

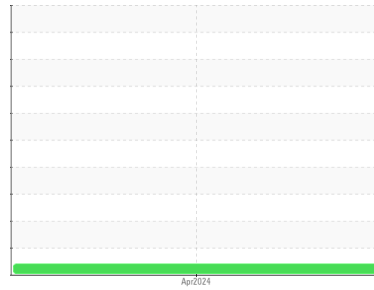


OIL ANALYSIS REPORT



Area
[GTT224-364]
 Machine Id
TRANE U04G06636(1)
 Component
Chiller
 Fluid
YORK TYPE H (--- GAL)

Sample Rating Trend



ADDITIVES



DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

The high zinc level and dark color of the oil indicates corrosion.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info | | GTT0002313 | --- | --- |
| Sample Date | Client Info | | 01 Apr 2024 | --- | --- |
| Machine Age | hrs | Client Info | 0 | --- | --- |
| Oil Age | hrs | Client Info | 0 | --- | --- |
| Oil Changed | | Client Info | N/A | --- | --- |
| Sample Status | | | ATTENTION | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|----------|----------|----------|
| Iron | ppm | ASTM D5185(m) >8 | 6 | --- | --- |
| 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 | 6 | --- | --- |
| 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 | 4 | --- | --- |
| Barium | ppm | ASTM D5185(m) 0 | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) 0 | 0 | --- | --- |
| Manganese | ppm | ASTM D5185(m) 0 | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) 0 | <1 | --- | --- |
| Calcium | ppm | ASTM D5185(m) 0 | 0 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) 10 | 10 | --- | --- |
| Zinc | ppm | ASTM D5185(m) 0 | 46 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) 35 | 10 | --- | --- |
| Lithium | ppm | ASTM D5185(m) | <1 | --- | --- |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) >15 | 11 | --- | --- |
| Sodium | ppm | ASTM D5185(m) | <1 | --- | --- |
| Potassium | ppm | ASTM D5185(m) >20 | <1 | --- | --- |
| ppm Water | ppm | ASTM D6304* >300 | 55 | --- | --- |



FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* 0.02 | 0.13 | --- | --- |

OIL ANALYSIS REPORT

| 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 | 64.6 | --- |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---|----------|----------|
| Color | | |  | no image | no image |
| Bottom | | |  | no image | no image |

GRAPHS



Sample No. : GTT0002313 **Received** : 05 Apr 2024
Lab Number : 02627161 **Tested** : 10 Apr 2024
Unique Number : 5760293 **Diagnosed** : 10 Apr 2024 - Bill Quesnel
Test Package : IND 2 (Additional Tests: KV40)

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.

Carmichael Engineering Ltd.
 2389 Scanlan St
 London, ON
 CA M5W 6G9
 Contact: Service Manager
 aplondon@carmichael-eng.ca

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