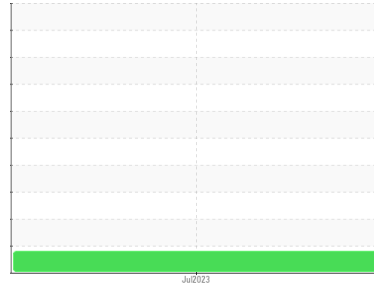




# PROBLEM SUMMARY

Sample Rating Trend



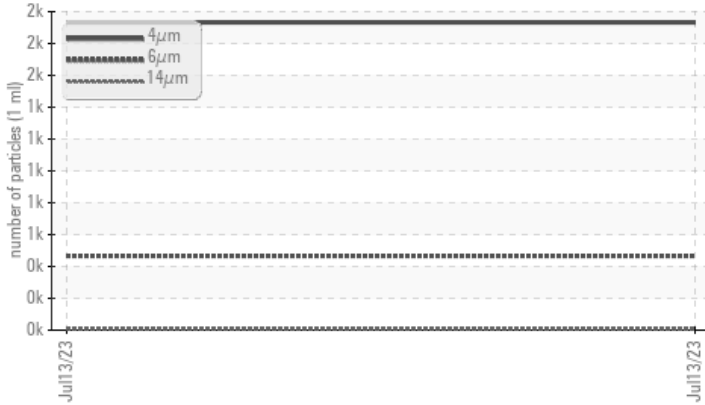
ISO



Machine Id  
**PAO PRESSURE DROP TEST SET B 0827613**  
Component  
**Hydraulic System**  
Fluid  
**NOT GIVEN (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

|                 |              |           |                   |     |     |
|-----------------|--------------|-----------|-------------------|-----|-----|
| Sample Status   |              |           | <b>ABNORMAL</b>   | --- | --- |
| Particles >6µm  | ASTM D7647   | >160      | ▲ <b>466</b>      | --- | --- |
| Oil Cleanliness | ISO 4406 (c) | >--/14/11 | ▲ <b>18/16/10</b> | --- | --- |

Customer Id: TAGBAL  
Sample No.: WC0827613  
Lab Number: 05899504  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

| Action        | Status | Date | Done By | Description   |
|---------------|--------|------|---------|---|
| Change Filter | ---    | ---  | ?       | We recommend you service the filters on this component if applicable. |

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id  
**PAO PRESSURE DROP TEST SET B 0827613**

Component  
**Hydraulic System**

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

## DIAGNOSIS

### ▲ Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

Discrete particle counts [100 ml] 5-15µm = 45900, 15-25µm = 600, 25-50µm = 100, 50-100µm = 0, >100µm = 0. There is a high amount of silt (particulates < 14 microns in size) present 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>WC0827613</b>   | ---      | ---      |
| Sample Date   | Client Info | <b>13 Jul 2023</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info        | <b>0</b> | ---      |
| Oil Age       | hrs         | Client Info        | <b>0</b> | ---      |
| Oil Changed   | Client Info | <b>N/A</b>         | ---      | ---      |
| Sample Status |             | <b>ABNORMAL</b>    | ---      | ---      |

## WEAR METALS

| method   | limit/base | current         | history1     | history2 |
|----------|------------|-----------------|--------------|----------|
| Iron     | ppm        | ASTM D5185m >20 | <b>0</b>     | ---      |
| Chromium | ppm        | ASTM D5185m >20 | <b>0</b>     | ---      |
| Nickel   | ppm        | ASTM D5185m >20 | <b>&lt;1</b> | ---      |
| Titanium | ppm        | ASTM D5185m     | <b>0</b>     | ---      |
| Silver   | ppm        | ASTM D5185m     | <b>0</b>     | ---      |
| Aluminum | ppm        | ASTM D5185m >20 | <b>0</b>     | ---      |
| Lead     | ppm        | ASTM D5185m >20 | <b>0</b>     | ---      |
| Copper   | ppm        | ASTM D5185m >20 | <b>0</b>     | ---      |
| Tin      | ppm        | ASTM D5185m >20 | <b>0</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>0</b> | ---      |
| Phosphorus | ppm        | ASTM D5185m | <b>0</b> | ---      |
| Zinc       | ppm        | ASTM D5185m | <b>0</b> | ---      |
| Sulfur     | ppm        | ASTM D5185m | <b>7</b> | ---      |

