

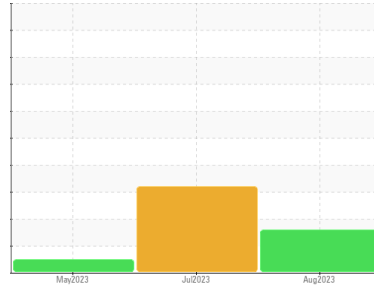


# OIL ANALYSIS REPORT



Area  
**Action Newark**  
 Machine Id  
**CATERPILLAR 315C 5579 (S/N CCJC01085)**  
 Component  
**Swing Drive**  
 Fluid  
**NOT GIVEN (--- GAL)**

Sample Rating Trend



**WATER**



## DIAGNOSIS

### ▲ Recommendation

We advise that you check for the source of water entry. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a moderate concentration of water present 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>WC0774704</b>   | WC0774815   | WC0745264   |
| Sample Date   | Client Info |             | <b>15 Aug 2023</b> | 15 Jul 2023 | 08 May 2023 |
| Machine Age   | hrs         | Client Info | <b>19169</b>       | 19147       | 18894       |
| 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>ABNORMAL</b>    | ABNORMAL    | NORMAL      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >400 | <b>230</b>   | ▲ 697    | 135      |
| Chromium | ppm    | ASTM D5185m >10  | <b>4</b>     | 8        | 9        |
| Nickel   | ppm    | ASTM D5185m >10  | <b>0</b>     | <1       | 0        |
| Titanium | ppm    | ASTM D5185m      | <b>&lt;1</b> | 2        | <1       |
| Silver   | ppm    | ASTM D5185m      | <b>0</b>     | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >25  | <b>&lt;1</b> | 4        | 6        |
| Lead     | ppm    | ASTM D5185m >50  | <b>&lt;1</b> | 0        | <1       |
| Copper   | ppm    | ASTM D5185m >200 | <b>6</b>     | 2        | <1       |
| Tin      | ppm    | ASTM D5185m >10  | <b>0</b>     | 0        | 0        |
| Vanadium | ppm    | ASTM D5185m      | <b>0</b>     | 0        | <1       |
| Cadmium  | ppm    | ASTM D5185m      | <b>0</b>     | <1       | <1       |

## ADDITIVES

|            | method | limit/base  | current      | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>0</b>     | 0        | 5        |
| Barium     | ppm    | ASTM D5185m | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m | <b>2</b>     | 3        | 7        |
| Manganese  | ppm    | ASTM D5185m | <b>2</b>     | 5        | 2        |
| Magnesium  | ppm    | ASTM D5185m | <b>10</b>    | 7        | 46       |
| Calcium    | ppm    | ASTM D5185m | <b>208</b>   | 224      | 2168     |
| Phosphorus | ppm    | ASTM D5185m | <b>494</b>   | 409      | 840      |
| Zinc       | ppm    | ASTM D5185m | <b>571</b>   | 306      | 1067     |
| Sulfur     | ppm    | ASTM D5185m | <b>10363</b> | 14526    | 8047     |

## CONTAMINANTS

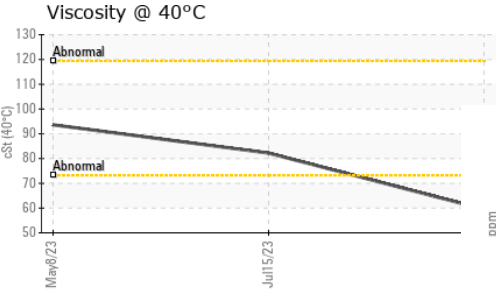
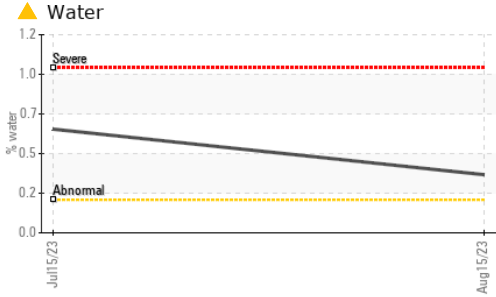
|           | method | limit/base       | current        | history1 | history2 |
|-----------|--------|------------------|----------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >50  | <b>8</b>       | 16       | 27       |
| Sodium    | ppm    | ASTM D5185m      | <b>0</b>       | 2        | 2        |
| Potassium | ppm    | ASTM D5185m >20  | <b>0</b>       | 0        | 2        |
| Water     | %      | ASTM D6304 >0.2  | ▲ <b>0.352</b> | ▲ 0.628  | ---      |
| ppm Water | ppm    | ASTM D6304 >2000 | ▲ <b>3520</b>  | ▲ 6280   | ---      |

