



# OIL ANALYSIS REPORT

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

Machine Id  
**781188**  
 Component  
**Diesel Engine**  
 Fluid  
**{not provided} (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>RPL0019630</b>  | RPL0016708  | RPL0015286  |
| Sample Date    |     | Client Info |           | <b>20 May 2024</b> | 01 Mar 2024 | 01 Nov 2023 |
| Machine Age    | mls | Client Info |           | <b>330370</b>      | 312305      | 0           |
| Oil Age        | mls | Client Info |           | <b>330370</b>      | 312305      | 0           |
| Filter Age     | mls | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>N/A</b>         | N/A         | N/A         |
| Filter Changed |     | Client Info |           | <b>N/A</b>         | N/A         | N/A         |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## WEAR

All component wear rates are normal.

|              |        |             |      |              |      |      |
|--------------|--------|-------------|------|--------------|------|------|
| Iron         | ppm    | ASTM D5185m | >110 | <b>23</b>    | 13   | 10   |
| Chromium     | ppm    | ASTM D5185m | >4   | <b>&lt;1</b> | 0    | 1    |
| Nickel       | ppm    | ASTM D5185m | >2   | <b>&lt;1</b> | 0    | 0    |
| Titanium     | ppm    | ASTM D5185m |      | <b>1</b>     | 0    | 0    |
| Silver       | ppm    | ASTM D5185m | >2   | <b>0</b>     | 0    | 0    |
| Aluminum     | ppm    | ASTM D5185m | >25  | <b>6</b>     | 5    | 2    |
| Lead         | ppm    | ASTM D5185m | >45  | <b>1</b>     | <1   | 2    |
| Copper       | ppm    | ASTM D5185m | >85  | <b>4</b>     | 2    | 2    |
| Tin          | ppm    | ASTM D5185m | >4   | <b>&lt;1</b> | 0    | 0    |
| 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

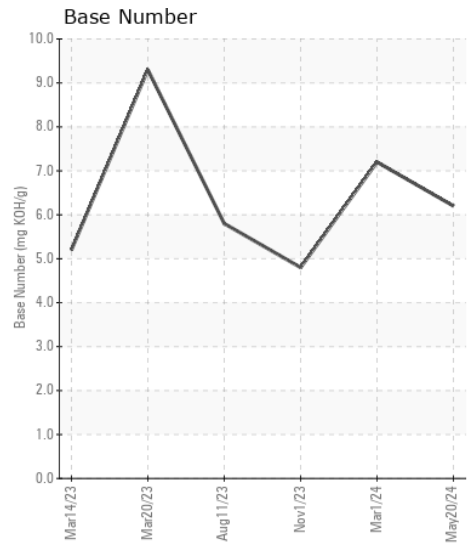
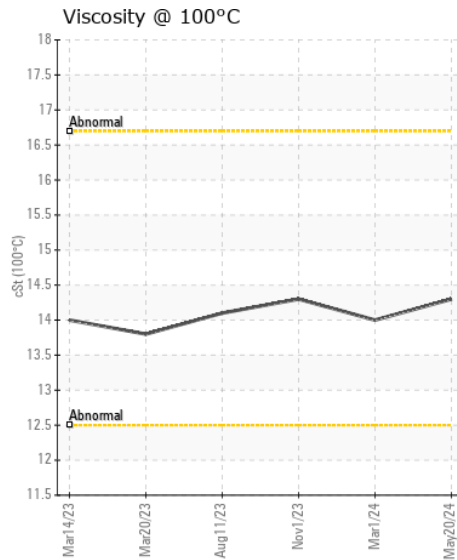
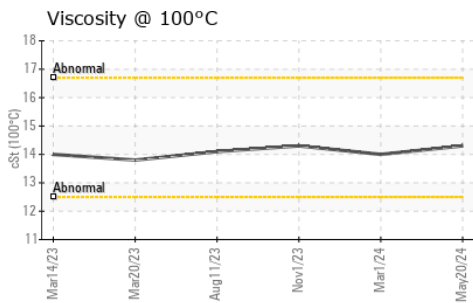
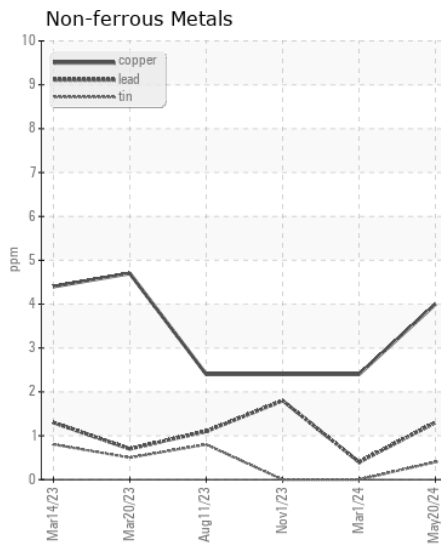
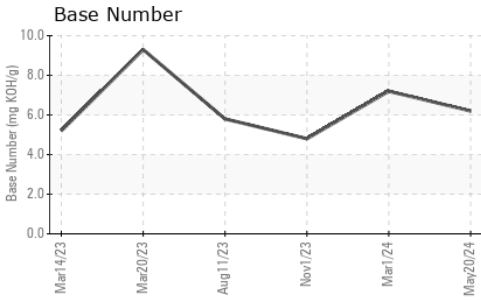
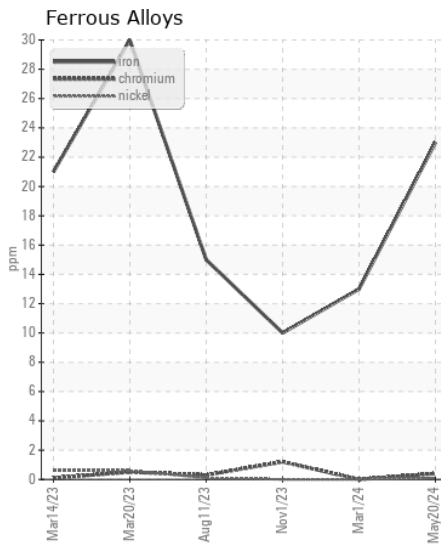
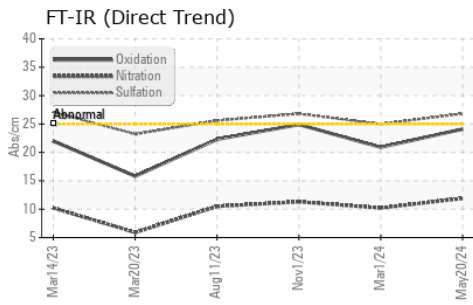
There is no indication of any contamination in the oil.

