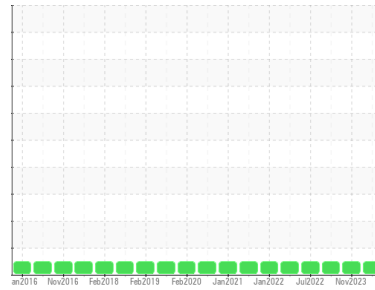




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**CTL74**

Machine Id

**CTL 74 LEVELER REDUCER (S/N 16-5210-0210)**

Component

**Gearbox**

Fluid

**ROYAL PURPLE SYNFILM GT 220 (--- QTS)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### 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>RP0042489</b>   | RP0035320   | RP0029619   |
| Sample Date   | Client Info |             | <b>28 May 2024</b> | 02 Nov 2023 | 17 Apr 2023 |
| 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>22</b>    | 11       | 86       |
| Iron     | ppm        | ASTM D5185m >200 | <b>8</b>     | 7        | 71       |
| Chromium | ppm        | ASTM D5185m >15  | <b>&lt;1</b> | <1       | <1       |
| Nickel   | ppm        | ASTM D5185m >15  | <b>&lt;1</b> | 0        | <1       |
| Titanium | ppm        | ASTM D5185m      | <b>&lt;1</b> | 0        | 0        |
| Silver   | ppm        | ASTM D5185m      | <b>1</b>     | 0        | 0        |
| Aluminum | ppm        | ASTM D5185m >25  | <b>2</b>     | 2        | 2        |
| Lead     | ppm        | ASTM D5185m >100 | <b>&lt;1</b> | 0        | 0        |
| Copper   | ppm        | ASTM D5185m >200 | <b>1</b>     | <1       | 1        |
| Tin      | ppm        | ASTM D5185m >25  | <b>&lt;1</b> | 0        | 0        |
| Vanadium | ppm        | ASTM D5185m      | <b>&lt;1</b> | 0        | 0        |
| Cadmium  | ppm        | ASTM D5185m      | <b>&lt;1</b> | 0        | 0        |

## ADDITIVES

|            | method | limit/base  | current      | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>1</b>     | 1        | 1        |
| Barium     | ppm    | ASTM D5185m | <b>0</b>     | 19       | 0        |
| Molybdenum | ppm    | ASTM D5185m | <b>&lt;1</b> | 0        | <1       |
| Manganese  | ppm    | ASTM D5185m | <b>&lt;1</b> | 0        | 1        |
| Magnesium  | ppm    | ASTM D5185m | <b>&lt;1</b> | <1       | 2        |
| Calcium    | ppm    | ASTM D5185m | <b>24</b>    | 32       | 26       |
| Phosphorus | ppm    | ASTM D5185m | <b>104</b>   | 143      | 137      |
| Zinc       | ppm    | ASTM D5185m | <b>5</b>     | 12       | 9        |

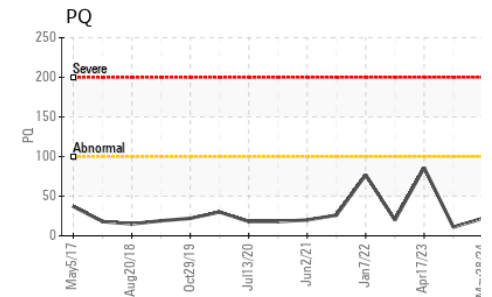
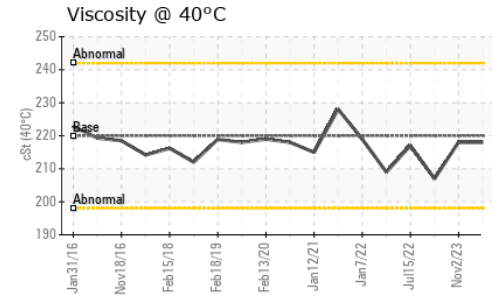
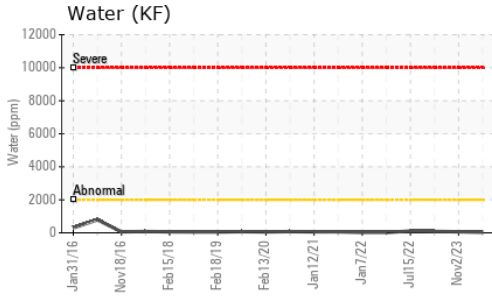
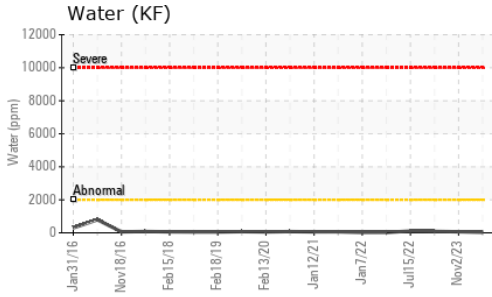
## CONTAMINANTS

