

OIL ANALYSIS REPORT

Sai



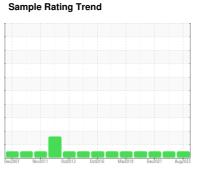


Queens U. Cancer Res. 1B [4500054809]

CARRIER 3102Q01853(1B)

Chiller

COMP OIL (ESTER) ISO 220 (--- GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your 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.

| 0 220 (GAL) | | Dec2007 | Nov2011 Oct2013 | Oct2016 Mar2019 Dec2021 | Aug2023 | |
|------------------|----------|---------------|-----------------|-------------------------|-------------|-------------|
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | GTT0001469 | GTT10868 | GTT10869 |
| Sample Date | | Client Info | | 10 Aug 2023 | 05 Apr 2023 | 30 Dec 2021 |
| Machine Age | hrs | Client Info | | 0 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185(m) | >8 | 7 | 5 | 6 |
| Chromium | ppm | ASTM D5185(m) | >2 | 0 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) | | 0 | | |
| Titanium | ppm | ASTM D5185(m) | | 0 | | |
| Silver | ppm | ASTM D5185(m) | >2 | 0 | | |
| Aluminum | ppm | ASTM D5185(m) | >3 | <1 | <1 | <1 |
| Lead | ppm | ASTM D5185(m) | >2 | 1 | <1 | <1 |
| Copper | ppm | ASTM D5185(m) | >8 | 2 | 2 | <1 |
| Tin | ppm | ASTM D5185(m) | >4 | 0 | <1 | <1 |
| Antimony | ppm | ASTM D5185(m) | | 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) | 5 | <1 | | |
| Barium | ppm | ASTM D5185(m) | 5 | 0 | | |
| Molybdenum | ppm | ASTM D5185(m) | 5 | 0 | | |
| Manganese | ppm | ASTM D5185(m) | | 0 | | |
| Magnesium | ppm | ASTM D5185(m) | 5 | 0 | | |
| Calcium | ppm | ASTM D5185(m) | 5 | 0 | | |
| Phosphorus | ppm | ASTM D5185(m) | 400 | <1 | | |
| Zinc | ppm | ASTM D5185(m) | 5 | 2 | 2 | 1 |
| Sulfur | ppm | ASTM D5185(m) | 100 | 2 | | |
| Lithium | ppm | ASTM D5185(m) | | <1 | | |
| CONTAMINANTS | 6 | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | >15 | 33 | | |
| Sodium | ppm | ASTM D5185(m) | | <1 | | |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | | |
| ppm Water | ppm | ASTM D6304* | >100 | 52 | 231 | 127 |
| FLUID DEGRADA | NOITA | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.40 | 0.04 | 0.023 | 0.023 |
| | | | | | | |



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| VISUAL | | method | limit/base | current | history1 | history2 |
|---------------|--------|---------------|------------|---------|----------|----------|
| White Metal | scalar | Visual* | NONE | NONE | | |
| Yellow Metal | scalar | Visual* | NONE | NONE | | |
| Precipitate | scalar | Visual* | NONE | NONE | | |
| Silt | scalar | Visual* | NONE | NONE | | |
| Debris | scalar | Visual* | NONE | NONE | | |
| Sand/Dirt | scalar | Visual* | NONE | NONE | | |
| Appearance | scalar | Visual* | NORML | NORML | | |
| Odor | scalar | Visual* | NORML | NORML | | |
| FLUID PROPERT | IES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 220 | 161 | | |
| SAMPLE IMAGES | | method | limit/base | current | history1 | history2 |
| Color | | | | | no image | no image |
| | | | | | | |
| Bottom | | | | | no image | no image |



Sample No. : GTT0001469 Recieved : 03 Jan 2024 Lab Number : 02606348 Diagnosed : 09 Jan 2024 Unique Number : 5707434 Diagnostician : Bill Quesnel

Test Package : IND 2 (Additional Tests: KV40) Contact: Brian Raymundo To discuss this sample report, contact Customer Service at 1-905-847-9300 Ext 26.

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Damages: Seller shall in no event be liable for special, incidental, or consequential damages, of a commercial nature, resulting from any cause.

Carrier Commerical Service

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