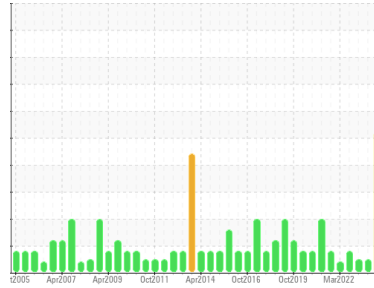




# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**3259**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL DTE 25 (30 GAL)**

## DIAGNOSIS

### Recommendation

We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Appearance is milky. There is a moderate amount of particulates present in the oil. Free water present. There is a light concentration of water present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2    |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info |             | <b>WC0767610</b>   | WC0787953   | WC0787952   |
| Sample Date   | Client Info |             | <b>26 Mar 2024</b> | 20 Sep 2023 | 24 Mar 2023 |
| Machine Age   | hrs         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Age       | hrs         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info |             | <b>N/A</b>         | N/A         | N/A         |
| Sample Status |             |             | <b>ABNORMAL</b>    | NORMAL      | NORMAL      |

## WEAR METALS

|          | method | limit/base      | current      | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >20 | <b>4</b>     | 12       | 10       |
| Chromium | ppm    | ASTM D5185m >20 | <b>&lt;1</b> | 0        | 0        |
| Nickel   | ppm    | ASTM D5185m >20 | <b>0</b>     | 0        | 0        |
| Titanium | ppm    | ASTM D5185m     | <b>&lt;1</b> | 0        | 0        |
| Silver   | ppm    | ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >20 | <b>3</b>     | 0        | <1       |
| Lead     | ppm    | ASTM D5185m >20 | <b>&lt;1</b> | 0        | 0        |
| Copper   | ppm    | ASTM D5185m >20 | <b>7</b>     | 1        | <1       |
| Tin      | ppm    | ASTM D5185m >20 | <b>&lt;1</b> | <1       | 0        |
| Vanadium | ppm    | ASTM D5185m     | <b>&lt;1</b> | <1       | 0        |
| Cadmium  | ppm    | ASTM D5185m     | <b>&lt;1</b> | 0        | 0        |

## ADDITIVES

|            | method | limit/base  | current      | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>0</b>     | 0        | 0        |
| Barium     | ppm    | ASTM D5185m | <b>&lt;1</b> | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m | <b>&lt;1</b> | 0        | <1       |
| Manganese  | ppm    | ASTM D5185m | <b>0</b>     | <1       | <1       |
| Magnesium  | ppm    | ASTM D5185m | <b>1</b>     | 0        | <1       |
| Calcium    | ppm    | ASTM D5185m | <b>87</b>    | 60       | 60       |
| Phosphorus | ppm    | ASTM D5185m | <b>460</b>   | 328      | 319      |
| Zinc       | ppm    | ASTM D5185m | <b>720</b>   | 513      | 527      |
| Sulfur     | ppm    | ASTM D5185m | <b>1139</b>  | 1026     | 1070     |

## CONTAMINANTS

|           | method | limit/base       | current        | history1 | history2 |
|-----------|--------|------------------|----------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >15  | <b>6</b>       | 1        | 2        |
| Sodium    | ppm    | ASTM D5185m      | <b>1</b>       | <1       | <1       |
| Potassium | ppm    | ASTM D5185m >20  | <b>2</b>       | 0        | <1       |
| Water     | %      | ASTM D6304 >0.05 | <b>▲ 0.069</b> | ---      | ---      |
| ppm Water | ppm    | ASTM D6304 >500  | <b>▲ 690</b>   | ---      | ---      |

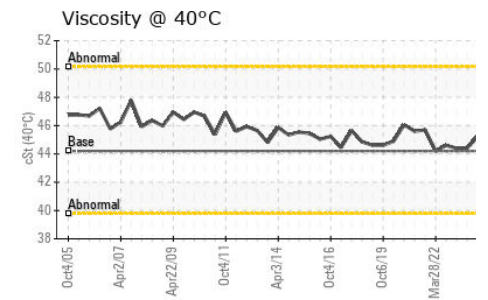
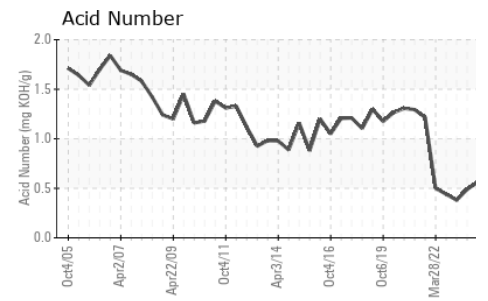
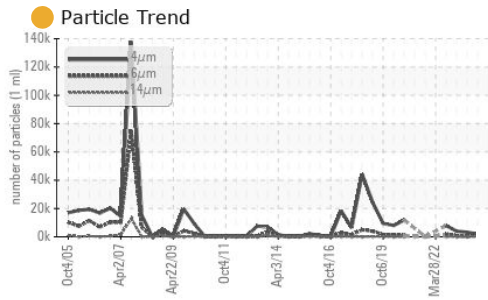
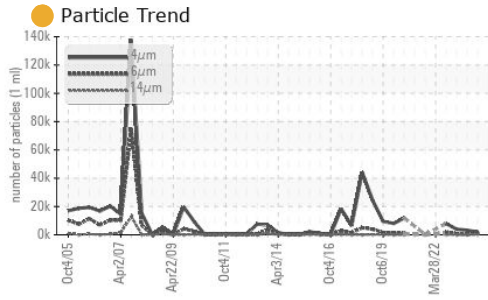
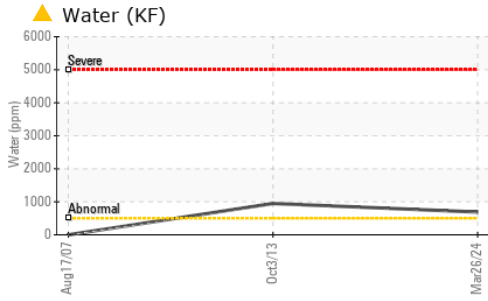
## FLUID CLEANLINESS

