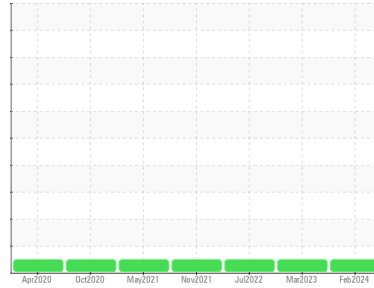




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**OKLAHOMA/105/EG - TRUCK-ON-HWY-HEAVY DUTY**  
 Machine Id  
**08.123 [OKLAHOMA^105^EG - TRUCK-ON-HWY-HEAVY DUTY]**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL MOBILFLUID 424 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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>WC0834088</b>   | WC0800788   | WC0713192   |
| Sample Date   | Client Info |             | <b>12 Feb 2024</b> | 27 Mar 2023 | 05 Jul 2022 |
| Machine Age   | hrs         | Client Info | <b>8579</b>        | 7128        | 5708        |
| Oil Age       | hrs         | Client Info | <b>1451</b>        | 1420        | 1207        |
| Oil Changed   | Client Info |             | <b>Changed</b>     | Changed     | Changed     |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## CONTAMINATION

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

## WEAR METALS

|          | method | limit/base      | current      | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >20 | <b>4</b>     | 4        | 2        |
| Chromium | ppm    | ASTM D5185m >10 | <b>0</b>     | <1       | 0        |
| Nickel   | ppm    | ASTM D5185m >10 | <b>0</b>     | <1       | <1       |
| Titanium | ppm    | ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Silver   | ppm    | ASTM D5185m     | <b>&lt;1</b> | 0        | <1       |
| Aluminum | ppm    | ASTM D5185m >10 | <b>&lt;1</b> | 2        | <1       |
| Lead     | ppm    | ASTM D5185m >10 | <b>0</b>     | <1       | <1       |
| Copper   | ppm    | ASTM D5185m >75 | <b>3</b>     | 4        | 4        |
| Tin      | ppm    | ASTM D5185m >10 | <b>&lt;1</b> | <1       | <1       |
| Antimony | ppm    | ASTM D5185m     | <b>---</b>   | ---      | ---      |
| Vanadium | ppm    | ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Cadmium  | ppm    | ASTM D5185m     | <b>0</b>     | 0        | 0        |

## ADDITIVES

|            | method | limit/base  | current      | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>107</b>   | 119      | 130      |
| Barium     | ppm    | ASTM D5185m | <b>2</b>     | <1       | 0        |
| Molybdenum | ppm    | ASTM D5185m | <b>0</b>     | <1       | 1        |
| Manganese  | ppm    | ASTM D5185m | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm    | ASTM D5185m | <b>23</b>    | 18       | 22       |
| Calcium    | ppm    | ASTM D5185m | <b>3478</b>  | 3486     | 3503     |
| Phosphorus | ppm    | ASTM D5185m | <b>1152</b>  | 1125     | 1031     |
| Zinc       | ppm    | ASTM D5185m | <b>1419</b>  | 1403     | 1315     |
| Sulfur     | ppm    | ASTM D5185m | <b>4293</b>  | 4248     | 4781     |

## CONTAMINANTS

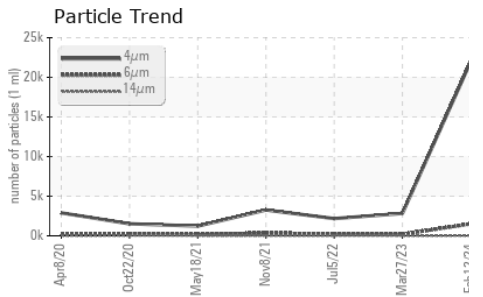
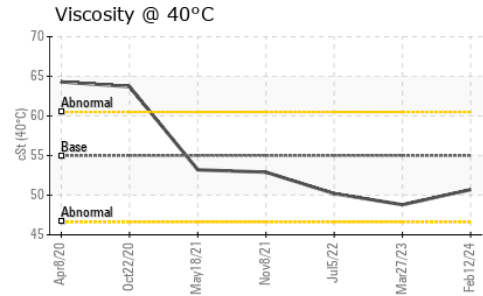
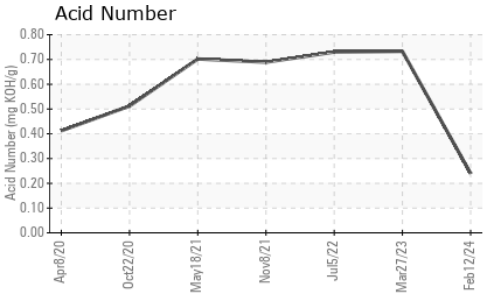
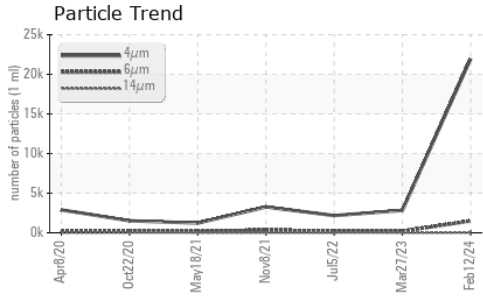
|           | method | limit/base      | current   | history1 | history2 |
|-----------|--------|-----------------|-----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >20 | <b>14</b> | 11       | 9        |
| Sodium    | ppm    | ASTM D5185m     | <b>1</b>  | 0        | 7        |
| Potassium | ppm    | ASTM D5185m >20 | <b>0</b>  | 2        | 0        |

