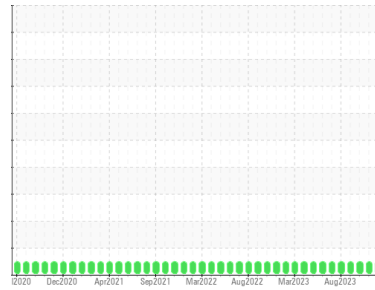




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**CRM54**  
 Machine Id  
**CRM 54 MOTOR (S/N 16-2200-0700)**  
 Component  
**Bearing**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (92 GAL)**

### DIAGNOSIS

**Recommendation**  
 Resample at the next service interval to monitor.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 The water content is negligible. 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>RP0038003</b>   | RP0042642   | RP0039118   |
| Sample Date   | Client Info |             | <b>08 Apr 2024</b> | 05 Mar 2024 | 07 Feb 2024 |
| 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>NORMAL</b>      | NORMAL      | NORMAL      |

### WEAR METALS

|          | method     | limit/base      | current   | history1 | history2 |
|----------|------------|-----------------|-----------|----------|----------|
| PQ       | ASTM D8184 |                 | <b>13</b> | 16       | 13       |
| Iron     | ppm        | ASTM D5185m >20 | <b>0</b>  | 2        | <1       |
| Chromium | ppm        | ASTM D5185m >20 | <b>0</b>  | <1       | 0        |
| Nickel   | ppm        | ASTM D5185m >20 | <b>0</b>  | <1       | 0        |
| Titanium | ppm        | ASTM D5185m     | <b>0</b>  | 0        | <1       |
| Silver   | ppm        | ASTM D5185m     | <b>0</b>  | 0        | 0        |
| Aluminum | ppm        | ASTM D5185m >20 | <b>0</b>  | 2        | 0        |
| Lead     | ppm        | ASTM D5185m >20 | <b>0</b>  | 0        | 0        |
| Copper   | ppm        | ASTM D5185m >20 | <b>1</b>  | 2        | 2        |
| Tin      | ppm        | ASTM D5185m >20 | <b>11</b> | 13       | 12       |
| Vanadium | ppm        | ASTM D5185m     | <b>0</b>  | 0        | <1       |
| Cadmium  | ppm        | ASTM D5185m     | <b>0</b>  | 0        | 0        |

### ADDITIVES

|            | method | limit/base      | current      | history1 | history2 |
|------------|--------|-----------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m 5   | <b>0</b>     | 0        | 0        |
| Barium     | ppm    | ASTM D5185m 5   | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m 5   | <b>0</b>     | 0        | 0        |
| Manganese  | ppm    | ASTM D5185m     | <b>&lt;1</b> | 0        | 0        |
| Magnesium  | ppm    | ASTM D5185m 25  | <b>0</b>     | <1       | 0        |
| Calcium    | ppm    | ASTM D5185m 200 | <b>41</b>    | 53       | 46       |
| Phosphorus | ppm    | ASTM D5185m 300 | <b>311</b>   | 301      | 316      |
| Zinc       | ppm    | ASTM D5185m 370 | <b>394</b>   | 419      | 374      |

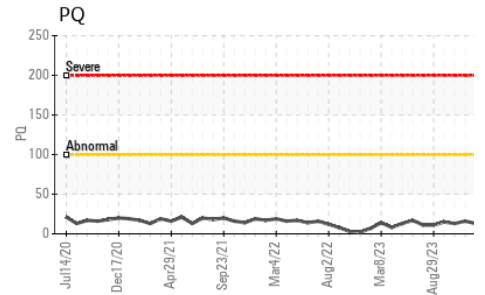
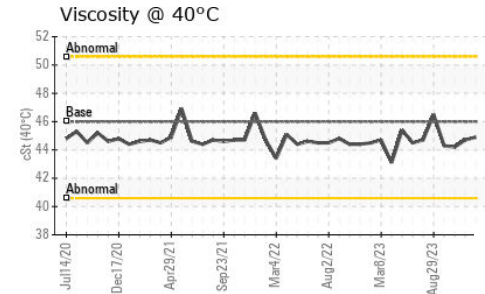
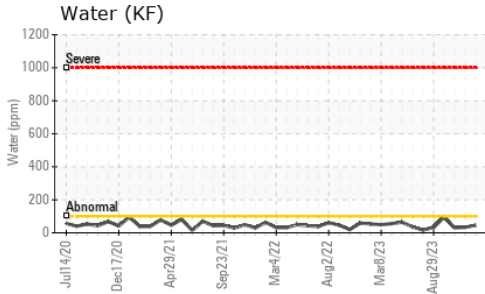
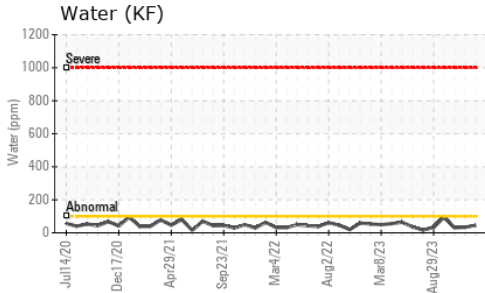
### CONTAMINANTS

