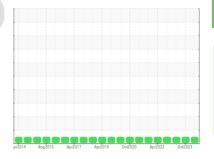


# **OIL ANALYSIS REPORT**

Area [20590627] 810-M5020 (S/N 94DCG0465) Component Gearbox

**ROYAL PURPLE POLYGUARD FDA 220 (--- GAL)** 



Sample Rating Trend



### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

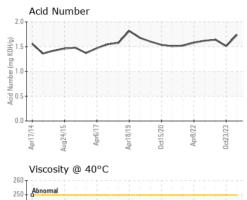
## **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| SAMPLE INFORM    | MATION   | method      | limit/base | current     | history1    | history2    |
|------------------|----------|-------------|------------|-------------|-------------|-------------|
| Sample Number    |          | Client Info |            | WC0904635   | WC0819226   | WC0805843   |
| Sample Date      |          | Client Info |            | 10 Apr 2024 | 23 Oct 2023 | 24 Apr 2023 |
| Machine Age      | mths     | Client Info |            | 0           | 0           | 0           |
| Oil Age          | mths     | Client Info |            | 0           | 0           | 0           |
| Oil Changed      |          | Client Info |            | Not Changd  | Not Changd  | Not Changd  |
| Sample Status    |          |             |            | NORMAL      | NORMAL      | NORMAL      |
| CONTAMINATION    | V        | 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       | 5           | 2           | 2           |
| Chromium         | ppm      | ASTM D5185m | >15        | <1          | 0           | 0           |
| Nickel           | ppm      | ASTM D5185m | >15        | <1          | 0           | 0           |
| Titanium         | ppm      | ASTM D5185m |            | <1          | <1          | <1          |
| Silver           | ppm      | ASTM D5185m |            | 0           | 0           | <1          |
| Aluminum         | ppm      | ASTM D5185m | >25        | 2           | 1           | <1          |
| Lead             | ppm      | ASTM D5185m | >100       | <1          | 0           | 0           |
| Copper           | ppm      | ASTM D5185m | >200       | <1          | 0           | 0           |
| Tin              | ppm      | ASTM D5185m | >25        | <1          | 0           | 0           |
| Vanadium         | ppm      | ASTM D5185m |            | 0           | 0           | 0           |
| Cadmium          | ppm      | ASTM D5185m |            | <1          | 0           | 0           |
| ADDITIVES        |          | method      | limit/base | current     | history1    | history2    |
| Boron            | ppm      | ASTM D5185m |            | 0           | 0           | 0           |
| Barium           | ppm      | ASTM D5185m |            | 0           | 0           | 0           |
| Molybdenum       | ppm      | ASTM D5185m |            | <1          | 0           | 0           |
| Manganese        | ppm      | ASTM D5185m |            | 0           | 0           | <1          |
| Magnesium        | ppm      | ASTM D5185m |            | <1          | 0           | 2           |
| Calcium          | ppm      | ASTM D5185m |            | 2           | 0           | 2           |
| Phosphorus       | ppm      | ASTM D5185m |            | 717         | 464         | 503         |
| Zinc             | ppm      | ASTM D5185m |            | 21          | 0           | 14          |
| Sulfur           | ppm      | ASTM D5185m |            | 388         | 44          | 401         |
| CONTAMINANTS     | ;        | method      | limit/base | current     | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m | >50        | 6           | 4           | 1           |
| Sodium           | ppm      | ASTM D5185m |            | 0           | 2           | <1          |
| Potassium        | ppm      | ASTM D5185m | >20        | 2           | 0           | 0           |
| FLUID DEGRADA    | TION     | method      | limit/base | current     | history1    | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D8045  |            | 1.74        | 1.51        | 1.64        |



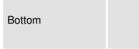
## **OIL ANALYSIS REPORT**



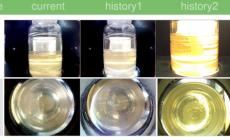
| Viscos         | ity @    | 40°C      |               |          |               |            |   |
|----------------|----------|-----------|---------------|----------|---------------|------------|---|
| 250 Abnormal   |          |           |               |          |               |            |   |
| 240 -          |          | -         |               |          |               |            |   |
| 230<br>tg 220  | ~        |           | $\overline{}$ |          | $/ \setminus$ |            |   |
|                |          |           | 1             | $\Gamma$ |               |            |   |
| 210 - Abnormal |          |           | V             |          |               |            |   |
| Apr17/14       | Aug24/15 | Apr6/17 - | Apr18/19      | 0ct15/20 | Apr8/22       | Oct23/23 - | - |

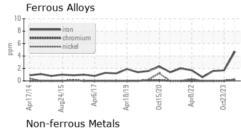
| VISUAL                  |        | method    | limit/base | current | history1 | history2 |
|-------------------------|--------|-----------|------------|---------|----------|----------|
| White Metal             | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal            | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Precipitate             | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Silt                    | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Debris                  | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Sand/Dirt               | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Appearance              | scalar | *Visual   | NORML      | NORML   | NORML    | NORML    |
| Odor                    | scalar | *Visual   | NORML      | NORML   | NORML    | NORML    |
| <b>Emulsified Water</b> | scalar | *Visual   | >0.2       | NEG     | NEG      | NEG      |
| Free Water              | scalar | *Visual   |            | NEG     | NEG      | NEG      |
| FLUID PROPERT           | TIES   | method    | limit/base | current | history1 | history2 |
| Visc @ 40°C             | cSt    | ASTM D445 |            | 227     | 224      | 223      |

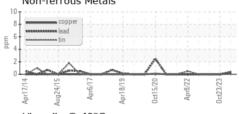
Color

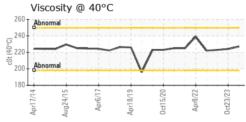


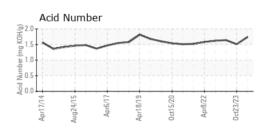
SAMPLE IMAGES















Certificate 12367

Laboratory Sample No.

Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0904635 Lab Number : 06155223 Unique Number : 10990646

Received **Tested** Diagnosed

: 19 Apr 2024 : 23 Apr 2024 : 24 Apr 2024 - Don Baldridge

THERMO FISHER 6173 East Old Marion Highway, Bldg. 806

Florence, SC US 29506 Contact: BARRY OLIVER Calvin.Oliver@Roche.com

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.

T: (843)629-4577 F: (843)629-4553

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) Report Id: ROCFLO [WUSCAR] 06155223 (Generated: 04/24/2024 13:01:32) Rev: 1

Contact/Location: BARRY OLIVER - ROCFLO