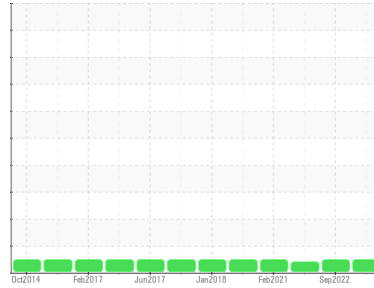




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**03Y639**  
 Component  
**Gearbox**  
 Fluid  
**ROYAL PURPLE SYNFILM 100 (--- 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.

**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>RP0027706</b>   | RP0021426   | RP0018264   |
| Sample Date   | Client Info |             | <b>11 May 2023</b> | 05 Sep 2022 | 18 Jan 2022 |
| 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      | ABNORMAL    |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >200 | <b>4</b>     | 4        | 4        |
| Chromium | ppm    | ASTM D5185m >15  | <b>&lt;1</b> | 0        | 0        |
| Nickel   | ppm    | ASTM D5185m >15  | <b>&lt;1</b> | 0        | 0        |
| Titanium | ppm    | ASTM D5185m      | <b>&lt;1</b> | <1       | <1       |
| Silver   | ppm    | ASTM D5185m      | <b>0</b>     | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >25  | <b>2</b>     | 2        | 0        |
| Lead     | ppm    | ASTM D5185m >100 | <b>0</b>     | 0        | 0        |
| Copper   | ppm    | ASTM D5185m >200 | <b>0</b>     | <1       | 0        |
| Tin      | ppm    | ASTM D5185m >25  | <b>&lt;1</b> | <1       | 0        |
| Antimony | ppm    | ASTM D5185m >5   | <b>---</b>   | ---      | <1       |
| 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    | <b>0</b>     | <1       | <1       |
| Barium     | ppm    | ASTM D5185m    | <b>0</b>     | 2        | <1       |
| Molybdenum | ppm    | ASTM D5185m    | <b>&lt;1</b> | <1       | <1       |
| Manganese  | ppm    | ASTM D5185m    | <b>&lt;1</b> | 0        | 0        |
| Magnesium  | ppm    | ASTM D5185m 90 | <b>40</b>    | 39       | 38       |
| Calcium    | ppm    | ASTM D5185m    | <b>110</b>   | 122      | 124      |
| Phosphorus | ppm    | ASTM D5185m    | <b>12</b>    | 12       | 14       |
| Zinc       | ppm    | ASTM D5185m    | <b>0</b>     | 9        | 0        |

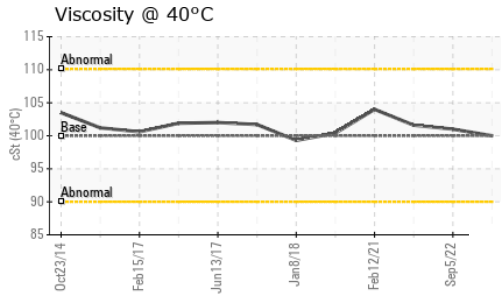
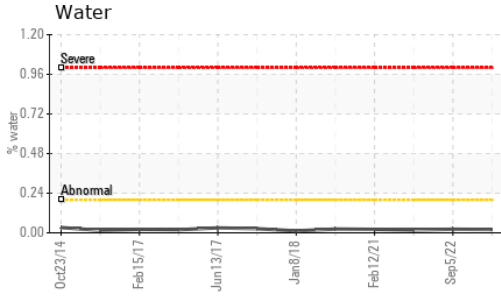
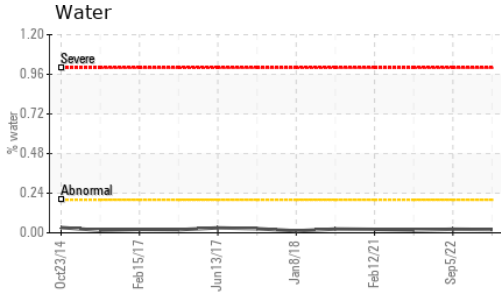
## CONTAMINANTS

|           | method | limit/base       | current      | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >50  | <b>1</b>     | 1        | 1        |
| Sodium    | ppm    | ASTM D5185m      | <b>2</b>     | 0        | 0        |
| Potassium | ppm    | ASTM D5185m >20  | <b>&lt;1</b> | 1        | 0        |
| Water     | %      | ASTM D6304 >0.2  | <b>0.020</b> | 0.022    | 0.017    |
| ppm Water | ppm    | ASTM D6304 >2000 | <b>205.6</b> | 223.0    | 175.4    |

## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.25 | <b>0.29</b> | 0.32     | 0.225    |

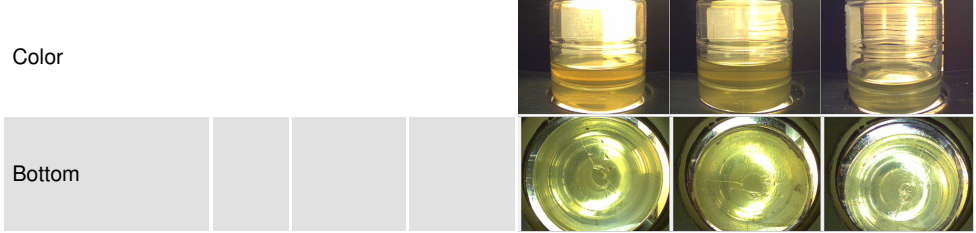
# OIL ANALYSIS REPORT



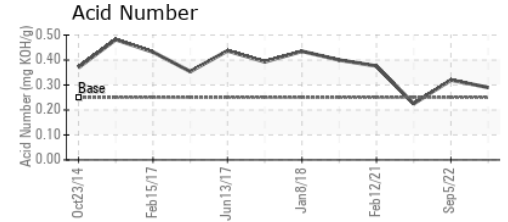
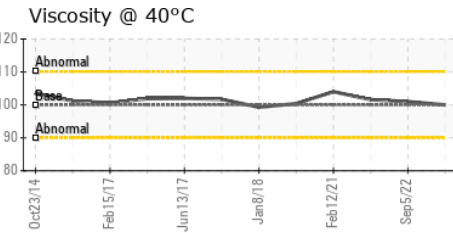
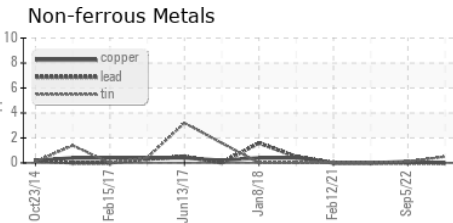
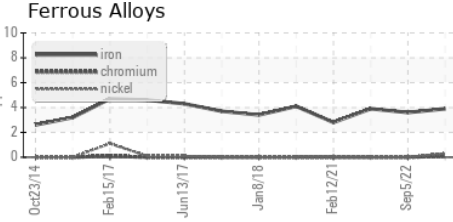
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | NONE    | NONE     | ▲ MODER  |
| 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  | 100     | 101      | 101.6    |

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



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0027706 **Received** : 12 May 2023  
**Lab Number** : 05846379 **Diagnosed** : 15 May 2023  
**Unique Number** : 10470486 **Diagnostician** : Wes Davis  
**Test Package** : IND 2

**SOLVAY**  
 1275 AIRLINE HWY  
 BATON ROUGE, LA  
 US 70805  
 Contact: MICHEAL ROJAS  
 micheal.rojas@solvay.com  
 T: (225)573-3664  
 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)