



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area

**[212223]**

Machine Id

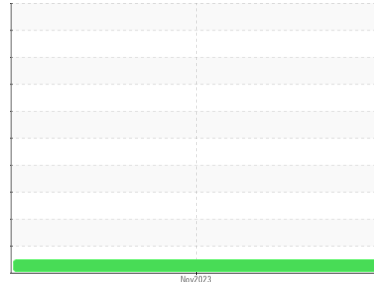
**HARRIS WASLE BADGER 70574 - CAPE MAY MUA**

Component

**Hydraulic System**

Fluid

**NOT GIVEN (--- GAL)**



## 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. Please specify the brand, type, and viscosity of the oil on 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>WC0858559</b>   | ---      | ---      |
| Sample Date   | Client Info |             | <b>09 Nov 2023</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info | <b>0</b>           | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>0</b>           | ---      | ---      |
| Oil Changed   | Client Info |             | <b>Not Chngd</b>   | ---      | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | ---      | ---      |

## CONTAMINATION

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

## WEAR METALS

|          | method | limit/base      | current      | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >20 | <b>4</b>     | ---      | ---      |
| Chromium | ppm    | ASTM D5185m >10 | <b>0</b>     | ---      | ---      |
| Nickel   | ppm    | ASTM D5185m >10 | <b>0</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>9</b>     | ---      | ---      |
| Tin      | ppm    | ASTM D5185m >10 | <b>&lt;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 | <b>0</b>    | ---      | ---      |
| Barium     | ppm    | ASTM D5185m | <b>0</b>    | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185m | <b>0</b>    | ---      | ---      |
| Manganese  | ppm    | ASTM D5185m | <b>0</b>    | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185m | <b>0</b>    | ---      | ---      |
| Calcium    | ppm    | ASTM D5185m | <b>57</b>   | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185m | <b>271</b>  | ---      | ---      |
| Zinc       | ppm    | ASTM D5185m | <b>344</b>  | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185m | <b>4486</b> | ---      | ---      |

## CONTAMINANTS

|           | method | limit/base      | current  | history1 | history2 |
|-----------|--------|-----------------|----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >20 | <b>2</b> | ---      | ---      |
| Sodium    | ppm    | ASTM D5185m     | <b>1</b> | ---      | ---      |
| Potassium | ppm    | ASTM D5185m >20 | <b>0</b> | ---      | ---      |

## FLUID CLEANLINESS

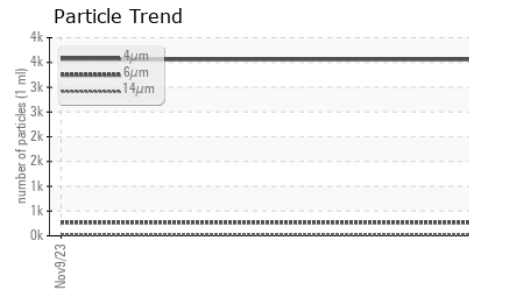
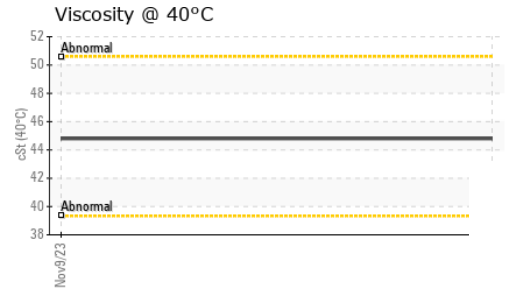
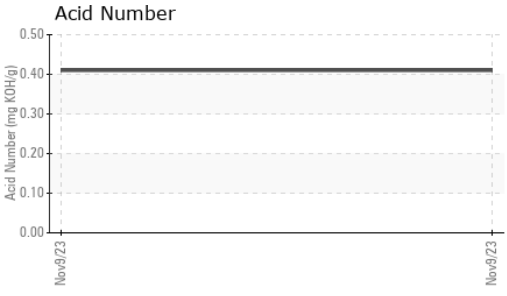
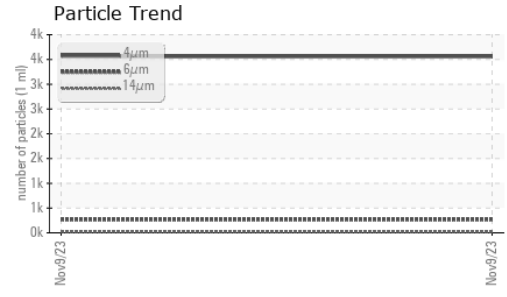
|                 | method       | limit/base | current      | history1 | history2 |
|-----------------|--------------|------------|--------------|----------|----------|
| Particles >4µm  | ASTM D7647   |            | <b>3560</b>  | ---      | ---      |
| Particles >6µm  | ASTM D7647   | >5000      | <b>268</b>   | ---      | ---      |
| Particles >14µm | ASTM D7647   | >640       | <b>20</b>    | ---      | ---      |
| Particles >21µm | ASTM D7647   | >160       | <b>5</b>     | ---      | ---      |
| Particles >38µm | ASTM D7647   | >40        | <b>0</b>     | ---      | ---      |
| Particles >71µm | ASTM D7647   | >10        | <b>0</b>     | ---      | ---      |
| Oil Cleanliness | ISO 4406 (c) | >19/16     | <b>15/11</b> | ---      | ---      |

## FLUID DEGRADATION

|                  | method   | limit/base | current     | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | <b>0.41</b> | ---      | ---      |



# OIL ANALYSIS REPORT



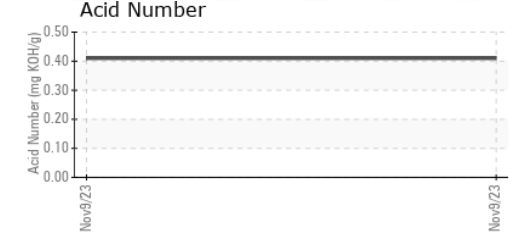
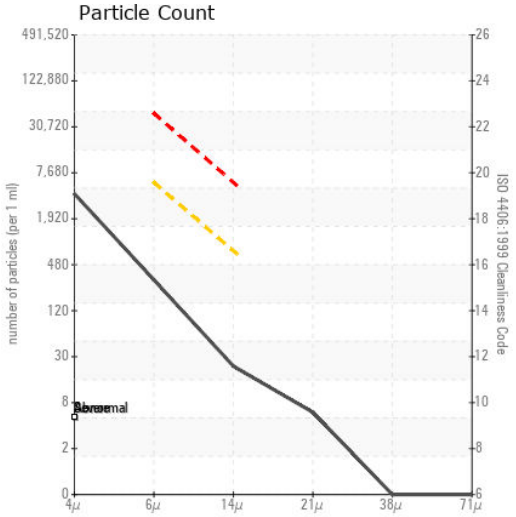
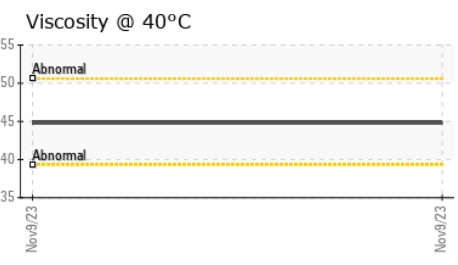
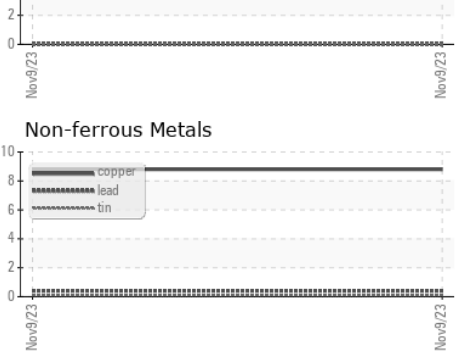
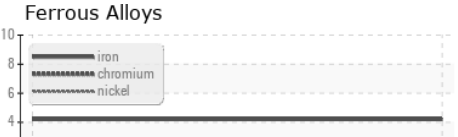
| VISUAL           | method | limit/base | current | history1 | history2 |     |
|------------------|--------|------------|---------|----------|----------|-----|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| 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  | <b>44.8</b> | ---      | ---      |

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

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

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0858559 **Received** : 17 Nov 2023  
**Lab Number** : 06011478 **Diagnosed** : 20 Nov 2023  
**Unique Number** : 10750622 **Diagnostician** : Wes Davis  
**Test Package** : IND 2

**ADVANCED EQUIPMENT SALES**  
 535 HAGEY RD  
 SOUDERTON, PA  
 US 18964  
 Contact: JEFF BURNLEY  
 jburnley@aesales.net  
 T: (215)723-7200  
 F: (215)723-7201

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)