## CONTAMINANTS

| method    | limit/base | current          | history1     | history2 |
|-----------|------------|------------------|--------------|----------|
| Silicon   | ppm        | ASTM D5185m >15  | <b>&lt;1</b> | ---      |
| Sodium    | ppm        | ASTM D5185m      | <b>0</b>     | ---      |
| Potassium | ppm        | ASTM D5185m >20  | <b>&lt;1</b> | ---      |
| Water     | %          | ASTM D6304 >0.05 | <b>0.002</b> | ---      |
| ppm Water | ppm        | ASTM D6304 >500  | <b>19.2</b>  | ---      |

## FLUID CLEANLINESS

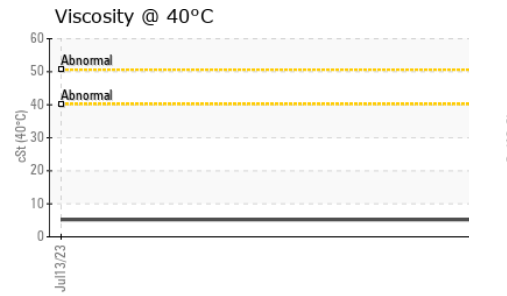
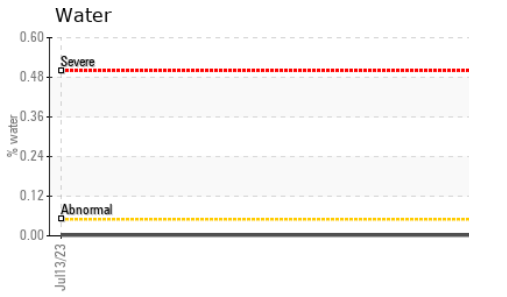
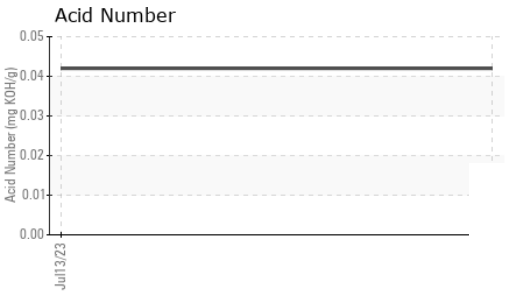
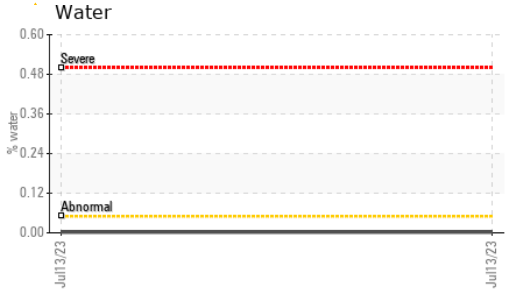
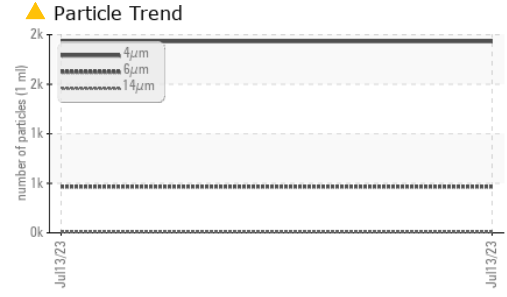
| method          | limit/base             | current           | history1 | history2 |
|-----------------|------------------------|-------------------|----------|----------|
| Particles >4µm  | ASTM D7647             | <b>1932</b>       | ---      | ---      |
| Particles >6µm  | ASTM D7647 >160        | <b>▲ 466</b>      | ---      | ---      |
| Particles >14µm | ASTM D7647 >20         | <b>7</b>          | ---      | ---      |
| Particles >21µm | ASTM D7647 >4          | <b>1</b>          | ---      | ---      |
| Particles >38µm | ASTM D7647 >3          | <b>0</b>          | ---      | ---      |
| Particles >71µm | ASTM D7647 >3          | <b>0</b>          | ---      | ---      |
| Oil Cleanliness | ISO 4406 (c) >--/14/11 | <b>▲ 18/16/10</b> | ---      | ---      |