## FLUID CLEANLINESS

|                 | method       | limit/base | current         | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647   |            | <b>21954</b>    | 2826     | 2175     |
| Particles >6µm  | ASTM D7647   | >2500      | <b>1510</b>     | 192      | 204      |
| Particles >14µm | ASTM D7647   | >640       | <b>23</b>       | 9        | 12       |
| Particles >21µm | ASTM D7647   | >160       | <b>5</b>        | 3        | 2        |
| Particles >38µm | ASTM D7647   | >40        | <b>0</b>        | 0        | 0        |
| Particles >71µm | ASTM D7647   | >10        | <b>0</b>        | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) | >--/18/16  | <b>22/18/12</b> | 19/15/10 | 18/15/11 |



# OIL ANALYSIS REPORT

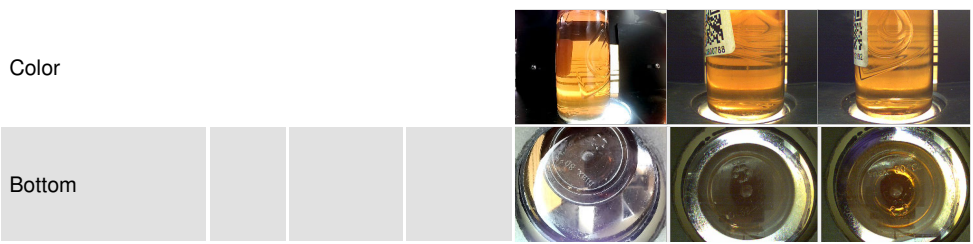


| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 |            | <b>0.24</b> | 0.733    | 0.73     |

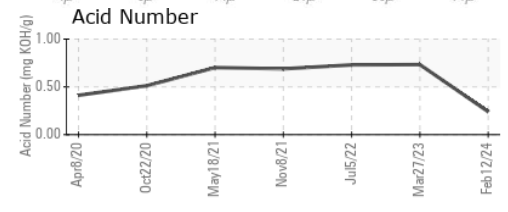
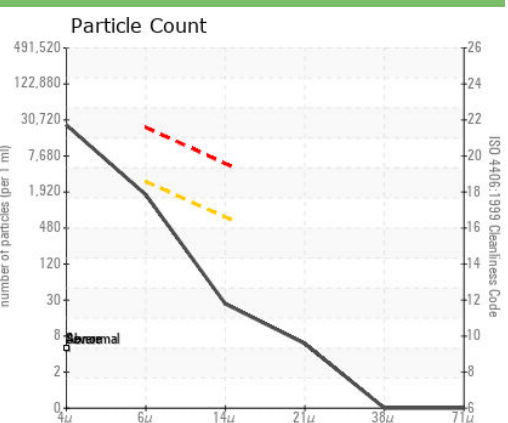
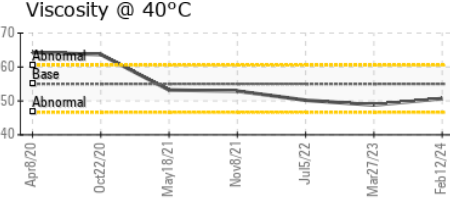
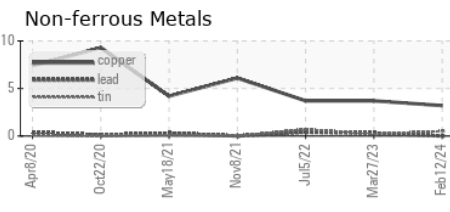
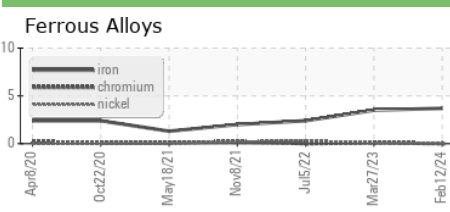
| VISUAL           |        | method  | limit/base | current      | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal      | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual | 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 | >0.1       | <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 | 55         | <b>50.7</b> | 48.8     | 50.2     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0834088  
**Lab Number** : 06098322  
**Unique Number** : 10896552  
**Test Package** : CONST  
**Received** : 23 Feb 2024  
**Tested** : 29 Feb 2024  
**Diagnosed** : 29 Feb 2024 - Jonathan Hester

**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:

Certificate L2367  
 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)