|           | method | limit/base       | current      | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >50  | <b>8</b>     | 6        | 5        |
| Sodium    | ppm    | ASTM D5185m      | <b>&lt;1</b> | 0        | <1       |
| Potassium | ppm    | ASTM D5185m >20  | <b>1</b>     | <1       | <1       |
| Water     | %      | ASTM D6304 >0.2  | <b>0.003</b> | 0.006    | 0.008    |
| ppm Water | ppm    | ASTM D6304 >2000 | <b>31</b>    | 63.9     | 85.5     |

## FLUID DEGRADATION

|                  | method   | limit/base | current     | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | <b>0.29</b> | 0.23     | 0.37     |

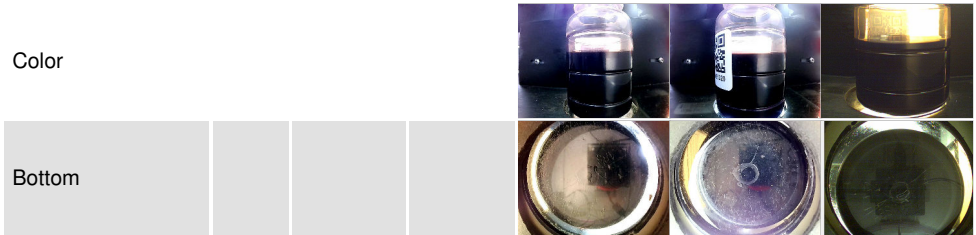
# OIL ANALYSIS REPORT



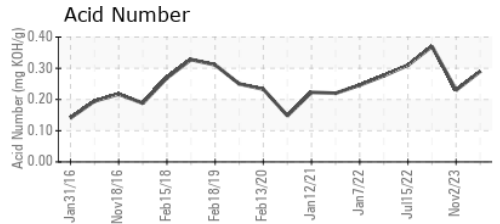
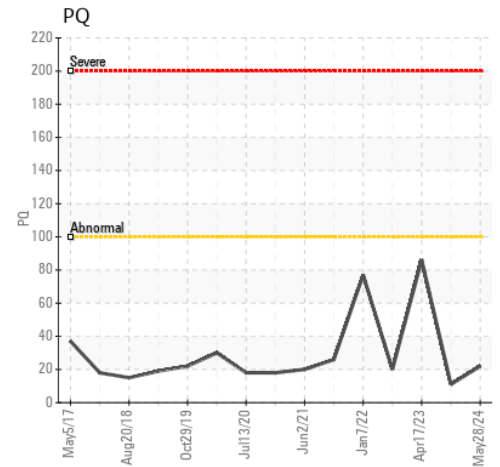
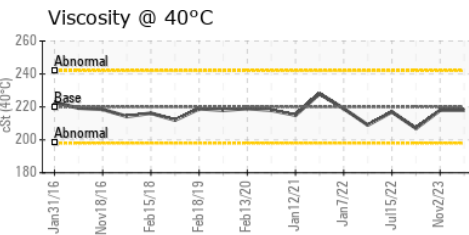
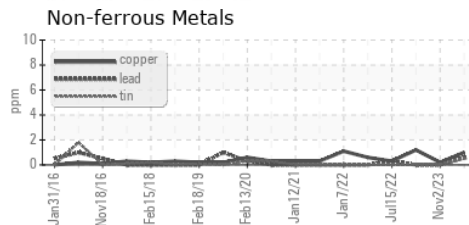
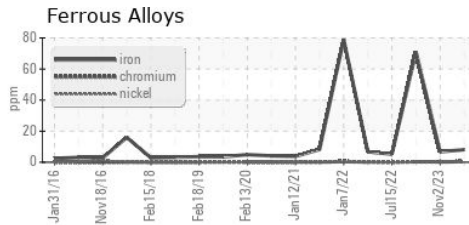
| VISUAL           | method | limit/base    | current      | history1 | history2 |
|------------------|--------|---------------|--------------|----------|----------|
| White Metal      | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | LIGHT    |
| Yellow Metal     | scalar | *Visual NONE  | <b>NONE</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 220 | <b>218</b> | 218      | 207      |

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



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0042489 **Received** : 29 May 2024  
**Lab Number** : **06194128** **Tested** : 30 May 2024  
**Unique Number** : 11056251 **Diagnosed** : 30 May 2024 - Wes Davis  
**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)