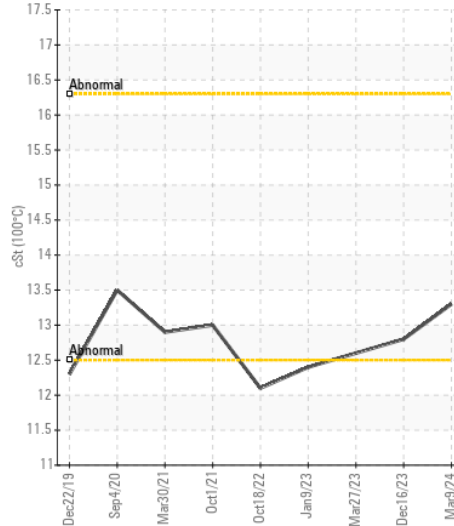
**Non-ferrous Metals**



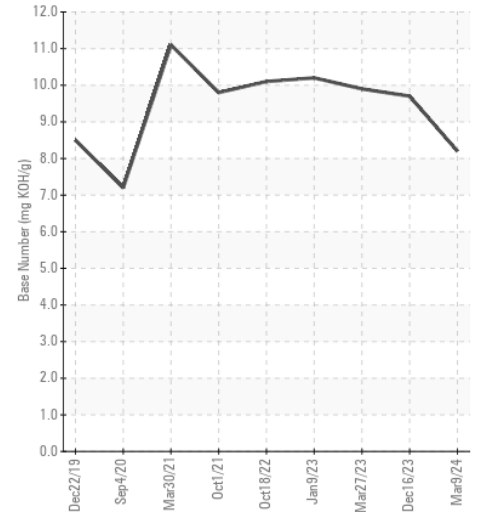
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0904487  
**Lab Number** : 06148012  
**Unique Number** : 10978090  
**Test Package** : FLEET

**Received** : 12 Apr 2024  
**Tested** : 15 Apr 2024  
**Diagnosed** : 15 Apr 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

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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