



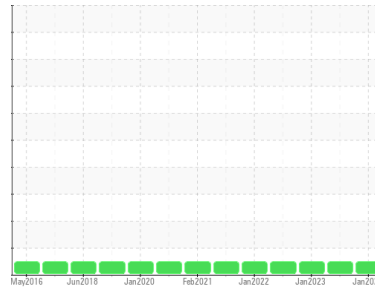
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**ACID NEUTRALIZATION**  
 Machine Id  
**ACID SLUDGE TANK V-7080 (S/N 16-6520-0115)**  
 Component  
**Gearbox**  
 Fluid  
**GEAR OIL (PAO) ISO 220 (--- QTS)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The water content is negligible. There is no indication of any contamination 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>RP0039107</b>   | RP0034915   | RP0031419   |
| Sample Date   | Client Info |             | <b>16 Jan 2024</b> | 29 Jun 2023 | 24 Jan 2023 |
| Machine Age   | hrs         | Client Info | <b>0</b>           | 0           | 0           |
| 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>NORMAL</b>      | NORMAL      | NORMAL      |

## WEAR METALS

|          | method     | limit/base       | current      | history1 | history2 |
|----------|------------|------------------|--------------|----------|----------|
| PQ       | ASTM D8184 |                  | <b>76</b>    | 30       | 35       |
| Iron     | ppm        | ASTM D5185m >200 | <b>91</b>    | 22       | 132      |
| Chromium | ppm        | ASTM D5185m >15  | <b>&lt;1</b> | 0        | 1        |
| Nickel   | ppm        | ASTM D5185m >15  | <b>0</b>     | 0        | 0        |
| Titanium | ppm        | ASTM D5185m      | <b>0</b>     | <1       | 0        |
| Silver   | ppm        | ASTM D5185m      | <b>0</b>     | 0        | 0        |
| Aluminum | ppm        | ASTM D5185m >25  | <b>2</b>     | <1       | 0        |
| Lead     | ppm        | ASTM D5185m >100 | <b>0</b>     | 0        | 0        |
| Copper   | ppm        | ASTM D5185m >200 | <b>0</b>     | 0        | <1       |
| Tin      | ppm        | ASTM D5185m >25  | <b>0</b>     | 0        | 0        |
| Vanadium | ppm        | ASTM D5185m      | <b>0</b>     | 0        | 0        |
| Cadmium  | ppm        | ASTM D5185m      | <b>0</b>     | 0        | 0        |

## ADDITIVES

|            | method | limit/base      | current      | history1 | history2 |
|------------|--------|-----------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m 25  | <b>12</b>    | 0        | 17       |
| Barium     | ppm    | ASTM D5185m 12  | <b>3</b>     | 14       | 1        |
| Molybdenum | ppm    | ASTM D5185m 5   | <b>0</b>     | 0        | <1       |
| Manganese  | ppm    | ASTM D5185m     | <b>&lt;1</b> | 0        | 1        |
| Magnesium  | ppm    | ASTM D5185m 25  | <b>&lt;1</b> | 13       | <1       |
| Calcium    | ppm    | ASTM D5185m 25  | <b>618</b>   | 15       | 3        |
| Phosphorus | ppm    | ASTM D5185m 375 | <b>278</b>   | 301      | 199      |
| Zinc       | ppm    | ASTM D5185m 25  | <b>0</b>     | 48       | 16       |

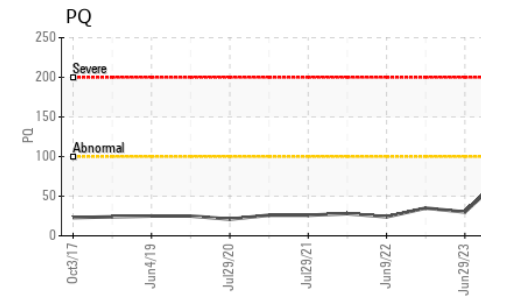
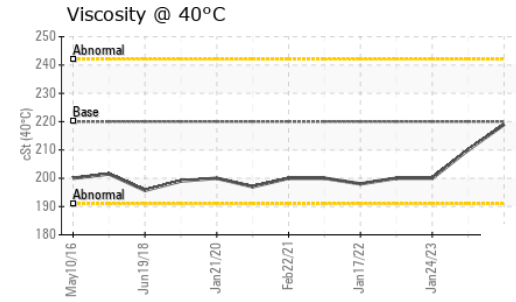
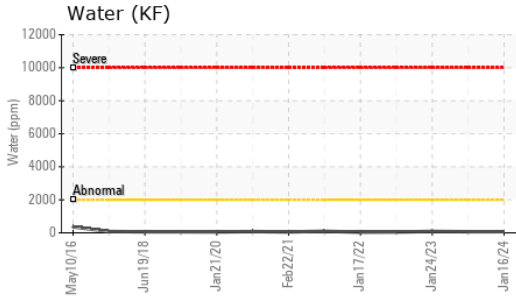
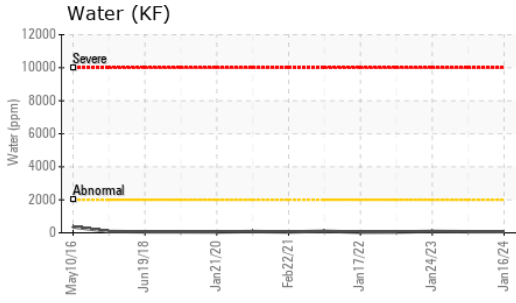
## CONTAMINANTS

