



|                 |        |
|-----------------|--------|
| WEAR            | NORMAL |
| CONTAMINATION   | NORMAL |
| FLUID CONDITION | NORMAL |

Machine Id  
**8337R**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL 15W40 (--- GAL)**

### 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>IL06063986</b>  | IL0028006   | IL0028035   |
| Sample Date    |     | Client Info |           | <b>17 Nov 2023</b> | 11 May 2023 | 23 Feb 2023 |
| Machine Age    | mls | Client Info |           | <b>0</b>           | 0           | 9274        |
| Oil Age        | mls | Client Info |           | <b>0</b>           | 0           | 1826        |
| Filter Age     | mls | Client Info |           | <b>0</b>           | 0           | 1826        |
| Oil Changed    |     | Client Info |           | <b>N/A</b>         | Changed     | Changed     |
| Filter Changed |     | Client Info |           | <b>N/A</b>         | Changed     | Changed     |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

### WEAR

All component wear rates are normal.

|              |        |             |      |              |      |      |
|--------------|--------|-------------|------|--------------|------|------|
| Iron         | ppm    | ASTM D5185m | >100 | <b>17</b>    | 39   | 53   |
| Chromium     | ppm    | ASTM D5185m | >20  | <b>&lt;1</b> | 2    | 2    |
| Nickel       | ppm    | ASTM D5185m | >4   | <b>0</b>     | 0    | <1   |
| 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>2</b>     | 1    | 3    |
| Lead         | ppm    | ASTM D5185m | >40  | <b>0</b>     | 0    | <1   |
| Copper       | ppm    | ASTM D5185m | >330 | <b>1</b>     | <1   | 1    |
| Tin          | ppm    | ASTM D5185m | >15  | <b>0</b>     | <1   | <1   |
| Vanadium     | ppm    | ASTM D5185m |      | <b>0</b>     | <1   | <1   |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |

### CONTAMINATION

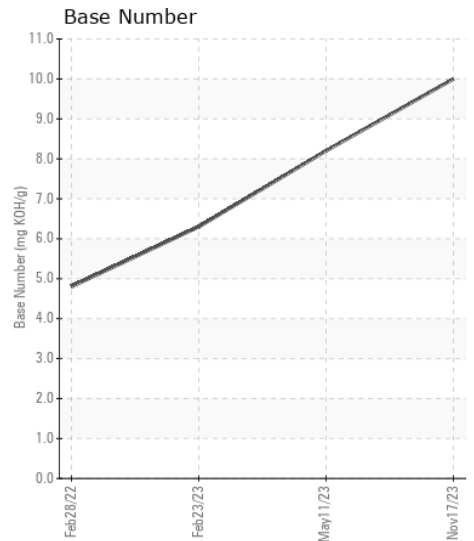
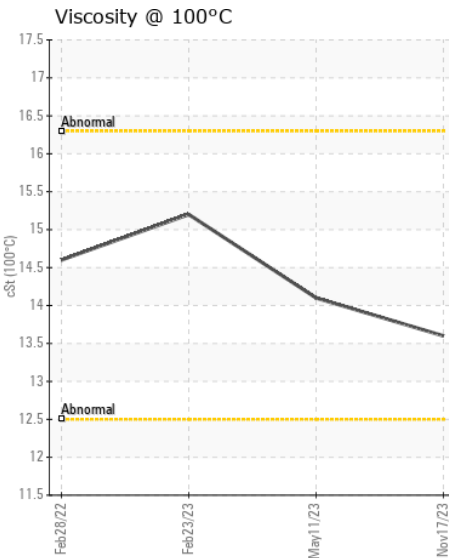
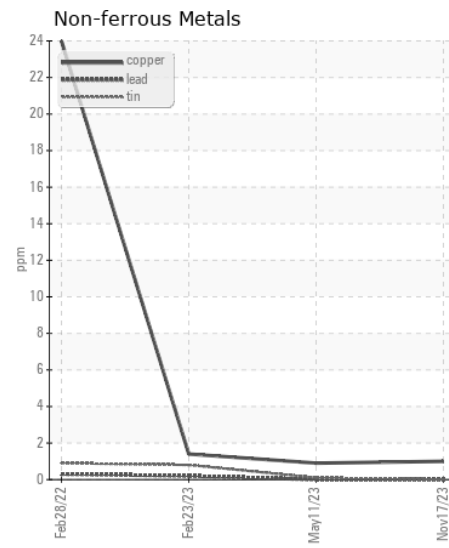
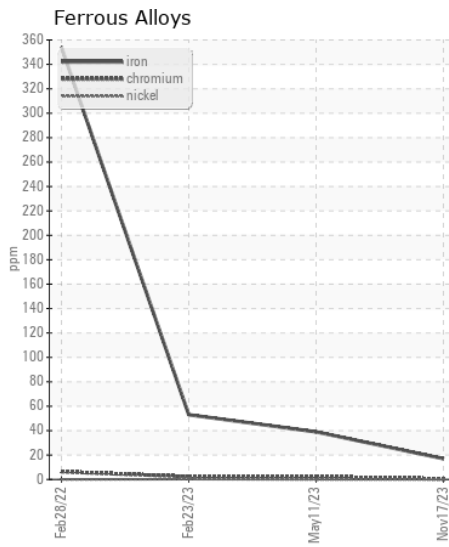
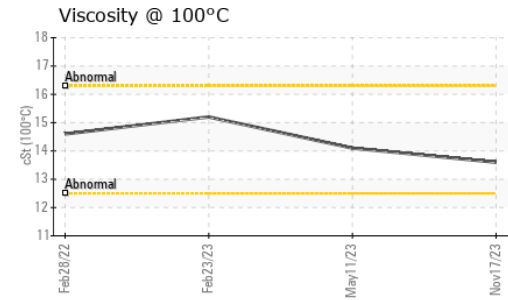
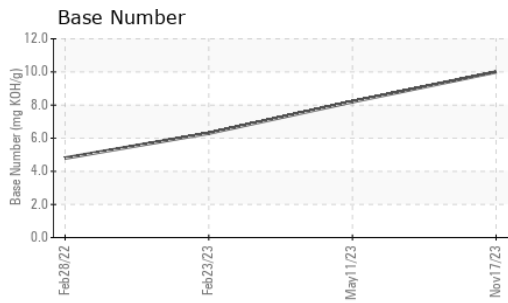
There is no indication of any contamination in the oil.

