



# WEAR CHECK

## OIL ANALYSIS REPORT

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

Machine Id  
**INTERNATIONAL SN11807**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL 15W40 (18 QTS)**

### RECOMMENDATION

The oil is near the end of its useful service life, recommend schedule an oil change. We recommend an early resample to monitor this condition.

### WEAR

All component wear rates are normal.

### 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 a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

### FLUID CONDITION

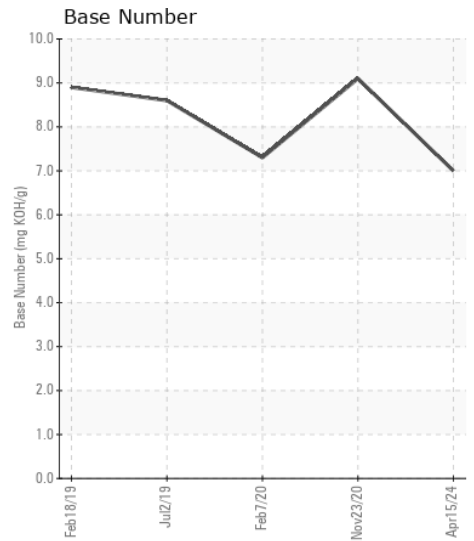
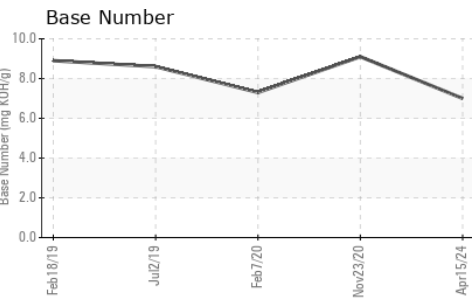
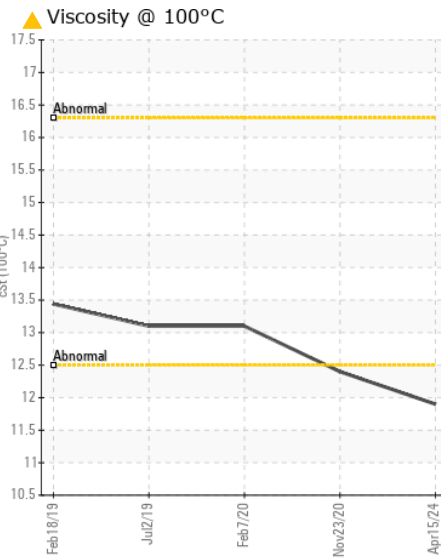
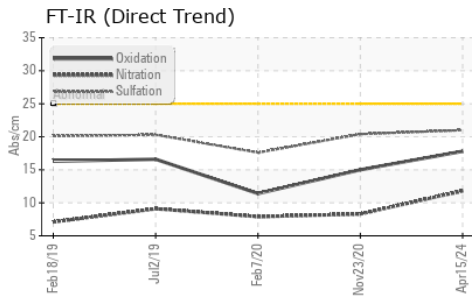
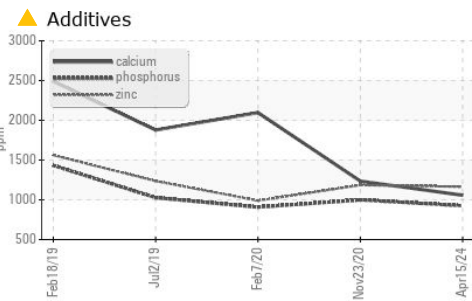
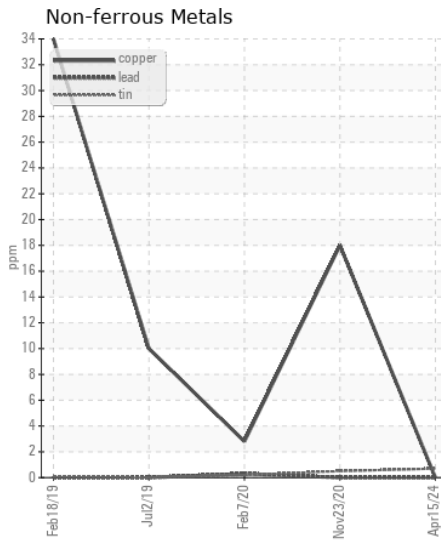
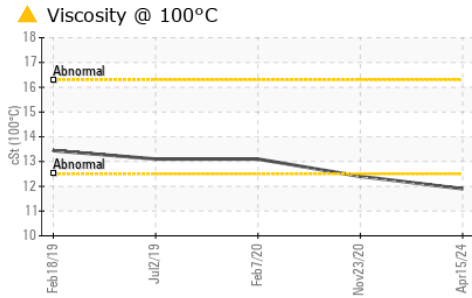
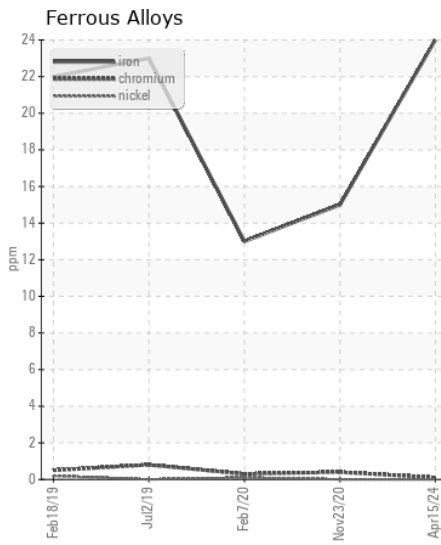
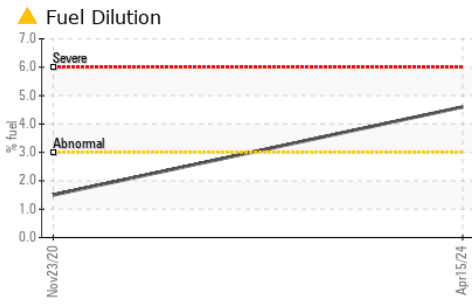
Calcium ppm levels are abnormally low. Visc @ 100°C is abnormally low. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0904392</b>	WC05134847	WC0409887
Sample Date		Client Info		<b>15 Apr 2024</b>	23 Nov 2020	07 Feb 2020
Machine Age	mls	Client Info		<b>125867</b>	0	0
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>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>ABNORMAL</b>	ATTENTION	NORMAL

