

# **OIL ANALYSIS REPORT**

Sample Rating Trend





### Gordon Brown Ch#1 Circ 1 [GTT244-348] TRANE U05F01815(1) Component Chiller

Feb/2024



TRANE 0015 (--- GAL)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### 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.

| SAMPLE INFORM    | IATION   | method        | limit/base | current     | history1 | history2 |
|------------------|----------|---------------|------------|-------------|----------|----------|
| Sample Number    |          | Client Info   |            | GTT0002284  |          |          |
| Sample Date      |          | Client Info   |            | 27 Feb 2024 |          |          |
| Machine Age      | hrs      | Client Info   |            | 0           |          |          |
| Oil Age          | hrs      | Client Info   |            | 0           |          |          |
| Oil Changed      |          | Client Info   |            | N/A         |          |          |
| Sample Status    |          |               |            | NORMAL      |          |          |
| WEAR METALS      |          | method        | limit/base | current     | history1 | history2 |
| Iron             | ppm      | ASTM D5185(m) | >8         | 0           |          |          |
| Chromium         | ppm      | ASTM D5185(m) | >2         | 0           |          |          |
| 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         | 0           |          |          |
| Lead             | ppm      | ASTM D5185(m) | >2         | 0           |          |          |
| Copper           | ppm      | ASTM D5185(m) | >8         | 0           |          |          |
| Tin              | ppm      | ASTM D5185(m) | >4         | 0           |          |          |
| 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) |            | 0           |          |          |
| Barium           | ppm      | ASTM D5185(m) |            | 0           |          |          |
| Molybdenum       | ppm      | ASTM D5185(m) |            | 0           |          |          |
| Manganese        | ppm      | ASTM D5185(m) |            | 0           |          |          |
| Magnesium        | ppm      | ASTM D5185(m) |            | 0           |          |          |
| Calcium          | ppm      | ASTM D5185(m) |            | 0           |          |          |
| Phosphorus       | ppm      | ASTM D5185(m) |            | 0           |          |          |
| Zinc             | ppm      | ASTM D5185(m) |            | <1          |          |          |
| Sulfur           | ppm      | ASTM D5185(m) |            | 239         |          |          |
| Lithium          | ppm      | ASTM D5185(m) |            | <1          |          |          |
| CONTAMINANTS     |          | method        | limit/base | current     | history1 | history2 |
| Silicon          | ppm      | ASTM D5185(m) | >15        | 4           |          |          |
| Sodium           | ppm      | ASTM D5185(m) |            | 0           |          |          |
| Potassium        | ppm      | ASTM D5185(m) | >20        | <1          |          |          |
| ppm Water        | ppm      | ASTM D6304*   | >300       | <10         |          |          |
| FLUID DEGRADA    | TION     | method        | limit/base | current     | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D974*    | 0.04       | 0.01        |          |          |



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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 PROPERTIES |        | method        | limit/base | current | history1 | history2 |
| Visc @ 40°C      | cSt    | ASTM D7279(m) | 68.0       | 59.6    |          |          |
| SAMPLE IMAGES    |        | method        | limit/base | current | history1 | history2 |
| Color            |        |               |            | E       | no image | no image |
| Bottom           |        |               |            |         | no image | no image |
|                  |        |               |            |         |          |          |



 Sample No.
 : GTT0002284
 Received
 : 01 Apr 2024
 : 10 Apr 2024
 : 10 Apr 2024

 Lab Number
 : 02625912
 Tested
 : 04 Apr 2024
 : 04 Apr 2024

 Unique Number
 : 5759044
 Diagnosed
 : 04 Apr 2024 - Bill Quesnel
 : 04 Apr 2024 - Bill Quesnel

 Test Package
 : IND 2 (Additional Tests: KV40)
 Contact
 Contact
 Contact

 To discuss this sample report, contact Customer Service at 1-905-847-9300 Ext 26.
 pca
 pca

 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.