|                 | method           | limit/base | current           | history1 | history2 |
|-----------------|------------------|------------|-------------------|----------|----------|
| Particles >4µm  | ASTM D7647       |            | <b>1949</b>       | 3217     | 4000     |
| Particles >6µm  | ASTM D7647 >1300 |            | <b>1062</b>       | 447      | 747      |
| Particles >14µm | ASTM D7647 >160  |            | <b>● 181</b>      | 53       | 51       |
| Particles >21µm | ASTM D7647 >40   |            | <b>● 61</b>       | 18       | 15       |
| Particles >38µm | ASTM D7647 >10   |            | <b>9</b>          | 1        | 1        |
| Particles >71µm | ASTM D7647 >3    |            | <b>1</b>          | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c)     | >--/17/14  | <b>● 18/17/15</b> | 19/16/13 | 19/17/13 |

## FLUID DEGRADATION

|                  | method   | limit/base | current     | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | <b>0.56</b> | 0.49     | 0.38     |

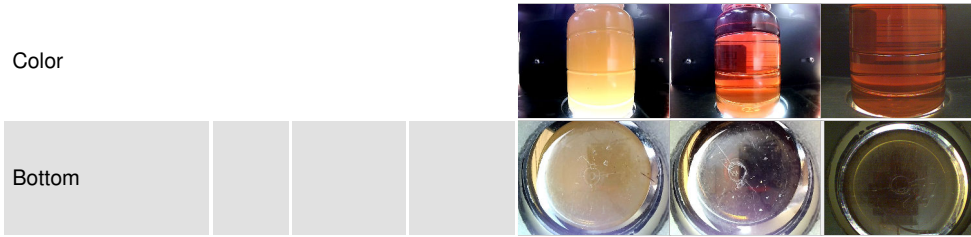
# OIL ANALYSIS REPORT



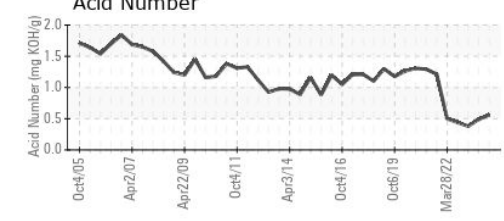
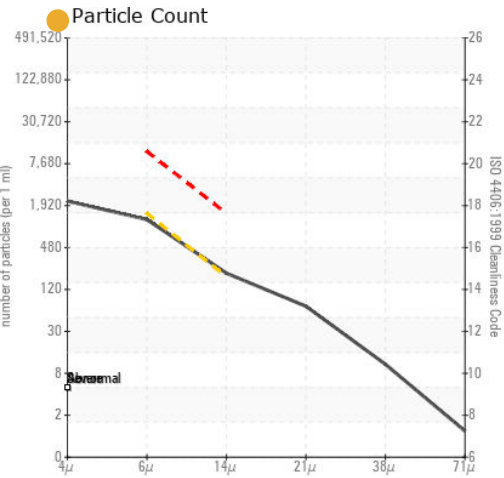
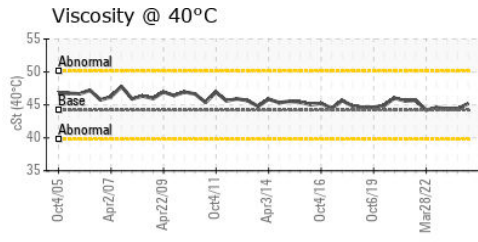
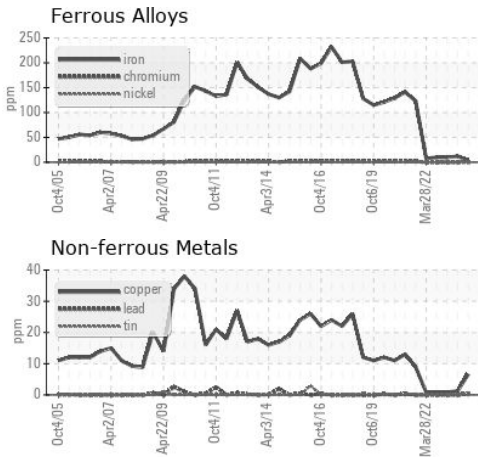
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | NONE    | NONE     | LIGHT    |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | NONE     |
| Appearance       | scalar | *Visual    | NORML   | ● MILKY  | NORML    |
| Odor             | scalar | *Visual    | NORML   | NORML    | NORML    |
| Emulsified Water | scalar | *Visual    | >0.05   | ● 0.2%   | NEG      |
| Free Water       | scalar | *Visual    | ▲ 2.0   | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 44.2    | 45.2     | 44.4     |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0767610      **Received** : 29 Mar 2024  
**Lab Number** : 06133208      **Tested** : 05 Apr 2024  
**Unique Number** : 10952673      **Diagnosed** : 05 Apr 2024 - Jonathan Hester  
**Test Package** : PLANT

**KOYO BEARINGS USA LLC S**  
 400 FRIENDSHIP RD  
 SYLVANIA, GA  
 US 30467  
 Contact: RUSSELL ZIPPERER  
 russell.zipperer@jtekt.com  
 T: (912)564-7151  
 F: (912)564-7244

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)