



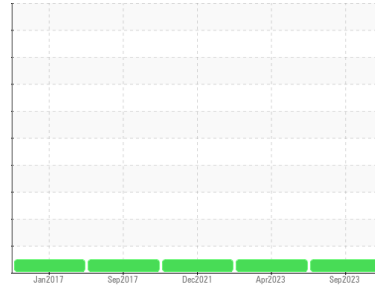
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**2020 Walkley Ch#1 Sys 2**  
 Machine Id  
**MCQUAY STNU040500227(1,2)**  
 Component  
**Chiller**  
 Fluid  
**REFRIG COMP OIL ISO 68 (--- 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.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2    |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info |             | <b>GTT0001217</b>  | GTT71574    | GTT71575    |
| Sample Date   | Client Info |             | <b>13 Sep 2023</b> | 05 Apr 2023 | 07 Dec 2021 |
| Machine Age   | hrs         | Client Info | <b>0</b>           | ---         | ---         |
| Oil Age       | hrs         | Client Info | <b>0</b>           | ---         | ---         |
| Oil Changed   | Client Info |             | <b>N/A</b>         | N/A         | N/A         |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## WEAR METALS

|           | method | limit/base         | current      | history1 | history2 |
|-----------|--------|--------------------|--------------|----------|----------|
| Iron      | ppm    | ASTM D5185(m) >100 | <b>3</b>     | <1       | 2        |
| Chromium  | ppm    | ASTM D5185(m) >2   | <b>0</b>     | <1       | <1       |
| Nickel    | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Titanium  | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Silver    | ppm    | ASTM D5185(m) >2   | <b>0</b>     | ---      | ---      |
| Aluminum  | ppm    | ASTM D5185(m) >50  | <b>&lt;1</b> | <1       | <1       |
| Lead      | ppm    | ASTM D5185(m) >2   | <b>0</b>     | <1       | <1       |
| Copper    | ppm    | ASTM D5185(m) >100 | <b>&lt;1</b> | <1       | <1       |
| Tin       | ppm    | ASTM D5185(m) >4   | <b>0</b>     | <1       | <1       |
| Antimony  | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Vanadium  | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Beryllium | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Cadmium   | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |

## ADDITIVES

|            | method | limit/base         | current      | history1 | history2 |
|------------|--------|--------------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185(m) 5    | <b>0</b>     | ---      | ---      |
| Barium     | ppm    | ASTM D5185(m) 5    | <b>0</b>     | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185(m) 5    | <b>0</b>     | ---      | ---      |
| Manganese  | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185(m) 5    | <b>0</b>     | ---      | ---      |
| Calcium    | ppm    | ASTM D5185(m) 12   | <b>0</b>     | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185(m) 12   | <b>5</b>     | ---      | ---      |
| Zinc       | ppm    | ASTM D5185(m) 12   | <b>1</b>     | <1       | 1        |
| Sulfur     | ppm    | ASTM D5185(m) 1000 | <b>0</b>     | ---      | ---      |
| Lithium    | ppm    | ASTM D5185(m)      | <b>&lt;1</b> | ---      | ---      |

## CONTAMINANTS

|           | method | limit/base        | current    | history1 | history2 |
|-----------|--------|-------------------|------------|----------|----------|
| Silicon   | ppm    | ASTM D5185(m) >50 | <b>3</b>   | ---      | ---      |
| Sodium    | ppm    | ASTM D5185(m)     | <b>0</b>   | ---      | ---      |
| Potassium | ppm    | ASTM D5185(m) >20 | <b>0</b>   | ---      | ---      |
| ppm Water | ppm    | ASTM D6304* >400  | <b>153</b> | 114      | 155      |

## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* 0.10 | <b>0.05</b> | 0.004    | 0.017    |

# OIL ANALYSIS REPORT

| VISUAL       | method | limit/base | current | history1     | history2 |     |
|--------------|--------|------------|---------|--------------|----------|-----|
| White Metal  | scalar | Visual*    | NONE    | <b>NONE</b>  | ---      | --- |
| Yellow Metal | scalar | Visual*    | NONE    | <b>NONE</b>  | ---      | --- |
| Precipitate  | scalar | Visual*    | NONE    | <b>NONE</b>  | ---      | --- |
| Silt         | scalar | Visual*    | NONE    | <b>NONE</b>  | ---      | --- |
| Debris       | scalar | Visual*    | NONE    | <b>NONE</b>  | ---      | --- |
| Sand/Dirt    | scalar | Visual*    | NONE    | <b>NONE</b>  | ---      | --- |
| Appearance   | scalar | Visual*    | NORML   | <b>NORML</b> | ---      | --- |
| Odor         | scalar | Visual*    | NORML   | <b>NORML</b> | ---      | --- |

| FLUID PROPERTIES | method | limit/base    | current | history1    | history2 |     |
|------------------|--------|---------------|---------|-------------|----------|-----|
| Visc @ 40°C      | cSt    | ASTM D7279(m) | 68      | <b>63.8</b> | ---      | --- |

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

## GRAPHS



**Sample No.** : GTT0001217      **Recieved** : 28 Dec 2023  
**Lab Number** : **02605628**      **Diagnosed** : 05 Jan 2024  
**Unique Number** : 5698713      **Diagnostician** : 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.*

**Carrier Commerical Service**  
 C/O Conduent Div of Carrier Canada, 1-2740 Matheson Blvd  
 Mississauga, ON  
 CA L4W 4X3  
 Contact: Brian Raymundo  
 Brian.Raymundo@carrier.com

T:  
F: