



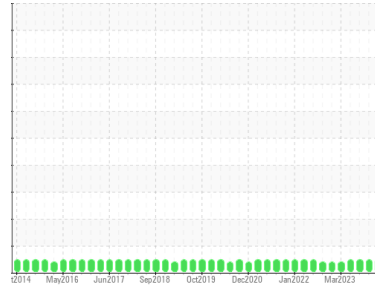
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**[604317520 SR]**  
 Machine Id  
**PETZ 8 MD (S/N 20069613)**  
 Component  
**Gearbox**  
 Fluid  
**GEAR OIL ISO 220 (--- 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 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>WC0854425</b>   | WC0605491   | WC0854378   |
| Sample Date   | Client Info |             | <b>07 Mar 2024</b> | 14 Dec 2023 | 15 Sep 2023 |
| Machine Age   | mls         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Age       | mls         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info |             | <b>Not Changed</b> | Not Changed | Not Changed |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## CONTAMINATION

|       | method    | limit/base | current    | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.2       | <b>NEG</b> | NEG      | NEG      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >200 | <b>5</b>     | 0        | 2        |
| Chromium | ppm    | ASTM D5185m >15  | <b>0</b>     | 0        | <1       |
| Nickel   | ppm    | ASTM D5185m >15  | <b>0</b>     | <1       | 0        |
| Titanium | ppm    | ASTM D5185m      | <b>0</b>     | 0        | 0        |
| Silver   | ppm    | ASTM D5185m      | <b>0</b>     | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >25  | <b>&lt;1</b> | <1       | 5        |
| Lead     | ppm    | ASTM D5185m >100 | <b>0</b>     | 0        | 0        |
| Copper   | ppm    | ASTM D5185m >200 | <b>&lt;1</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 50    | <b>0</b>    | 0        | 0        |
| Barium     | ppm    | ASTM D5185m 15    | <b>0</b>    | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m 15    | <b>0</b>    | 0        | 0        |
| Manganese  | ppm    | ASTM D5185m       | <b>0</b>    | <1       | 0        |
| Magnesium  | ppm    | ASTM D5185m 50    | <b>0</b>    | 2        | <1       |
| Calcium    | ppm    | ASTM D5185m 50    | <b>2</b>    | 4        | 3        |
| Phosphorus | ppm    | ASTM D5185m 350   | <b>150</b>  | 529      | 513      |
| Zinc       | ppm    | ASTM D5185m 100   | <b>0</b>    | 38       | 31       |
| Sulfur     | ppm    | ASTM D5185m 12500 | <b>2601</b> | 1292     | 1524     |

## CONTAMINANTS

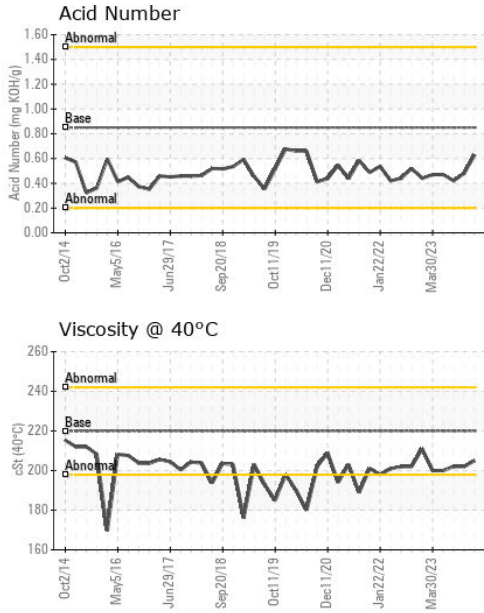
|           | method | limit/base      | current   | history1 | history2 |
|-----------|--------|-----------------|-----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >50 | <b>11</b> | 9        | 8        |
| Sodium    | ppm    | ASTM D5185m     | <b>0</b>  | <1       | <1       |
| Potassium | ppm    | ASTM D5185m >20 | <b>0</b>  | 3        | <1       |

## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.85 | <b>0.63</b> | 0.48     | 0.42     |



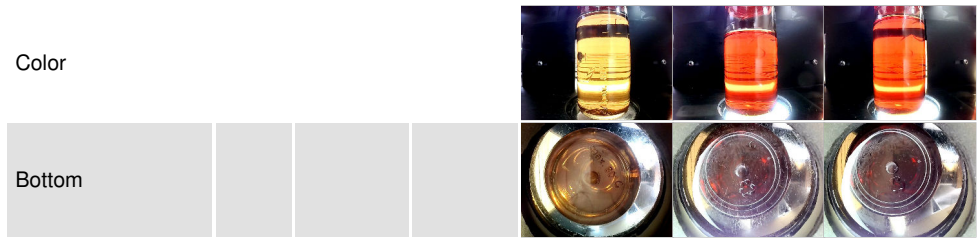
# OIL ANALYSIS REPORT



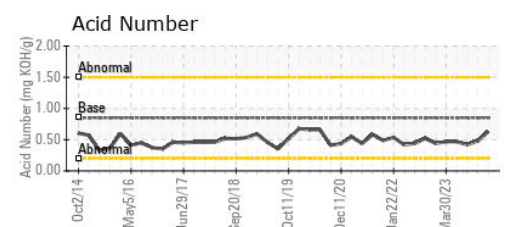
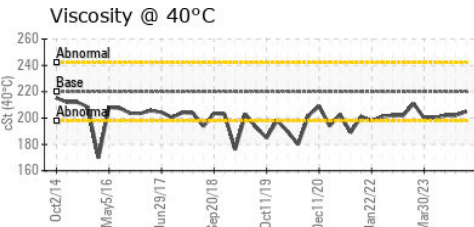
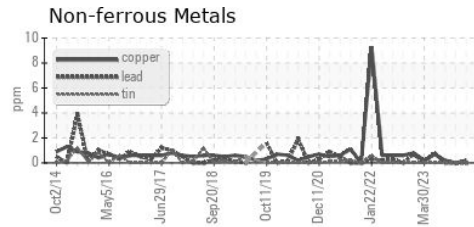
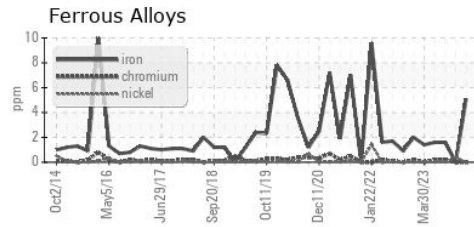
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | NONE    | LIGHT    | 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     | 205      | 202      |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0854425 **Received** : 19 Mar 2024  
**Lab Number** : **06122562** **Tested** : 20 Mar 2024  
**Unique Number** : 10936713 **Diagnosed** : 21 Mar 2024 - Jonathan Hester  
**Test Package** : IND 2

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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)