



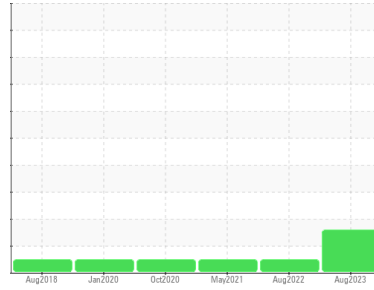
# PROBLEM SUMMARY

## Sample Rating Trend

ISO

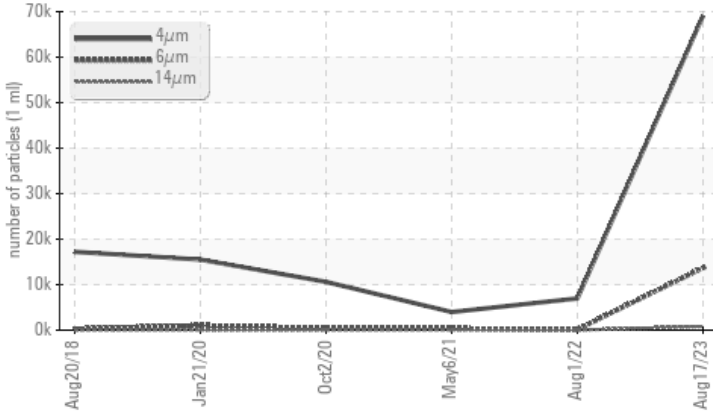


Area  
**OKLAHOMA/105/EG - TRUCK-ON-HWY-HEAVY DUTY**  
 Machine Id  
**08.101 [OKLAHOMA^105^EG - TRUCK-ON-HWY-HEAVY DUTY]**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL MOBILFLUID 424 (--- GAL)**



## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

| Sample Status   |              |           | ABNORMAL          | NORMAL   | NORMAL   |
|-----------------|--------------|-----------|-------------------|----------|----------|
| Particles >6µm  | ASTM D7647   | >2500     | ▲ <b>13681</b>    | 147      | 368      |
| Particles >14µm | ASTM D7647   | >640      | ▲ <b>803</b>      | 7        | 39       |
| Particles >21µm | ASTM D7647   | >160      | ▲ <b>245</b>      | 2        | 11       |
| Oil Cleanliness | ISO 4406 (c) | >--/18/16 | ▲ <b>23/21/17</b> | 20/14/10 | 19/16/12 |

Customer Id: SHEWIC  
 Sample No.: WC0834002  
 Lab Number: 05934863  
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

| Action        | Status | Date | Done By | Description   |
|---------------|--------|------|---------|---|
| Change Fluid  | ---    | ---  | ?       | Oil and filter change at the time of sampling has been noted. |
| Change Filter | ---    | ---  | ?       | Oil and filter change at the time of sampling has been noted. |

## HISTORICAL DIAGNOSIS

### 01 Aug 2022 Diag: Angela Borella

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 06 May 2021 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 02 Oct 2020 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

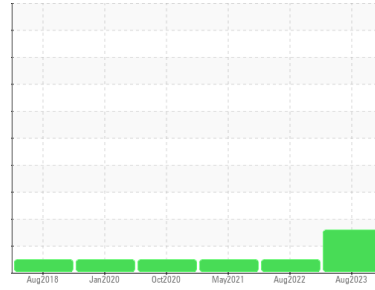
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



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

## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a high amount of particulates 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>WC0834002</b>   | WC0713207   | WC0578206   |
| Sample Date   | Client Info |             | <b>17 Aug 2023</b> | 01 Aug 2022 | 06 May 2021 |
| Machine Age   | hrs         | Client Info | <b>12419</b>       | 11097       | 10011       |
| Oil Age       | hrs         | Client Info | <b>1322</b>        | 1086        | 1087        |
| Oil Changed   | Client Info |             | <b>Changed</b>     | Changed     | Changed     |
| Sample Status |             |             | <b>ABNORMAL</b>    | NORMAL      | NORMAL      |