|           | method | limit/base      | current      | history1 | history2 |
|-----------|--------|-----------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >15 | <b>&lt;1</b> | 2        | <1       |
| Sodium    | ppm    | ASTM D5185m     | <b>1</b>     | <1       | <1       |
| Potassium | ppm    | ASTM D5185m >20 | <b>0</b>     | <1       | 0        |
| Water     | %      | ASTM D6304 >2   | <b>0.004</b> | 0.003    | 0.003    |
| ppm Water | ppm    | ASTM D6304      | <b>45</b>    | 34       | 30       |

### FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.57 | <b>0.34</b> | 0.37     | 0.32     |

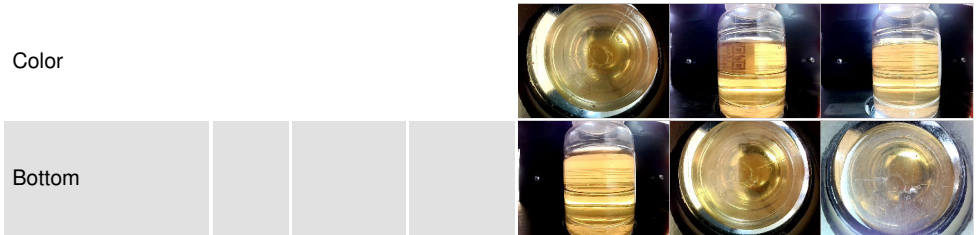
# OIL ANALYSIS REPORT



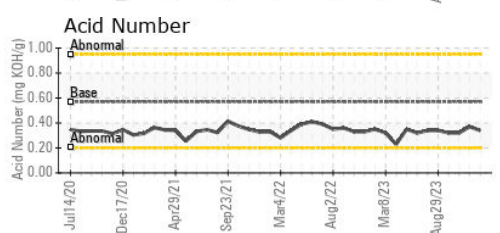
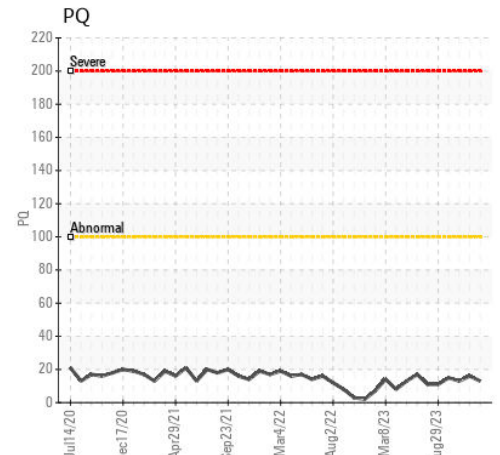
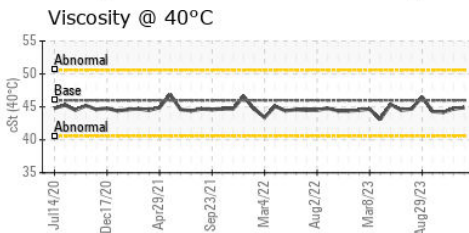
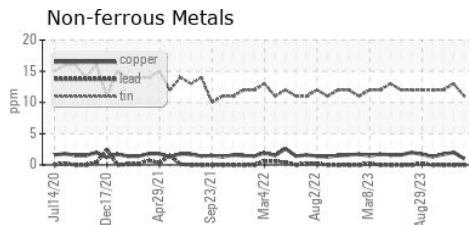
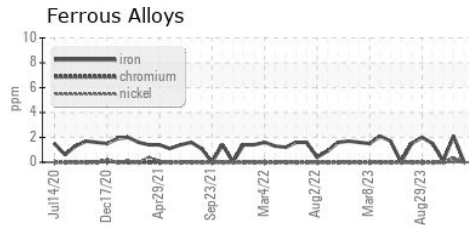
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | NONE    | NONE     | NONE     |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | NONE     |
| Appearance       | scalar | *Visual    | NORML   | NORML    | NORML    |
| Odor             | scalar | *Visual    | NORML   | NORML    | NORML    |
| Emulsified Water | scalar | *Visual    | >2      | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 46      | 44.9     | 44.7     |

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



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0038003 **Received** : 09 Apr 2024  
**Lab Number** : 06143138 **Tested** : 10 Apr 2024  
**Unique Number** : 10967946 **Diagnosed** : 11 Apr 2024 - Angela Borella  
**Test Package** : IND 2 ( Additional Tests: PQ )

**OUTOKUMPU STAINLESS USA**  
 HWY 43 N  
 CALVERT, AL 36513  
 Contact: MARIO JOHNSON  
 Mario.johnson@outokumpu.com  
 T: (251)321-4105  
 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)