

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

LLOYD F (S/N 024248)

Gearbox Fluid

{not provided} (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is ISO 220 Gear Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

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 INFORM | IATION | method | limit/base | current | history1 | history2 |
|------------------|----------|---------------|------------|-------------|----------|----------|
| Sample Number | | Client Info | | WC0813118 | | |
| Sample Date | | Client Info | | 24 Jun 2024 | | |
| Machine Age | hrs | Client Info | | 0 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | N/A | | |
| Sample Status | | | | NORMAL | | |
| CONTAMINATION | N | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.2 | NEG | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| PQ | | ASTM D8184* | | 5 | | |
| Iron | ppm | ASTM D5185(m) | >200 | 42 | | |
| Chromium | ppm | ASTM D5185(m) | >15 | <1 | | |
| Nickel | ppm | ASTM D5185(m) | >15 | <1 | | |
| Titanium | ppm | ASTM D5185(m) | | 0 | | |
| Silver | ppm | ASTM D5185(m) | | 0 | | |
| Aluminum | ppm | ASTM D5185(m) | >25 | <1 | | |
| Lead | ppm | ASTM D5185(m) | >100 | 9 | | |
| Copper | ppm | ASTM D5185(m) | >200 | <1 | | |
| Tin | ppm | ASTM D5185(m) | >25 | 0 | | |
| Antimony | ppm | ASTM D5185(m) | >5 | 0 | | |
| Vanadium | ppm | ASTM D5185(m) | | 0 | | |
| Beryllium | ppm | ASTM D5185(m) | | 0 | | |
| Cadmium | ppm | ASTM D5185(m) | | 0 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185(m) | | 13 | | |
| Barium | ppm | ASTM D5185(m) | | 1 | | |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | | |
| Manganese | ppm | ASTM D5185(m) | | <1 | | |
| Magnesium | ppm | ASTM D5185(m) | | 1 | | |
| Calcium | ppm | ASTM D5185(m) | | 2 | | |
| Phosphorus | ppm | ASTM D5185(m) | | 233 | | |
| Zinc | ppm | ASTM D5185(m) | | 14 | | |
| Sulfur | ppm | ASTM D5185(m) | | 10761 | | |
| Lithium | ppm | ASTM D5185(m) | | 1 | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | >50 | 11 | | |
| Sodium | ppm | ASTM D5185(m) | | 6 | | |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | | |
| FLUID DEGRADA | | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D974* | | 0.43 | | |



