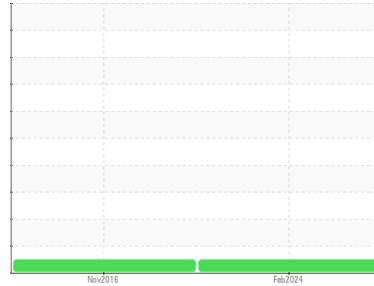




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id

**272**

Component

**Hydraulic System**

Fluid

**AW HYDRAULIC OIL ISO 32 (100 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the component. The amount and size of particulates present in the system 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>WC0905545</b>   | WCI2296529  | ---      |
| Sample Date   | Client Info | <b>27 Feb 2024</b> | 28 Nov 2016 | ---      |
| Machine Age   | hrs         | Client Info        | <b>1028</b> | 634      |
| Oil Age       | hrs         | Client Info        | <b>820</b>  | 0        |
| Oil Changed   | Client Info | <b>Not Chngd</b>   | Changed     | ---      |
| Sample Status |             | <b>NORMAL</b>      | NORMAL      | ---      |

## CONTAMINATION

| method | limit/base | current | history1   | history2 |
|--------|------------|---------|------------|----------|
| Water  | WC Method  | >0.1    | <b>NEG</b> | NEG      |

## WEAR METALS

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

## ADDITIVES

| method     | limit/base | current     | history1 | history2     |      |     |
|------------|------------|-------------|----------|--------------|------|-----|
| Boron      | ppm        | ASTM D5185m | 5        | <b>&lt;1</b> | 3    | --- |
| Barium     | ppm        | ASTM D5185m | 5        | <b>0</b>     | 0    | --- |
| Molybdenum | ppm        | ASTM D5185m | 5        | <b>0</b>     | <1   | --- |
| Manganese  | ppm        | ASTM D5185m |          | <b>0</b>     | 0    | --- |
| Magnesium  | ppm        | ASTM D5185m | 25       | <b>0</b>     | 7    | --- |
| Calcium    | ppm        | ASTM D5185m | 200      | <b>97</b>    | 108  | --- |
| Phosphorus | ppm        | ASTM D5185m | 300      | <b>271</b>   | 283  | --- |
| Zinc       | ppm        | ASTM D5185m | 370      | <b>316</b>   | 315  | --- |
| Sulfur     | ppm        | ASTM D5185m | 2500     | <b>5446</b>  | 4380 | --- |

## CONTAMINANTS

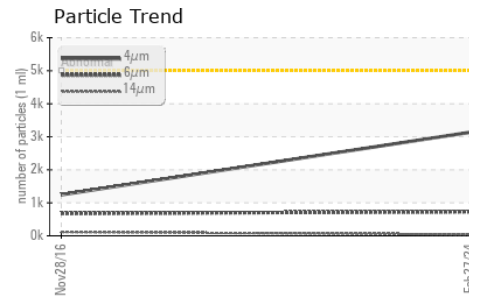
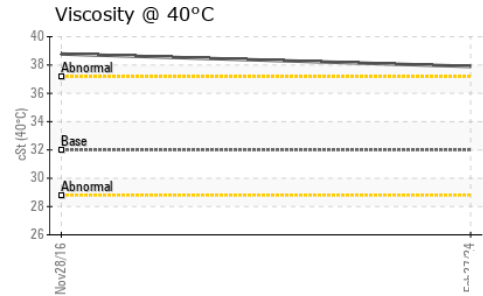
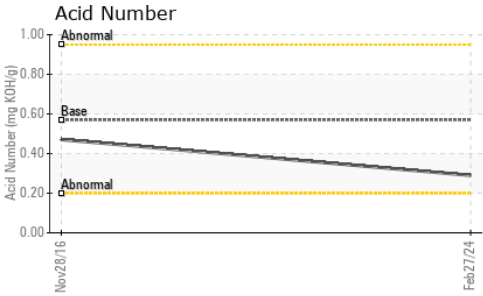
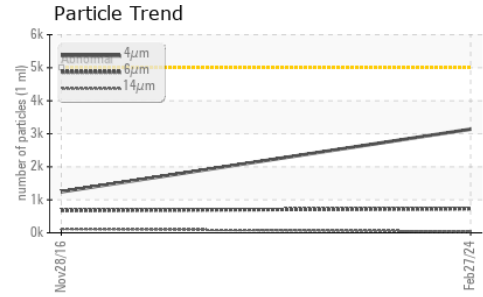
| method    | limit/base | current     | history1 | history2     |    |     |
|-----------|------------|-------------|----------|--------------|----|-----|
| Silicon   | ppm        | ASTM D5185m | >20      | <b>&lt;1</b> | <1 | --- |
| Sodium    | ppm        | ASTM D5185m |          | <b>0</b>     |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

