



# OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Machine Id  
**JCB 3TS 3234220**  
Component  
**Hydraulic System**  
Fluid  
**{not provided} (15 GAL)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info |             | <b>JCB005715</b>   | ---      | ---      |
| Sample Date   | Client Info |             | <b>15 Jul 2024</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info | <b>925</b>         | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>0</b>           | ---      | ---      |
| Oil Changed   | Client Info |             | <b>N/A</b>         | ---      | ---      |
| Sample Status |             |             | <b>SEVERE</b>      | ---      | ---      |

## CONTAMINATION

|       | method    | limit/base | current    | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.1       | <b>NEG</b> | ---      | ---      |

## WEAR METALS

|          | method | limit/base      | current      | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >20 | <b>13</b>    | ---      | ---      |
| Chromium | ppm    | ASTM D5185m >10 | <b>&lt;1</b> | ---      | ---      |
| Nickel   | ppm    | ASTM D5185m >10 | <b>0</b>     | ---      | ---      |
| Titanium | ppm    | ASTM D5185m     | <b>&lt;1</b> | ---      | ---      |
| Silver   | ppm    | ASTM D5185m     | <b>&lt;1</b> | ---      | ---      |
| Aluminum | ppm    | ASTM D5185m >10 | <b>4</b>     | ---      | ---      |
| Lead     | ppm    | ASTM D5185m >10 | <b>3</b>     | ---      | ---      |
| Copper   | ppm    | ASTM D5185m >75 | <b>15</b>    | ---      | ---      |
| Tin      | ppm    | ASTM D5185m >10 | <b>&lt;1</b> | ---      | ---      |
| Vanadium | ppm    | ASTM D5185m     | <b>&lt;1</b> | ---      | ---      |
| Cadmium  | ppm    | ASTM D5185m     | <b>&lt;1</b> | ---      | ---      |

## ADDITIVES

|            | method | limit/base  | current      | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>3</b>     | ---      | ---      |
| Barium     | ppm    | ASTM D5185m | <b>&lt;1</b> | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185m | <b>&lt;1</b> | ---      | ---      |
| Manganese  | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185m | <b>63</b>    | ---      | ---      |
| Calcium    | ppm    | ASTM D5185m | <b>182</b>   | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185m | <b>305</b>   | ---      | ---      |
| Zinc       | ppm    | ASTM D5185m | <b>426</b>   | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185m | <b>1132</b>  | ---      | ---      |

## CONTAMINANTS

|           | method | limit/base      | current  | history1 | history2 |
|-----------|--------|-----------------|----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >20 | <b>3</b> | ---      | ---      |
| Sodium    | ppm    | ASTM D5185m     | <b>0</b> | ---      | ---      |
| Potassium | ppm    | ASTM D5185m >20 | <b>2</b> | ---      | ---      |

## FLUID CLEANLINESS

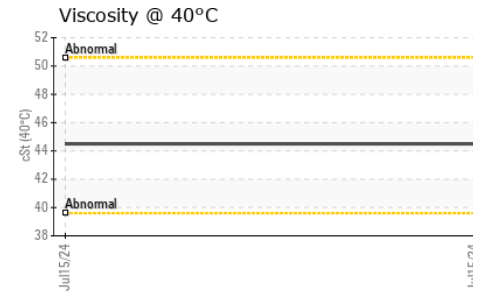
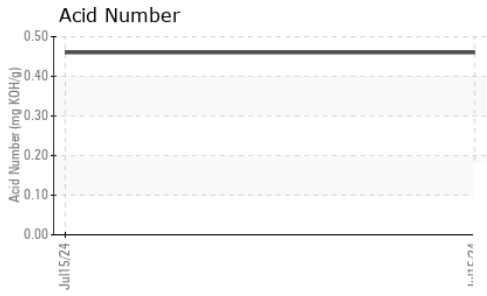
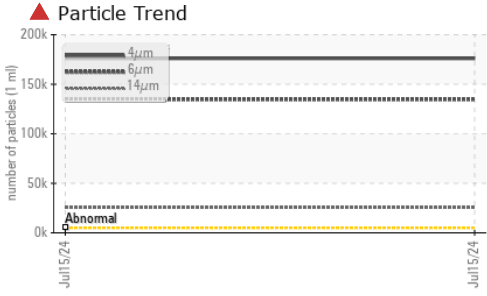
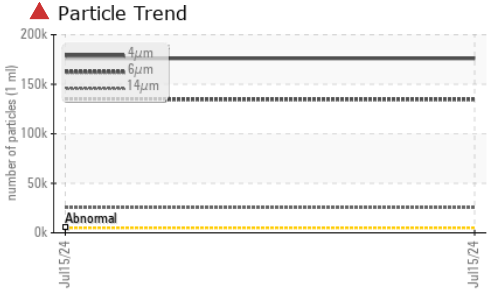
|                 | method       | limit/base | current           | history1 | history2 |
|-----------------|--------------|------------|-------------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >5000      | <b>▲ 176039</b>   | ---      | ---      |
| Particles >6µm  | ASTM D7647   | >1300      | <b>▲ 134695</b>   | ---      | ---      |
| Particles >14µm | ASTM D7647   | >160       | <b>▲ 25403</b>    | ---      | ---      |
| Particles >21µm | ASTM D7647   | >40        | <b>▲ 4940</b>     | ---      | ---      |
| Particles >38µm | ASTM D7647   | >10        | <b>▲ 101</b>      | ---      | ---      |
| Particles >71µm | ASTM D7647   | >3         | <b>▲ 6</b>        | ---      | ---      |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14  | <b>▲ 25/24/22</b> | ---      | ---      |

