



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**SR110212**

Component

**Hydraulic System**

Fluid

**AW HYDRAULIC OIL ISO 32 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 32. Please confirm. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### 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>WC0867480</b>   | ---      | ---      |
| Sample Date   | Client Info |             | <b>25 Oct 2023</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info | <b>7532</b>        | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>0</b>           | ---      | ---      |
| Oil Changed   | Client Info |             | <b>Not Chngd</b>   | ---      | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | ---      | ---      |

## WEAR METALS

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

## ADDITIVES

|            | method | limit/base       | current      | history1 | history2 |
|------------|--------|------------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m 5    | <b>0</b>     | ---      | ---      |
| Barium     | ppm    | ASTM D5185m 5    | <b>0</b>     | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185m 5    | <b>0</b>     | ---      | ---      |
| Manganese  | ppm    | ASTM D5185m      | <b>&lt;1</b> | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185m 25   | <b>11</b>    | ---      | ---      |
| Calcium    | ppm    | ASTM D5185m 200  | <b>294</b>   | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185m 300  | <b>294</b>   | ---      | ---      |
| Zinc       | ppm    | ASTM D5185m 370  | <b>332</b>   | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185m 2500 | <b>2530</b>  | ---      | ---      |

## CONTAMINANTS

|           | method | limit/base      | current  | history1 | history2 |
|-----------|--------|-----------------|----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >20 | <b>5</b> | ---      | ---      |
| Sodium    | ppm    | ASTM D5185m     | <b>1</b> | ---      | ---      |
| Potassium | ppm    | ASTM D5185m >20 | <b>0</b> | ---      | ---      |

## FLUID CLEANLINESS

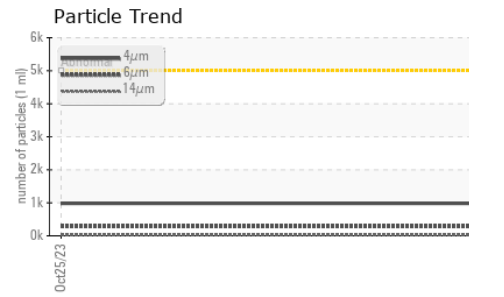
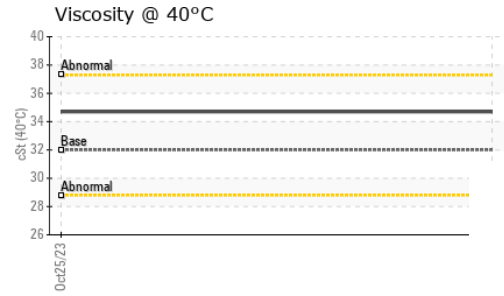
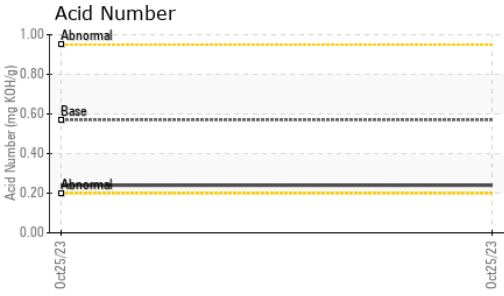
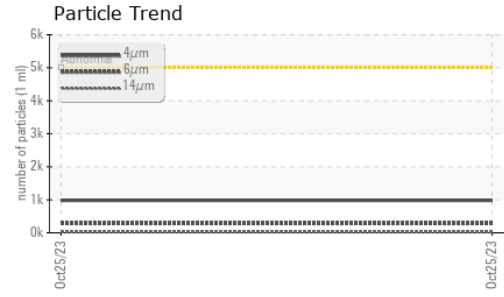
|                 | method       | limit/base | current         | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >5000      | <b>981</b>      | ---      | ---      |
| Particles >6µm  | ASTM D7647   | >1300      | <b>283</b>      | ---      | ---      |
| Particles >14µm | ASTM D7647   | >160       | <b>22</b>       | ---      | ---      |
| Particles >21µm | ASTM D7647   | >40        | <b>6</b>        | ---      | ---      |
| Particles >38µm | ASTM D7647   | >10        | <b>0</b>        | ---      | ---      |
| Particles >71µm | ASTM D7647   | >3         | <b>0</b>        | ---      | ---      |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14  | <b>17/15/12</b> | ---      | ---      |

## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.57 | <b>0.24</b> | ---      | ---      |



# OIL ANALYSIS REPORT



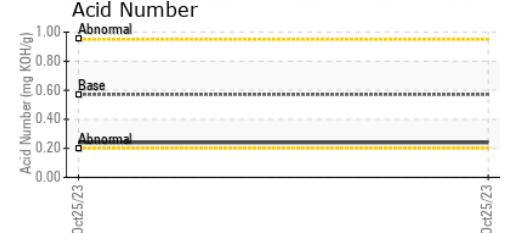
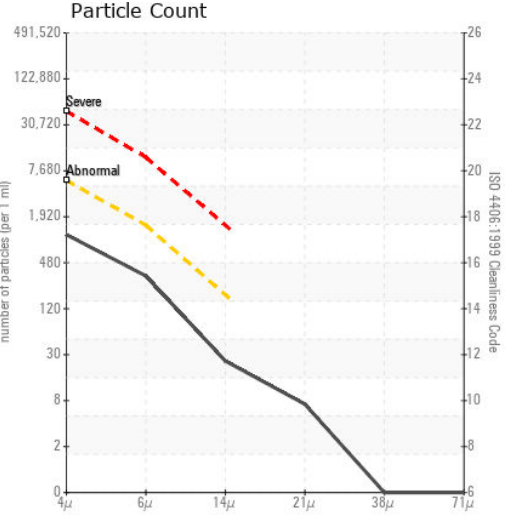
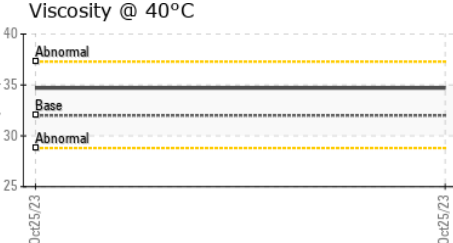
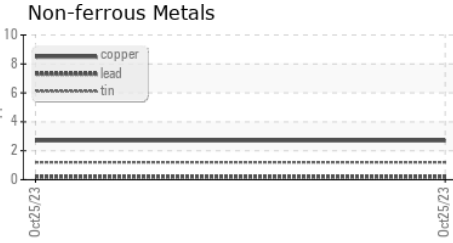
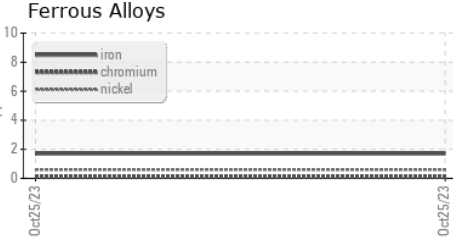
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      |
|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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 32      | 34.7     | ---      |

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

|        |  |  |  |          |          |
|--------|--|--|--|----------|----------|
| Color  |  |  |  | no image | no image |
| Bottom |  |  |  | no image | no image |

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0867480 Received : 16 Nov 2023  
 Lab Number : 06010165 Diagnosed : 17 Nov 2023  
 Unique Number : 10749309 Diagnostician : Wes Davis  
 Test Package : CONST ( Additional Tests: PrtCount )

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)

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