## WEAR METALS

|          | method | limit/base      | current      | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >20 | <b>6</b>     | 3        | 3        |
| Chromium | ppm    | ASTM D5185m >10 | <b>&lt;1</b> | 0        | <1       |
| Nickel   | ppm    | ASTM D5185m >10 | <b>0</b>     | 0        | 0        |
| Titanium | ppm    | ASTM D5185m     | <b>&lt;1</b> | 0        | <1       |
| Silver   | ppm    | ASTM D5185m     | <b>0</b>     | 0        | <1       |
| Aluminum | ppm    | ASTM D5185m >10 | <b>2</b>     | 2        | 0        |
| Lead     | ppm    | ASTM D5185m >10 | <b>&lt;1</b> | <1       | <1       |
| Copper   | ppm    | ASTM D5185m >75 | <b>4</b>     | 2        | 2        |
| Tin      | ppm    | ASTM D5185m >10 | <b>&lt;1</b> | <1       | <1       |
| Antimony | ppm    | ASTM D5185m     | <b>---</b>   | ---      | 0        |
| 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>145</b>   | 148      | 116      |
| Barium     | ppm    | ASTM D5185m | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m | <b>&lt;1</b> | <1       | <1       |
| Manganese  | ppm    | ASTM D5185m | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm    | ASTM D5185m | <b>21</b>    | 15       | 15       |
| Calcium    | ppm    | ASTM D5185m | <b>4147</b>  | 3511     | 3624     |
| Phosphorus | ppm    | ASTM D5185m | <b>1340</b>  | 1151     | 1140     |
| Zinc       | ppm    | ASTM D5185m | <b>1668</b>  | 1395     | 1382     |
| Sulfur     | ppm    | ASTM D5185m | <b>5863</b>  | 4489     | 4031     |

## CONTAMINANTS

|           | method | limit/base      | current   | history1 | history2 |
|-----------|--------|-----------------|-----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >20 | <b>15</b> | 13       | 9        |
| Sodium    | ppm    | ASTM D5185m     | <b>0</b>  | 1        | 6        |
| Potassium | ppm    | ASTM D5185m >20 | <b>2</b>  | 2        | 1        |

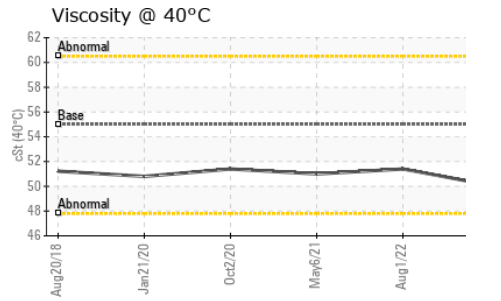
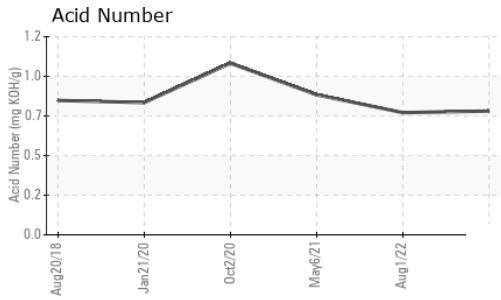
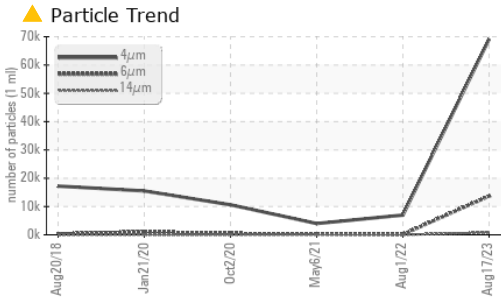
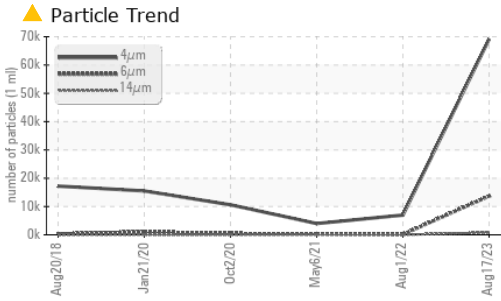
## FLUID CLEANLINESS

|                 | method       | limit/base | current           | history1 | history2 |
|-----------------|--------------|------------|-------------------|----------|----------|
| Particles >4µm  | ASTM D7647   |            | <b>69108</b>      | 6967     | 3984     |
| Particles >6µm  | ASTM D7647   | >2500      | ▲ <b>13681</b>    | 147      | 368      |
| Particles >14µm | ASTM D7647   | >640       | ▲ <b>803</b>      | 7        | 39       |
| Particles >21µm | ASTM D7647   | >160       | ▲ <b>245</b>      | 2        | 11       |
| Particles >38µm | ASTM D7647   | >40        | <b>11</b>         | 0        | 0        |
| Particles >71µm | ASTM D7647   | >10        | <b>1</b>          | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) | >--/18/16  | ▲ <b>23/21/17</b> | 20/14/10 | 19/16/12 |