## FLUID DEGRADATION

| method           | limit/base | current    | history1     | history2 |
|------------------|------------|------------|--------------|----------|
| Acid Number (AN) | mg KOH/g   | ASTM D8045 | <b>0.042</b> | ---      |



# OIL ANALYSIS REPORT



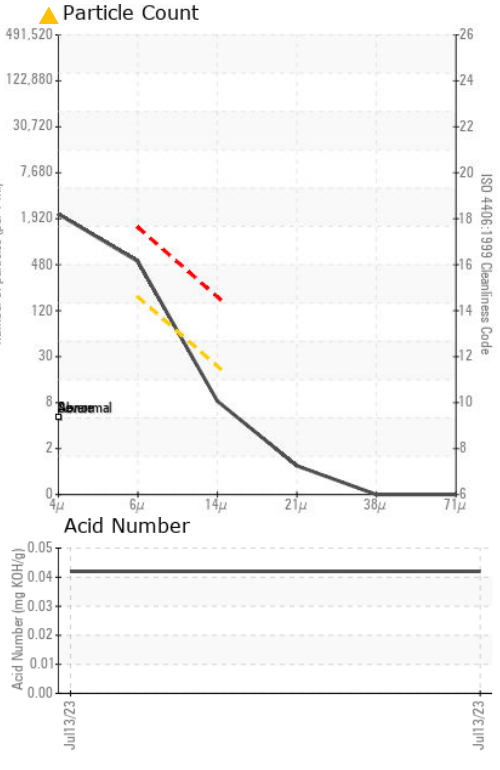
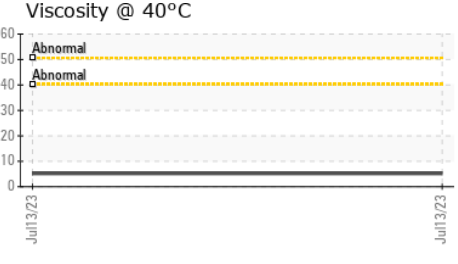
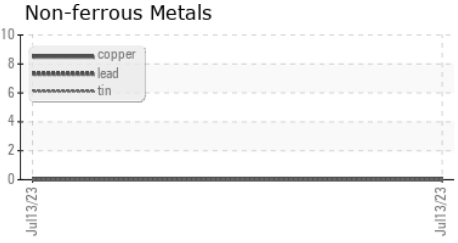
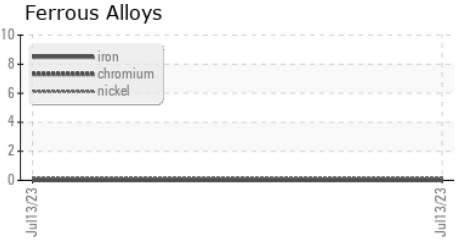
| VISUAL           | method | limit/base | current | history1 | history2 |     |
|------------------|--------|------------|---------|----------|----------|-----|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      | --- |
| 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    | >0.05   | NEG      | ---      | --- |
| Free Water       | scalar | *Visual    |         | NEG      | ---      | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 5.2     | ---      | ---      |

| 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.** : WC0827613 **Received** : 14 Jul 2023  
**Lab Number** : 05899504 **Diagnosed** : 18 Jul 2023  
**Unique Number** : 10560860 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF )

**TAG ENGINEERING INC**  
 6707 WHITESTONE RD  
 BALTIMORE, MD  
 US 21207  
 Contact: MIKE STEVENSON  
 mike@tagengineering.com  
 T: (410)265-8686  
 F: (410)265-8690

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)