|                  |          |             |       |                |       |       |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon          | ppm      | ASTM D5185m | >30   | <b>15</b>      | 11    | 5     |
| Potassium        | ppm      | ASTM D5185m | >20   | <b>3</b>       | <1    | 0     |
| 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>0.7</b>     | 0.5   | 0.6   |
| Nitration        | Abs/cm   | *ASTM D7624 | >20   | <b>11.9</b>    | 10.2  | 11.3  |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30   | <b>26.8</b>    | 25.0  | 26.8  |
| 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 |     | <b>&lt;1</b> | 2    | 7    |
| Boron            | ppm      | ASTM D5185m |     | <b>53</b>    | 171  | 17   |
| Barium           | ppm      | ASTM D5185m |     | <b>0</b>     | 0    | 0    |
| Molybdenum       | ppm      | ASTM D5185m |     | <b>126</b>   | 127  | 52   |
| Manganese        | ppm      | ASTM D5185m |     | <b>&lt;1</b> | <1   | 0    |
| Magnesium        | ppm      | ASTM D5185m |     | <b>734</b>   | 705  | 578  |
| Calcium          | ppm      | ASTM D5185m |     | <b>1641</b>  | 1677 | 1644 |
| Phosphorus       | ppm      | ASTM D5185m |     | <b>745</b>   | 733  | 747  |
| Zinc             | ppm      | ASTM D5185m |     | <b>937</b>   | 851  | 978  |
| Sulfur           | ppm      | ASTM D5185m |     | <b>2470</b>  | 2512 | 2435 |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25 | <b>24.1</b>  | 20.9 | 24.9 |
| Base Number (BN) | mg KOH/g | ASTM D2896  |     | <b>6.2</b>   | 7.2  | 4.8  |
| Visc @ 100°C     | cSt      | ASTM D445   |     | <b>14.3</b>  | 14.0 | 14.3 |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RPL0019630  
**Lab Number** : 06216578  
**Unique Number** : 11089442  
**Test Package** : FLEET

**RTL PACLEASE - 7050 -Leasing Tyler**  
 10791 Hwy 69 North  
 Tyler, TX  
 US 75706  
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 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)