## VISUAL

|                  | method | limit/base    | current      | history1 | history2 |
|------------------|--------|---------------|--------------|----------|----------|
| White Metal      | scalar | *Visual NONE  | <b>NONE</b>  | LIGHT    | 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> | ▲ HAZY   | NORML    |
| Odor             | scalar | *Visual NORML | <b>NORML</b> | NORML    | NORML    |
| Emulsified Water | scalar | *Visual >0.2  | <b>0.2%</b>  | ▲ 0.2%   | NEG      |
| Free Water       | scalar | *Visual       | <b>NEG</b>   | NEG      | NEG      |



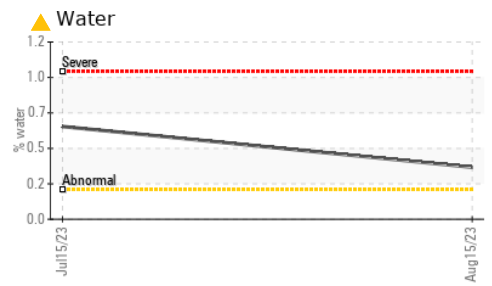
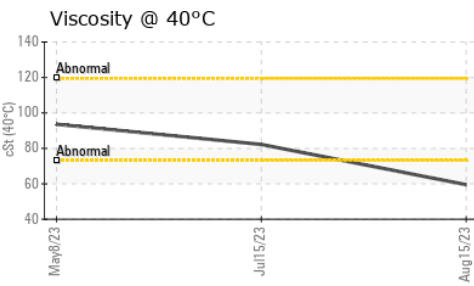
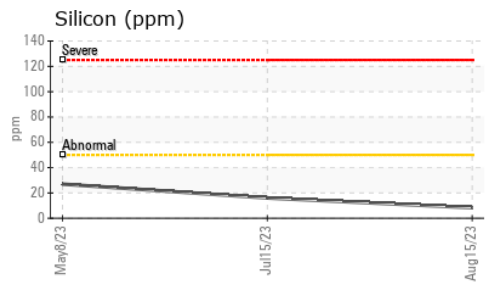
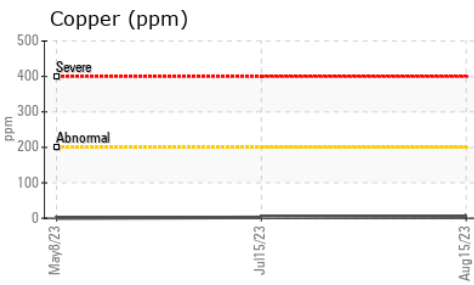
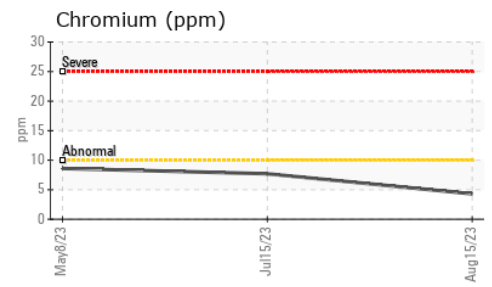
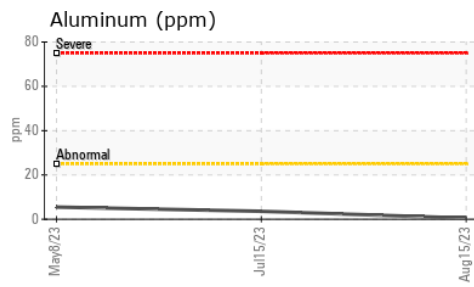
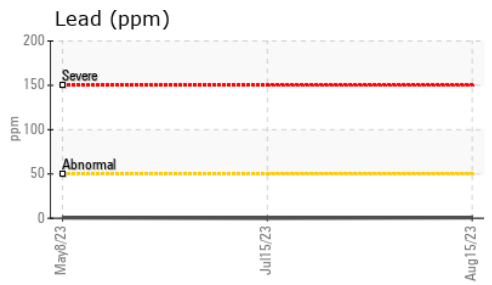
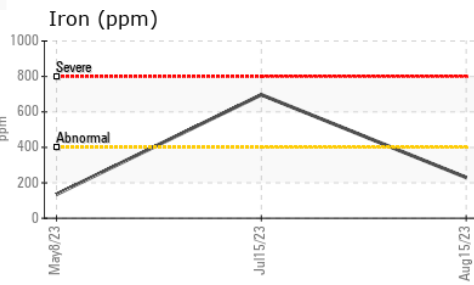
# OIL ANALYSIS REPORT



| FLUID PROPERTIES | method | limit/base | current     | history1 | history2 |
|------------------|--------|------------|-------------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | <b>59.5</b> | 82.2     | 93.6     |

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0774704      **Received** : 22 Aug 2023  
**Lab Number** : 05931057      **Diagnosed** : 24 Aug 2023  
**Unique Number** : 10616328      **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: KF )

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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)