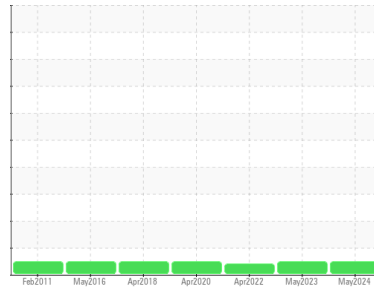




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

[20590123]

Machine Id

812 V0701 CELL3

Component

Gearbox

Fluid

ROYAL PURPLE SYNFILM 100 (--- 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 | | WC0936642 | WC0805829 | WC0688003 |
| Sample Date | Client Info | | 07 May 2024 | 03 May 2023 | 19 Apr 2022 |
| Machine Age | mths | Client Info | 0 | 0 | 0 |
| Oil Age | mths | Client Info | 0 | 0 | 0 |
| Oil Changed | Client Info | | Not Changed | Not Changed | Not Changed |
| Sample Status | | | NORMAL | NORMAL | ABNORMAL |

CONTAMINATION

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

WEAR METALS

| | method | limit/base | current | history1 | history2 | |
|----------|--------|-------------|---------|--------------|----------|-----|
| Iron | ppm | ASTM D5185m | >200 | 6 | 8 | 13 |
| Chromium | ppm | ASTM D5185m | >15 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >15 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 2 | 0 | 0 |
| Lead | ppm | ASTM D5185m | >100 | <1 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >200 | 5 | 4 | 3 |
| Tin | ppm | ASTM D5185m | >25 | <1 | 0 | <1 |
| Antimony | ppm | ASTM D5185m | >5 | --- | --- | --- |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | <1 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 | |
|------------|--------|-------------|---------|--------------|----------|-------|
| Boron | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | 90 | 8 | 14 | 22 |
| Calcium | ppm | ASTM D5185m | | 4 | 2 | 3 |
| Phosphorus | ppm | ASTM D5185m | | 6 | 3 | 18 |
| Zinc | ppm | ASTM D5185m | | 10 | 13 | 1 |
| Sulfur | ppm | ASTM D5185m | | 20988 | 18849 | 17581 |

CONTAMINANTS

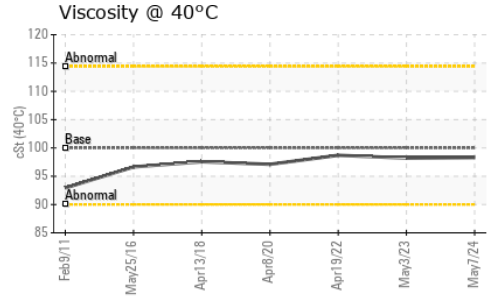
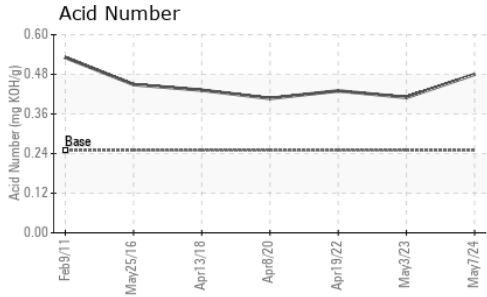
| | method | limit/base | current | history1 | history2 | |
|-----------|--------|-------------|---------|----------|----------|----|
| Silicon | ppm | ASTM D5185m | >50 | 3 | 2 | 3 |
| Sodium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | 1 | <1 | 0 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 | |
|------------------|----------|------------|---------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.25 | 0.48 | 0.41 | 0.43 |



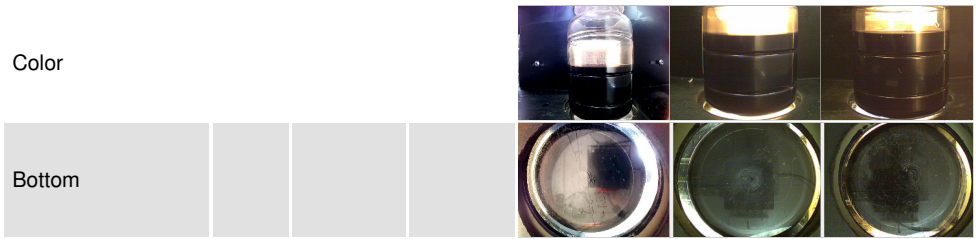
OIL ANALYSIS REPORT



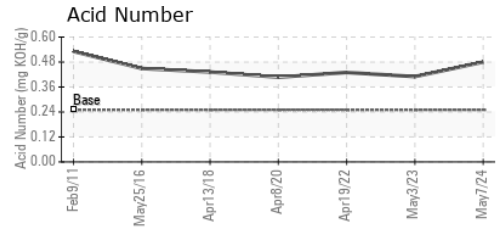
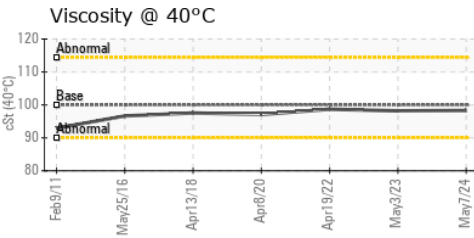
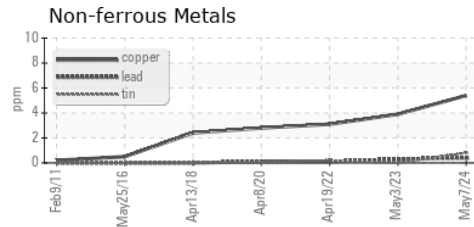
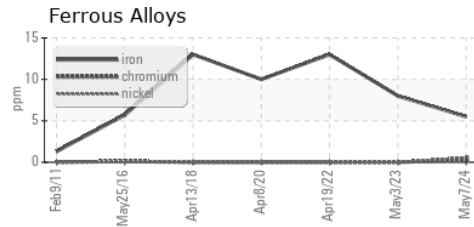
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | 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 | 98.3 | 98.2 | 98.7 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0936642 **Received** : 17 May 2024
Lab Number : 06183390 **Tested** : 20 May 2024
Unique Number : 11034716 **Diagnosed** : 21 May 2024 - Don Baldrige
Test Package : IND 2

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 Florence, SC
 US 29506
 Contact: SAM MCDOWELL
 sam.mcdowell@patheon.com
 T: (843)629-4042
 F: (843)629-4553

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)