|                  |          |             |       |                |       |       |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon          | ppm      | ASTM D5185m | >25   | <b>3</b>       | 4     | 5     |
| Potassium        | ppm      | ASTM D5185m | >20   | <b>2</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>     | 1.8   | 1.8   |
| Nitration        | Abs/cm   | *ASTM D7624 | >20   | <b>7.0</b>     | 12.1  | 14.1  |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30   | <b>19.7</b>    | 24.6  | 28.3  |
| 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>0</b>    | 3    | 1    |
| Boron            | ppm      | ASTM D5185m |      | <b>0</b>    | 2    | 3    |
| Barium           | ppm      | ASTM D5185m |      | <b>3</b>    | 0    | 0    |
| Molybdenum       | ppm      | ASTM D5185m |      | <b>58</b>   | 76   | 54   |
| Manganese        | ppm      | ASTM D5185m |      | <b>0</b>    | <1   | <1   |
| Magnesium        | ppm      | ASTM D5185m |      | <b>977</b>  | 1208 | 860  |
| Calcium          | ppm      | ASTM D5185m |      | <b>1039</b> | 1285 | 964  |
| Phosphorus       | ppm      | ASTM D5185m |      | <b>1015</b> | 1239 | 881  |
| Zinc             | ppm      | ASTM D5185m |      | <b>1205</b> | 1567 | 1121 |
| Sulfur           | ppm      | ASTM D5185m |      | <b>3642</b> | 4163 | 3096 |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25  | <b>15.4</b> | 21.3 | 28.0 |
| Base Number (BN) | mg KOH/g | ASTM D2896  |      | <b>10.0</b> | 8.2  | 6.3  |
| Visc @ 100°C     | cSt      | ASTM D445   |      | <b>13.6</b> | 14.1 | 15.2 |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL06063986 **Received** : 18 Jan 2024  
**Lab Number** : 06063986 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10835368 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**RUSH TRUCK CENTER - CHICAGO IDEALEASE**  
 4655 SOUTH CENTRAL AVENUE  
 CHICAGO, IL  
 US 60638  
 Contact: MIKE LINLEY  
 linleym@rushtruckcenters.com  
 T: (708)496-7500  
 F: (708)496-8818

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)