## FLUID DEGRADATION

|                  | method   | limit/base | current     | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | <b>0.46</b> | ---      | ---      |



# OIL ANALYSIS REPORT



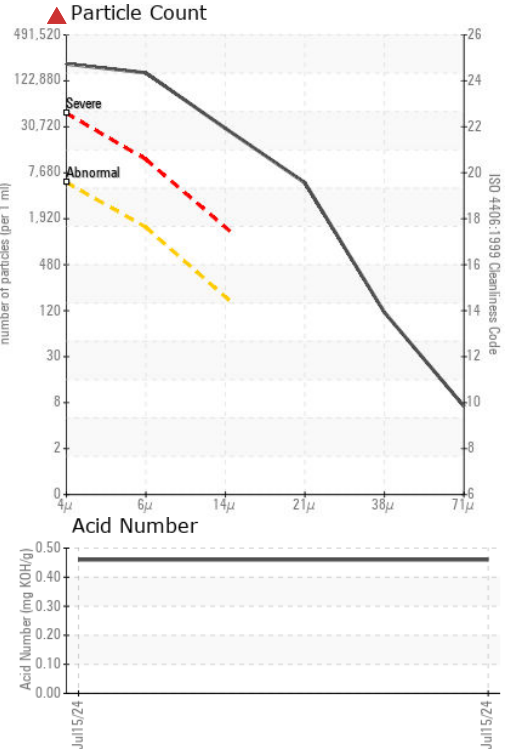
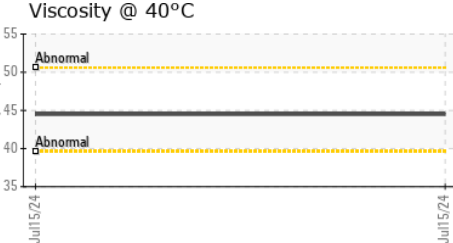
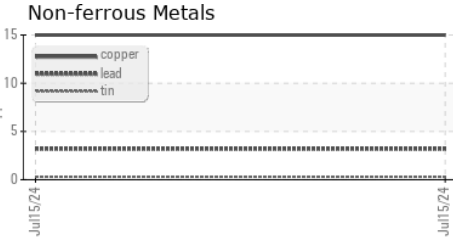
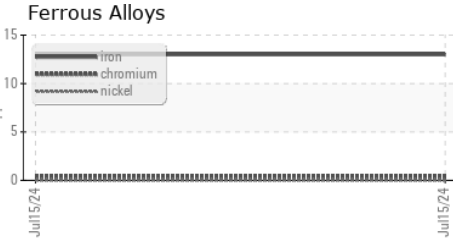
| VISUAL           | method | limit/base | current | history1 | history2 |     |
|------------------|--------|------------|---------|----------|----------|-----|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| Silt             | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| Debris           | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| Appearance       | scalar | *Visual    | NORML   | NORML    | ---      | --- |
| Odor             | scalar | *Visual    | NORML   | NORML    | ---      | --- |
| Emulsified Water | scalar | *Visual    | >0.1    | NEG      | ---      | --- |
| Free Water       | scalar | *Visual    |         | NEG      | ---      | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 44.5    | ---      | ---      |

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

|        |  |          |          |
|--------|--|----------|----------|
| Color  |  | no image | no image |
| Bottom |  | no image | no image |

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JCB005715      **Received** : 18 Jul 2024  
**Lab Number** : 06240233      **Tested** : 19 Jul 2024  
**Unique Number** : 11129067      **Diagnosed** : 19 Jul 2024 - Wes Davis  
**Test Package** : MOB 2

**BRIGGS JCB - TAMPA**  
 DBA BRIGGS JCB, 8215 PALM RIVER RD  
 TAMPA, FL  
 US 33619  
 Contact: CHRIS RYALS  
 chris.ryals@briggsequipment.com

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)