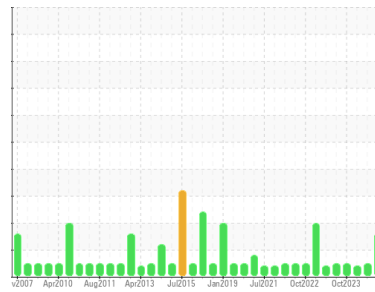




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**024CM12001**

Component  
**Turbine**

Fluid  
**ROYAL PURPLE SYNFILM GT 32 (500 GAL)**

## DIAGNOSIS

### Recommendation

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

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates present in the oil. The water content is negligible.

### 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>RP0041031</b>   | RP0020487   | RP0028195   |
| Sample Date   | Client Info | <b>14 Jul 2024</b> | 09 Apr 2024 | 21 Jan 2024 |
| Machine Age   | hrs         | Client Info        | 0           | 0           |
| Oil Age       | hrs         | Client Info        | 0           | 0           |
| Oil Changed   | Client Info | <b>N/A</b>         | N/A         | N/A         |
| Sample Status |             | <b>ABNORMAL</b>    | NORMAL      | ABNORMAL    |

## WEAR METALS

| method       | limit/base      | current      | history1 | history2 |
|--------------|-----------------|--------------|----------|----------|
| Iron ppm     | ASTM D5185m >15 | <b>&lt;1</b> | 0        | <1       |
| Chromium ppm | ASTM D5185m >4  | <b>0</b>     | 0        | <1       |
| Nickel ppm   | ASTM D5185m >2  | <b>0</b>     | 0        | <1       |
| Titanium ppm | ASTM D5185m     | <b>0</b>     | 0        | <1       |
| Silver ppm   | ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Aluminum ppm | ASTM D5185m >10 | <b>&lt;1</b> | 0        | 2        |
| Lead ppm     | ASTM D5185m     | <b>0</b>     | 0        | <1       |
| Copper ppm   | ASTM D5185m >5  | <b>3</b>     | 2        | 3        |
| Tin ppm      | ASTM D5185m >5  | <b>&lt;1</b> | <1       | <1       |
| Vanadium ppm | ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Cadmium ppm  | ASTM D5185m     | <b>0</b>     | 0        | <1       |

## ADDITIVES

| method         | limit/base  | current   | history1 | history2 |
|----------------|-------------|-----------|----------|----------|
| Boron ppm      | ASTM D5185m | <b>0</b>  | 0        | 0        |
| Barium ppm     | ASTM D5185m | <b>0</b>  | 0        | 0        |
| Molybdenum ppm | ASTM D5185m | <b>0</b>  | 0        | <1       |
| Manganese ppm  | ASTM D5185m | <b>0</b>  | 0        | <1       |
| Magnesium ppm  | ASTM D5185m | <b>58</b> | 72       | 76       |
| Calcium ppm    | ASTM D5185m | <b>0</b>  | 7        | 2        |
| Phosphorus ppm | ASTM D5185m | <b>0</b>  | 6        | 6        |
| Zinc ppm       | ASTM D5185m | <b>0</b>  | 0        | 0        |

## CONTAMINANTS

| method        | limit/base       | current      | history1 | history2 |
|---------------|------------------|--------------|----------|----------|
| Silicon ppm   | ASTM D5185m >15  | <b>&lt;1</b> | 0        | <1       |
| Sodium ppm    | ASTM D5185m      | <b>1</b>     | 1        | 3        |
| Potassium ppm | ASTM D5185m >20  | <b>&lt;1</b> | 0        | 1        |
| Water %       | ASTM D6304 >0.03 | <b>0.011</b> | 0.013    | 0.008    |
| ppm Water     | ASTM D6304 >300  | <b>114</b>   | 135      | 85       |

## FLUID CLEANLINESS

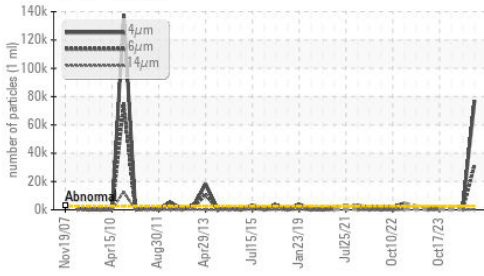
| method          | limit/base             | current           | history1 | history2 |
|-----------------|------------------------|-------------------|----------|----------|
| Particles >4µm  | ASTM D7647 >2500       | <b>▲ 77290</b>    | 2256     | ---      |
| Particles >6µm  | ASTM D7647 >640        | <b>▲ 31900</b>    | 488      | ---      |
| Particles >14µm | ASTM D7647 >80         | <b>▲ 300</b>      | 65       | ---      |
| Particles >21µm | ASTM D7647 >20         | <b>10</b>         | 25       | ---      |
| Particles >38µm | ASTM D7647 >4          | <b>1</b>          | 1        | ---      |
| Particles >71µm | ASTM D7647 >3          | <b>0</b>          | 0        | ---      |
| Oil Cleanliness | ISO 4406 (c) >18/16/13 | <b>▲ 23/22/15</b> | 18/16/13 | ---      |

## FLUID DEGRADATION

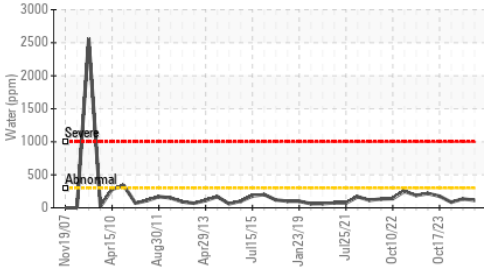
| method                    | limit/base | current     | history1 | history2 |
|---------------------------|------------|-------------|----------|----------|
| Acid Number (AN) mg KOH/g | ASTM D8045 | <b>0.34</b> | 0.35     | 0.34     |