## FLUID CLEANLINESS

| method          | limit/base   | current   | history1        | history2 |     |
|-----------------|--------------|-----------|-----------------|----------|-----|
| Particles >4µm  | ASTM D7647   | >5000     | <b>3138</b>     | 1243     | --- |
| Particles >6µm  | ASTM D7647   | >1300     | <b>730</b>      | 677      | --- |
| Particles >14µm | ASTM D7647   | >160      | <b>40</b>       | 115      | --- |
| Particles >21µm | ASTM D7647   | >40       | <b>10</b>       | 38       | --- |
| Particles >38µm | ASTM D7647   | >10       | <b>0</b>        | 6        | --- |
| Particles >71µm | ASTM D7647   | >3        | <b>0</b>        | 0        | --- |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14 | <b>19/17/12</b> | 17/17/14 | --- |



# OIL ANALYSIS REPORT



| FLUID DEGRADATION | method   | limit/base | current | history1    | history2 |     |
|-------------------|----------|------------|---------|-------------|----------|-----|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 0.57    | <b>0.29</b> | 0.471    | --- |

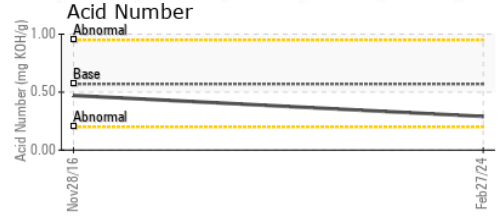
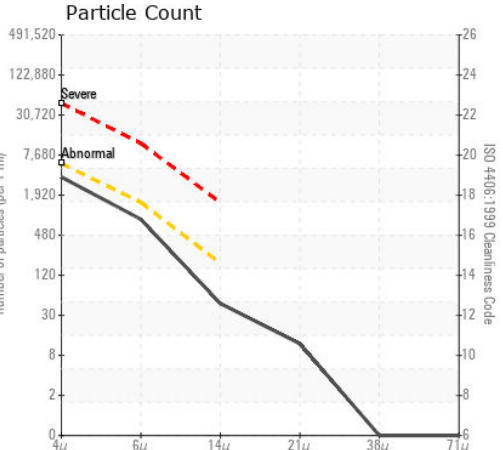
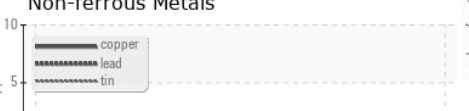
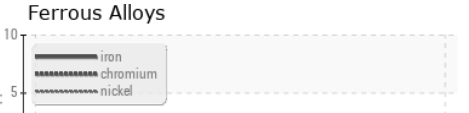
| VISUAL           | method | limit/base | current | history1     | history2 |     |
|------------------|--------|------------|---------|--------------|----------|-----|
| White Metal      | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     | --- |
| Yellow Metal     | scalar | *Visual    | NONE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

| FLUID PROPERTIES | method | limit/base | current | history1    | history2 |     |
|------------------|--------|------------|---------|-------------|----------|-----|
| Visc @ 40°C      | cSt    | ASTM D445  | 32      | <b>37.9</b> | 38.78    | --- |

### SAMPLE IMAGES

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

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0905545      **Received** : 19 Mar 2024  
**Lab Number** : **06122298**      **Tested** : 20 Mar 2024  
**Unique Number** : 10936449      **Diagnosed** : 21 Mar 2024 - Don Baldrige  
**Test Package** : IND 2

**TRANSPORT PRODUCTS & SERVICE ENTERPRISE**  
 3101 OXBOW CIRCLE  
 COCOA, FL  
 US 32926  
 Contact: Merrell Shye  
 merrell@tpseinc.com  
 T: (321)631-3803  
 F: (321)635-2042

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)