



# OIL ANALYSIS REPORT

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

Machine Id  
**8464823**  
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.

## WEAR

All component wear rates are normal.

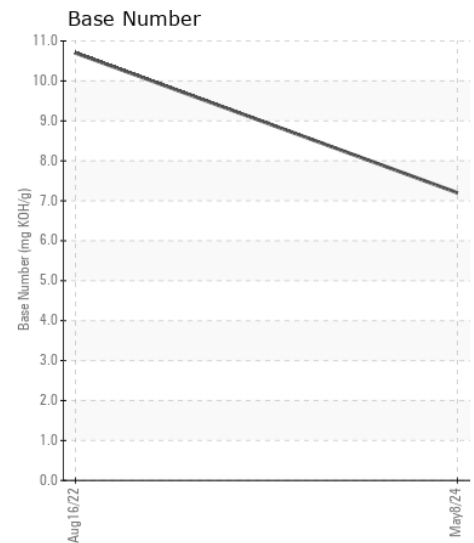
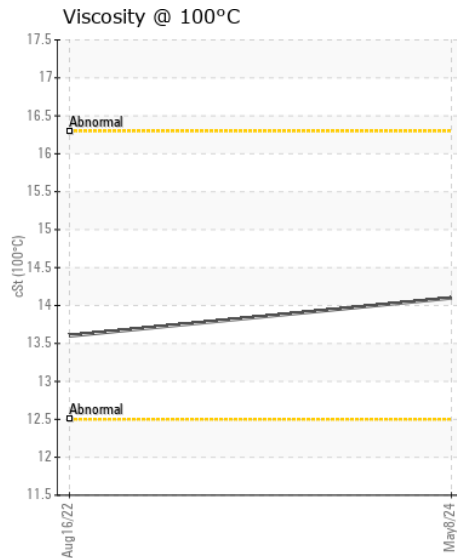
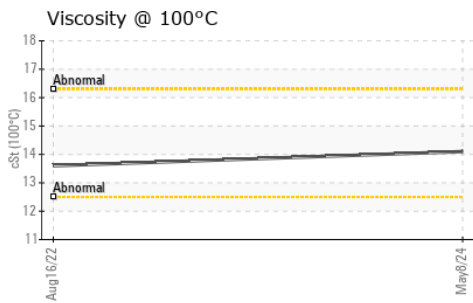
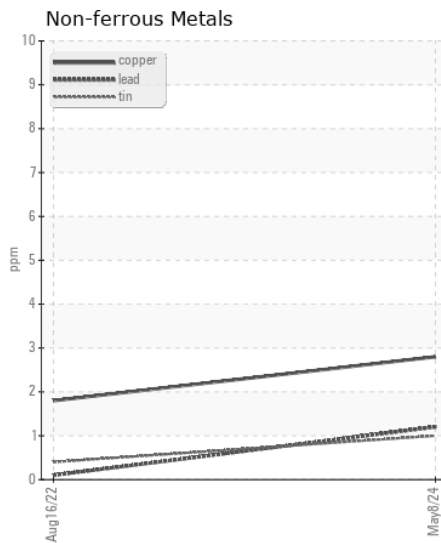
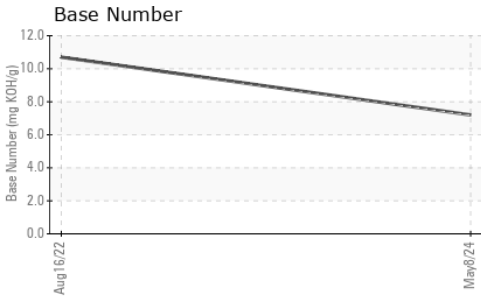
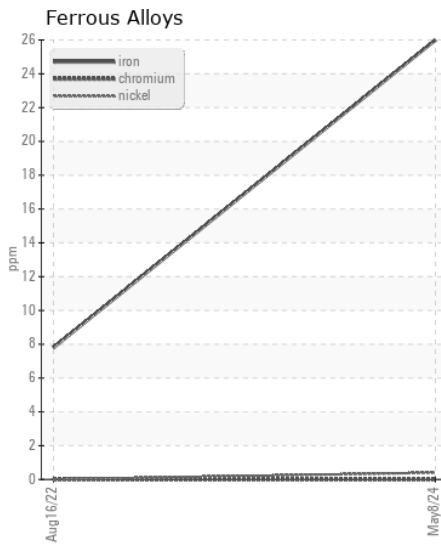
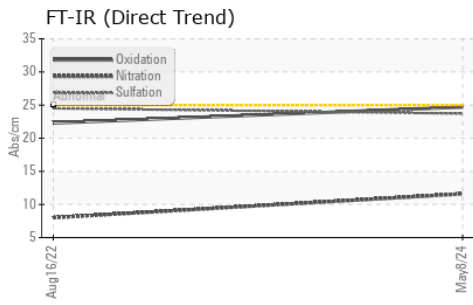
## CONTAMINATION

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 no indication of any contamination in the oil.

