

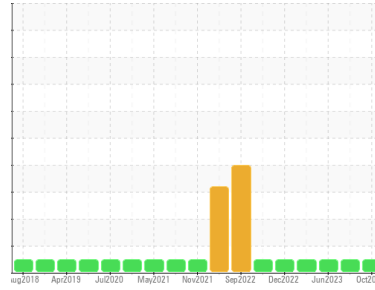


# OIL ANALYSIS REPORT



Area  
**KANSAS/44/EG - EXCAVATOR**  
 Machine Id  
**20.517L [KANSAS^44^EG - EXCAVATOR]**  
 Component  
**Left Final Drive**  
 Fluid  
**MOBIL MOBILTRANS HD 50 (--- GAL)**

Sample Rating Trend



**NORMAL**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2    |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info |             | <b>WC0862536</b>   | WC0741864   | WC0781243   |
| Sample Date   | Client Info |             | <b>15 Oct 2023</b> | 28 Sep 2023 | 02 Jun 2023 |
| Machine Age   | hrs         | Client Info | <b>5826</b>        | 5769        | 5512        |
| Oil Age       | hrs         | Client Info | <b>5826</b>        | 1142        | 4627        |
| Oil Changed   | Client Info |             | <b>Changed</b>     | Not Changd  | N/A         |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >800 | <b>247</b>   | 266      | 273      |
| Chromium | ppm    | ASTM D5185m >10  | <b>2</b>     | 2        | 2        |
| Nickel   | ppm    | ASTM D5185m >5   | <b>&lt;1</b> | 0        | <1       |
| Titanium | ppm    | ASTM D5185m >15  | <b>&lt;1</b> | <1       | 1        |
| Silver   | ppm    | ASTM D5185m >2   | <b>0</b>     | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >75  | <b>13</b>    | 21       | 16       |
| Lead     | ppm    | ASTM D5185m >10  | <b>&lt;1</b> | 0        | <1       |
| Copper   | ppm    | ASTM D5185m >75  | <b>&lt;1</b> | 0        | <1       |
| Tin      | ppm    | ASTM D5185m >8   | <b>&lt;1</b> | 0        | <1       |
| Vanadium | ppm    | ASTM D5185m      | <b>&lt;1</b> | 0        | <1       |
| Cadmium  | ppm    | ASTM D5185m      | <b>0</b>     | 0        | <1       |

## ADDITIVES

|            | method | limit/base  | current      | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>209</b>   | 262      | 264      |
| Barium     | ppm    | ASTM D5185m | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m | <b>0</b>     | 0        | <1       |
| Manganese  | ppm    | ASTM D5185m | <b>3</b>     | 3        | 3        |
| Magnesium  | ppm    | ASTM D5185m | <b>24</b>    | 9        | 9        |
| Calcium    | ppm    | ASTM D5185m | <b>184</b>   | 207      | 152      |
| Phosphorus | ppm    | ASTM D5185m | <b>1378</b>  | 1476     | 1342     |
| Zinc       | ppm    | ASTM D5185m | <b>83</b>    | 80       | 57       |
| Sulfur     | ppm    | ASTM D5185m | <b>23759</b> | 26386    | 25056    |

## CONTAMINANTS

|           | method | limit/base       | current   | history1 | history2 |
|-----------|--------|------------------|-----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >400 | <b>57</b> | 64       | 66       |
| Sodium    | ppm    | ASTM D5185m      | <b>3</b>  | 1        | 2        |
| Potassium | ppm    | ASTM D5185m >20  | <b>7</b>  | 6        | 7        |

## VISUAL

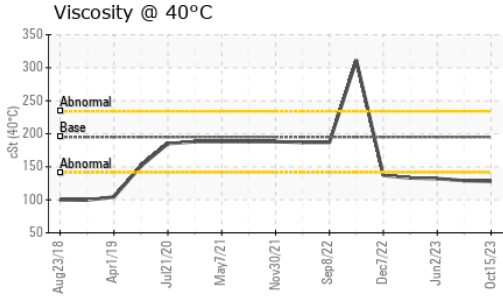
|                  | method | limit/base    | current      | history1 | history2 |
|------------------|--------|---------------|--------------|----------|----------|
| White Metal      | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | NONE     |
| Precipitate      | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | NONE     |
| 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      |
| Free Water       | scalar | *Visual       | <b>NEG</b>   | NEG      | NEG      |

## FLUID PROPERTIES

|             | method | limit/base    | current    | history1 | history2 |
|-------------|--------|---------------|------------|----------|----------|
| Visc @ 40°C | cSt    | ASTM D445 195 | <b>128</b> | 129      | 132      |

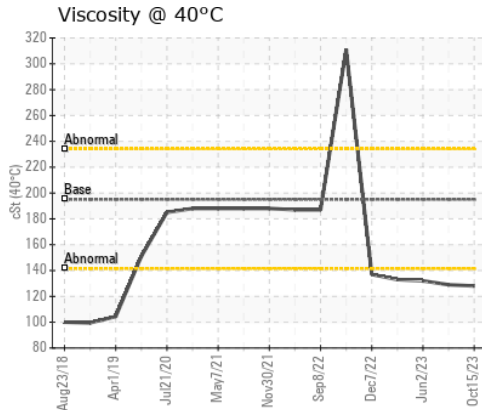
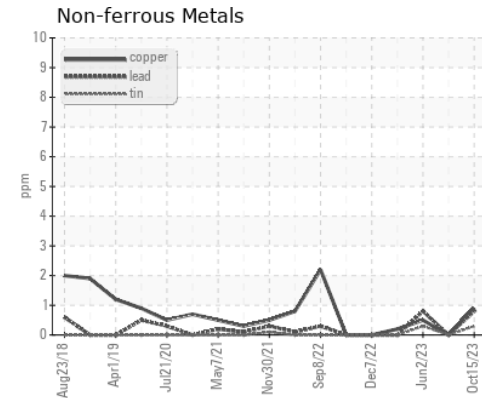
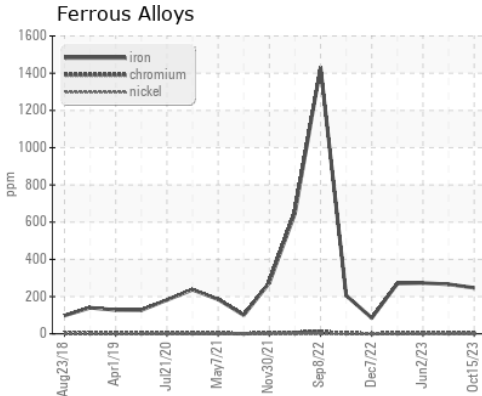


# OIL ANALYSIS REPORT



| SAMPLE IMAGES | method | limit/base | current  | history1 | history2 |
|---------------|--------|------------|----------|----------|----------|
| Color         |        |            | no image | no image | no image |
| Bottom        |        |            | no image | no image | no image |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0862536 **Received** : 31 Oct 2023  
**Lab Number** : 05994758 **Diagnosed** : 01 Nov 2023  
**Unique Number** : 10723118 **Diagnostician** : Don Baldridge  
**Test Package** : CONST

**SHERWOOD CONSTRUCTION CO INC**  
 3219 WEST MAY ST  
 WICHITA, KS  
 US 67213  
 Contact: DOUG KING  
 doug.king@sherwood.net  
 T: (316)617-3161  
 F: x:

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)