# OIL ANALYSIS REPORT

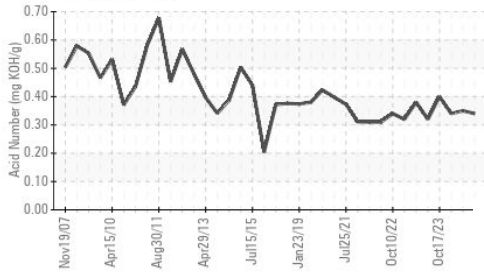
## ▲ Particle Trend



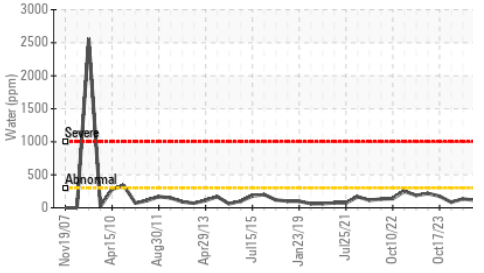
## Water (KF)



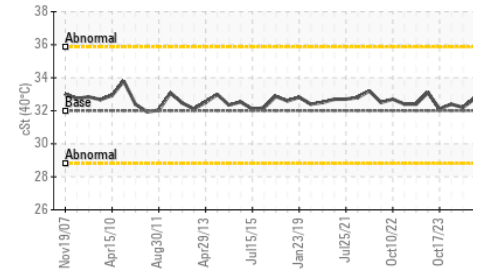
## Acid Number



## Water (KF)



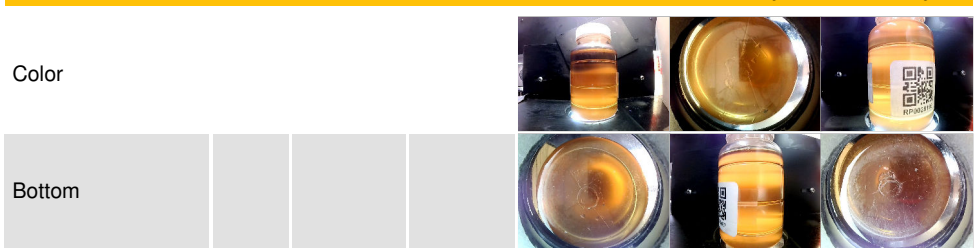
## Viscosity @ 40°C



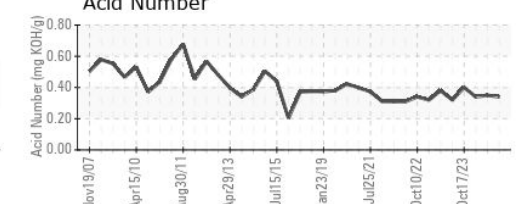
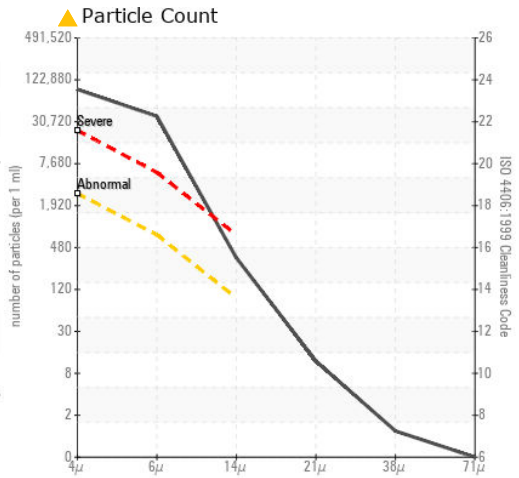
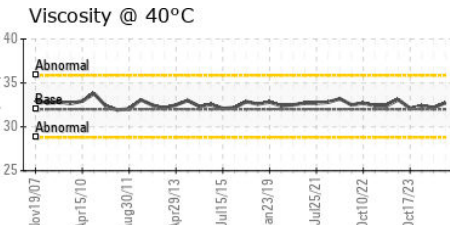
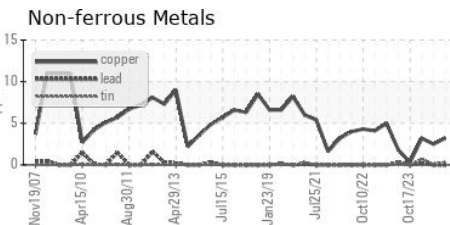
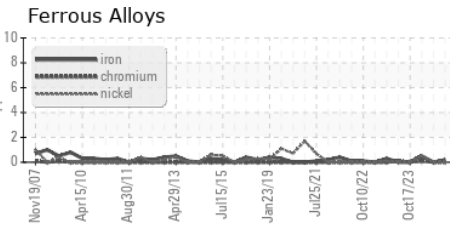
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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    | >0.03   | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 32      | 32.2     | 32.4     |

## SAMPLE IMAGES



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0041031 **Received** : 12 Jul 2024  
**Lab Number** : 06235058 **Tested** : 18 Jul 2024  
**Unique Number** : 11123892 **Diagnosed** : 18 Jul 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**ENTERPRISE PRODUCTS**  
P.O. BOX 573  
MONT BELVIEU, TX  
US 77580  
Contact: TOMMY EDWARDS  
tedwards@eproduct.com  
T: (281)217-1411  
F: (281)385-4327

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)