|           | method | limit/base       | current      | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >50  | <b>2</b>     | <1       | 22       |
| Sodium    | ppm    | ASTM D5185m      | <b>0</b>     | 2        | 0        |
| Potassium | ppm    | ASTM D5185m >20  | <b>2</b>     | 0        | <1       |
| Water     | %      | ASTM D6304 >0.2  | <b>0.006</b> | 0.006    | 0.008    |
| ppm Water | ppm    | ASTM D6304 >2000 | <b>70</b>    | 66.2     | 86.3     |

## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 1.10 | <b>0.36</b> | 0.38     | 0.48     |

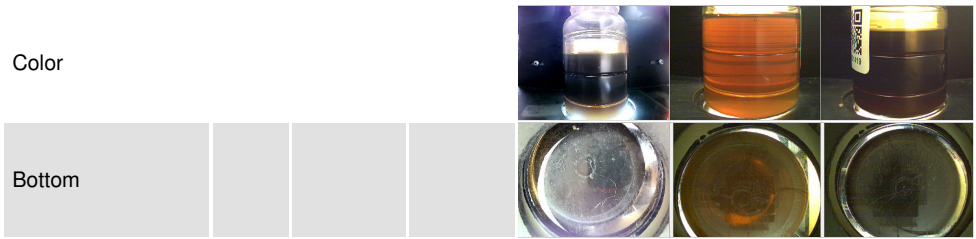
# OIL ANALYSIS REPORT



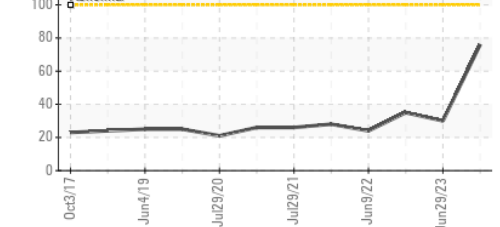
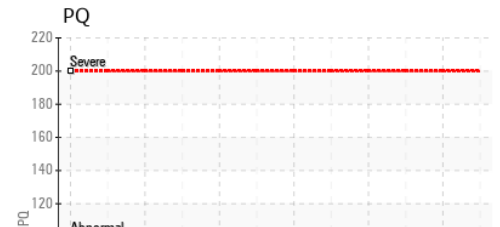
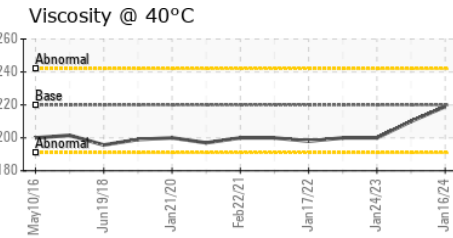
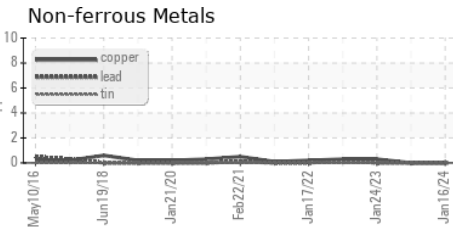
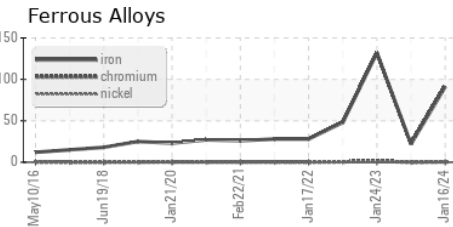
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | NONE    | NONE     | NONE     |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | NONE     |
| Appearance       | scalar | *Visual    | NORML   | NORML    | NORML    |
| Odor             | scalar | *Visual    | NORML   | NORML    | NORML    |
| Emulsified Water | scalar | *Visual    | >0.2    | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 220     | 219      | 210      |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0039107 **Received** : 17 Jan 2024  
**Lab Number** : 06063681 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10835063 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: PQ )

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 F: x:

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)