Iron	ppm	ASTM D5185m	>130	<b>24</b>	15	13
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>16</b>	18	19
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>125	<b>0</b>	18	3
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
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

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>35</b>	38	42
Fuel	%	ASTM D3524	>3.0	<b>▲ 4.6</b>	1.5	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>0.7</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.8</b>	8.3	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.0</b>	20.4	17.6
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

Sodium	ppm	ASTM D5185m	>118	<b>2</b>	2	3
Boron	ppm	ASTM D5185m		<b>4</b>	17	22
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>60</b>	57	15
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>867</b>	752	100
Calcium	ppm	ASTM D5185m		<b>▲ 1058</b>	1235	2097
Phosphorus	ppm	ASTM D5185m		<b>925</b>	999	908
Zinc	ppm	ASTM D5185m		<b>1164</b>	1185	989
Sulfur	ppm	ASTM D5185m		<b>3292</b>	2797	3892
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.8</b>	15	11.4
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.0</b>	9.1	7.3
Visc @ 100°C	cSt	ASTM D445		<b>▲ 11.9</b>	● 12.4	13.1



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0904392 **Received** : 22 Apr 2024  
**Lab Number** : 06156796 **Tested** : 25 Apr 2024  
**Unique Number** : 10992219 **Diagnosed** : 25 Apr 2024 - Wes Davis  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )  
 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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