## FLUID DEGRADATION

|                  | method   | limit/base | current     | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | <b>0.75</b> | 0.74     | 0.848    |

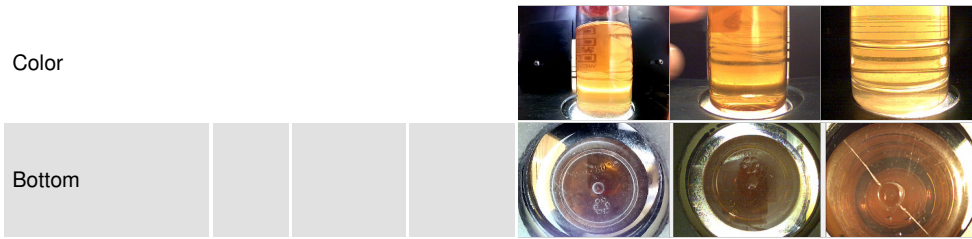
# OIL ANALYSIS REPORT



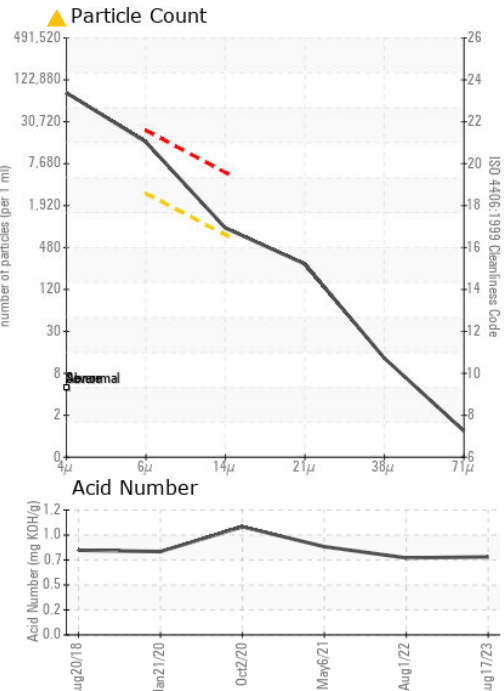
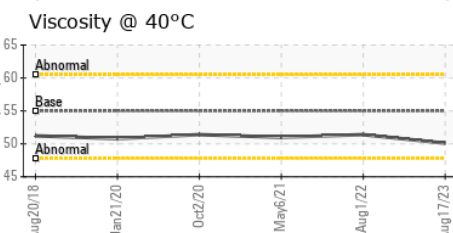
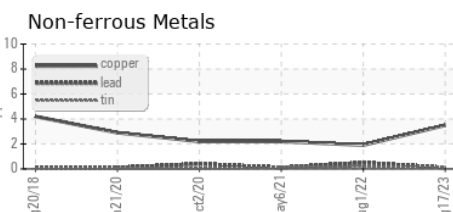
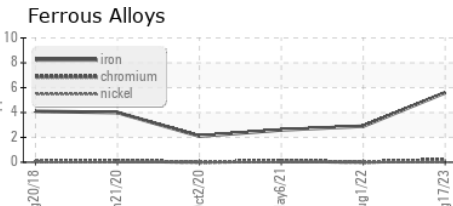
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
|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

| FLUID PROPERTIES | method | limit/base   | current | history1 | history2 |
|------------------|--------|--------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445 55 | 50.1    | 51.4     | 51.0     |

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



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0834002 **Received** : 25 Aug 2023  
**Lab Number** : 05934863 **Diagnosed** : 29 Aug 2023  
**Unique Number** : 10620134 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST

**SHERWOOD CONSTRUCTION CO INC**  
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 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)