Acid 0.50

(B/H0,40 B/H0X B/H0,30

nper 0.20 Pio 0.10 0.00 Jun24/24

> 300 Abnom 280

(0.05) (0.06) 240 230 220

> Abnom 200 180 Jun24/24

PQ 250

Severe 200 150 D

Abnom 100 50 0 Jun24/24

OIL ANALYSIS REPORT

| | | VISUAL | | method | limit/base | current | history1 | history2 |
|--|--|--------------------------|-------------------------|---|--|-------------|--------------|---|
| | | White Metal | scalar | Visual* | NONE | VLITE | | |
| | | Yellow Metal | scalar | Visual* | NONE | NONE | | |
| | | Precipitate | scalar | Visual* | NONE | NONE | | |
| | | Silt | scalar | Visual* | NONE | NONE | | |
| | | Debris | scalar | Visual* | NONE | VLITE | | |
| | | Sand/Dirt | scalar | Visual* | NONE | NONE | | |
| | /24 | Appearance | scalar | Visual* | NORML | NORML | | |
| | Jun24/24 | Odor | scalar | Visual* | NORML | NORML | | |
| | 2 | Emulsified Water | scalar | Visual* | >0.2 | NEG | | |
| cosity @ 40°C | | Free Water | scalar | Visual* | 20.L | NEG | | |
| ormal | | | | | | | | |
| | | FLUID PROPER | | method | limit/base | current | history1 | history2 |
| | | Visc @ 40°C | cSt | ASTM D7279(m) | | 219 | | |
| omal | | SAMPLE IMAGE | S | method | limit/base | current | history1 | history2 |
| | | | | | | | | |
| | Jun24/24 | Color | | | | | no image | no image |
| | μη | | | | | | | |
| | | | | | | | | |
| | | Bottom | | | | | no image | no image |
| | | | | | | | | |
| | | GRAPHS | | | | | | |
| mal | | Ferrous Alloys | | | | PQ | | |
| | | ⁵⁰ I | | | 220 | | | |
| | | 40 - iron | | | 200 | Severe | | |
| | VCIV | E 30 - management nickel | | | 180 | | | |
| | c1 | E 20- | | | | | | |
| | | 10 | | | 160 | | | |
| | | | | | 140 St. | | | |
| | | un24/24 | | | PD 150 | | | |
| | | -> | | | 루 문 100 | Abnormal | | |
| | | Non-ferrous Meta | ls | | | 1 | | |
| | | 10 copper | | | 80 | • | | |
| | | 6 announcementer | | | 60 | | | |
| | | | | | 40 | | | |
| | | 2 | | | 20 | | | |
| | | 0 | | | | | | |
| | | Jun24/24 | | | Jun24/24 | 4/24 | | |
| | | 1 | | | Juni | Jun24/24 | | |
| | | ٦٢ | | | , | | | |
| | | Viscosity @ 40°C | | | | Acid Number | | |
| | | Viscosity @ 40°C | | | | Acid Number | | |
| | | Viscosity @ 40°C | | | 。 0.50 夏 0.40 | Acid Number | | |
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| | | Viscosity @ 40°C | | | () () () () () () () () () () () () () (| Acid Number | | |
| | | Viscosity @ 40°C | | | (a) 0.50 Hoy Bu 0.30 Participanti Participan | Acid Number | | |
| | | Viscosity @ 40°C | | | (C).50 (C)HOX 0.40 (C)HOX 0.30 | Acid Number | | |
| | | Viscosity @ 40°C | | | (C).50 (C)HOX 0.40 (C)HOX 0.30 | Acid Number | | |
| | | Viscosity @ 40°C | | | (a) 0.50 Hoy Bu 0.30 Participanti Participan | Acid Number | | |
| | Laboratory | Viscosity @ 40°C | | | (B)HOX Du (B)HOX | Acid Number | JAYLOR | |
| | Laboratory Sample No. | Viscosity @ 40°C | Recei | i ved : 02 | (0,50 (0,40) (0,40) (0,20) (0, | Acid Number | JAYLOR | R.R. |
| ISO 17025:2017 | Laboratory Sample No. Lab Number | Viscosity @ 40°C | Recei Teste | ived : 02 d : 04 | (0,0.50) (0,00) | Acid Number | JAYLOR | FABRICATII R.R. ORTON, (|
| | Laboratory Sample No. Lab Number Unique Number | Viscosity @ 40°C | Recei | ived : 02 d : 04 | (0,50 (0,40) (0,40) (0,20) (0, | Acid Number | | R.R. ORTON, O CA LON 1 |
| ISO 17025:2017 Accredited Laboratory | Laboratory Sample No. Lab Number Unique Number Test Package | Viscosity @ 40°C | Recei Teste Diagn | ived : 02 id : 02 nosed : 04 | agton, ON L7L 2 Jul 2024 4 Jul 2024 - We | Acid Number | Cont | R.R. ORTON, (CA LON 1 act: Kevin Ke |
| ISO 17025:2017 Accredited Laboratory TO discuss thi | Laboratory Sample No. Lab Number Unique Number Test Package is sample report, | Viscosity @ 40°C | Recei Teste Diagn | ived : 02 id : 04 nosed : 04 800-268-213 | agton, ON L7L 2 Jul 2024 4 Jul 2024 - Wo 1. | Acid Number | Conta KKe | R.R. ORTON, O CA L0N 1 |

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Contact/Location: Kevin Kelly - FABORT Page 2 of 2