## 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.

| Test             | UOM      | Method      | Limit/Abn | Current            | History1    | History2 |
|------------------|----------|-------------|-----------|--------------------|-------------|----------|
| Sample Number    |          | Client Info |           | <b>RPL0018151</b>  | RPL0004109  | ---      |
| Sample Date      |          | Client Info |           | <b>08 May 2024</b> | 16 Aug 2022 | ---      |
| Machine Age      | mls      | Client Info |           | <b>196551</b>      | 83076       | ---      |
| Oil Age          | mls      | Client Info |           | <b>48691</b>       | 8657        | ---      |
| Filter Age       | mls      | Client Info |           | <b>48691</b>       | 83076       | ---      |
| Oil Changed      |          | Client Info |           | <b>Changed</b>     | Not Changed | ---      |
| Filter Changed   |          | Client Info |           | <b>Changed</b>     | Not Changed | ---      |
| Sample Status    |          |             |           | <b>NORMAL</b>      | NORMAL      | ---      |
| Iron             | ppm      | ASTM D5185m | >100      | <b>26</b>          | 8           | ---      |
| Chromium         | ppm      | ASTM D5185m | >20       | <b>0</b>           | 0           | ---      |
| Nickel           | ppm      | ASTM D5185m | >4        | <b>&lt;1</b>       | 0           | ---      |
| Titanium         | ppm      | ASTM D5185m |           | <b>0</b>           | 0           | ---      |
| Silver           | ppm      | ASTM D5185m | >3        | <b>&lt;1</b>       | <1          | ---      |
| Aluminum         | ppm      | ASTM D5185m | >20       | <b>7</b>           | 5           | ---      |
| Lead             | ppm      | ASTM D5185m | >40       | <b>1</b>           | <1          | ---      |
| Copper           | ppm      | ASTM D5185m | >330      | <b>3</b>           | 2           | ---      |
| Tin              | ppm      | ASTM D5185m | >15       | <b>1</b>           | <1          | ---      |
| Vanadium         | ppm      | ASTM D5185m |           | <b>&lt;1</b>       | 0           | ---      |
| White Metal      | scalar   | *Visual     | NONE      | <b>NONE</b>        | NONE        | ---      |
| Yellow Metal     | scalar   | *Visual     | NONE      | <b>NONE</b>        | NONE        | ---      |
| Silicon          | ppm      | ASTM D5185m | >25       | <b>10</b>          | 4           | ---      |
| Potassium        | ppm      | ASTM D5185m | >20       | <b>12</b>          | 10          | ---      |
| Fuel             |          | WC Method   | >5        | <b>&lt;1.0</b>     | <1.0        | ---      |
| Water            |          | WC Method   | >0.2      | <b>NEG</b>         | NEG         | ---      |
| Glycol           |          | WC Method   |           | <b>NEG</b>         | NEG         | ---      |
| Soot %           | %        | *ASTM D7844 | >3        | <b>0.6</b>         | 0.2         | ---      |
| Nitration        | Abs/cm   | *ASTM D7624 | >20       | <b>11.6</b>        | 8.0         | ---      |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30       | <b>23.7</b>        | 24.5        | ---      |
| 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>           | 0           | ---      |
| Boron            | ppm      | ASTM D5185m |           | <b>35</b>          | 68          | ---      |
| Barium           | ppm      | ASTM D5185m |           | <b>0</b>           | <1          | ---      |
| Molybdenum       | ppm      | ASTM D5185m |           | <b>48</b>          | 53          | ---      |
| Manganese        | ppm      | ASTM D5185m |           | <b>1</b>           | <1          | ---      |
| Magnesium        | ppm      | ASTM D5185m |           | <b>555</b>         | 467         | ---      |
| Calcium          | ppm      | ASTM D5185m |           | <b>1735</b>        | 1675        | ---      |
| Phosphorus       | ppm      | ASTM D5185m |           | <b>775</b>         | 791         | ---      |
| Zinc             | ppm      | ASTM D5185m |           | <b>999</b>         | 941         | ---      |
| Sulfur           | ppm      | ASTM D5185m |           | <b>2799</b>        | 2507        | ---      |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25       | <b>24.7</b>        | 22.3        | ---      |
| Base Number (BN) | mg KOH/g | ASTM D2896  |           | <b>7.2</b>         | 10.7        | ---      |
| Visc @ 100°C     | cSt      | ASTM D445   |           | <b>14.1</b>        | 13.6        | ---      |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RPL0018151  
**Lab Number** : 06190208  
**Unique Number** : 11046960  
**Test Package** : FLEET

**Received** : 24 May 2024  
**Tested** : 28 May 2024  
**Diagnosed** : 28 May 2024 - Wes Davis

**RTL PACLEASE - 7007 - Fontana**  
 3121 South Riverside  
 Bloomington, CA  
 US 92316

Contact: Rudy Trevizo  
 TrevizoR@RushEnterprises.Com

T: (909)829-1044

F:

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)