



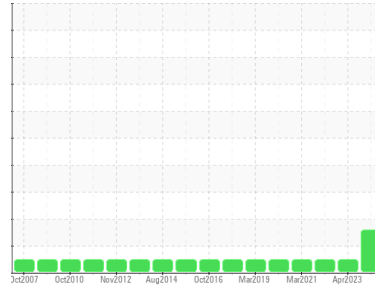
# OIL ANALYSIS REPORT

Sample Rating Trend

**WEAR**



Area  
**St. Vincents Hospital Ch#1**  
 Machine Id  
**CARRIER 0203Q67699**  
 Component  
**Chiller**  
 Fluid  
**CASTROL AIRCOL SW 68 (--- GAL)**



## DIAGNOSIS

**Recommendation**  
 This unit should be monitored closely by a service engineer as these wear conditions tend to advance rapidly. We recommend an early resample to monitor this condition.

**Wear**  
 Lead and tin ppm levels are abnormal. Bearing wear is indicated.

**Contamination**  
 There is no indication of any contamination in the oil.

**Fluid Condition**  
 The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2    |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info |             | <b>GTT0001319</b>  | GTT490      | GTT491      |
| Sample Date   | Client Info |             | <b>01 Aug 2023</b> | 05 Apr 2023 | 30 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>ABNORMAL</b>    | NORMAL      | NORMAL      |

## WEAR METALS

|           | method | limit/base       | current     | history1 | history2 |
|-----------|--------|------------------|-------------|----------|----------|
| Iron      | ppm    | ASTM D5185(m) >8 | <1          | <1       | <1       |
| 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) >3 | <1          | <1       | <1       |
| Lead      | ppm    | ASTM D5185(m) >2 | <b>▲ 3</b>  | <1       | <1       |
| Copper    | ppm    | ASTM D5185(m) >8 | <1          | <1       | <1       |
| Tin       | ppm    | ASTM D5185(m) >4 | <b>▲ 10</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) 0   | <b>0</b>    | ---      | ---      |
| Barium     | ppm    | ASTM D5185(m) 0   | <b>0</b>    | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185(m) 0   | <b>0</b>    | ---      | ---      |
| Manganese  | ppm    | ASTM D5185(m) 0   | <b>0</b>    | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185(m) 0   | <1          | ---      | ---      |
| Calcium    | ppm    | ASTM D5185(m) 0   | <1          | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185(m) 800 | <b>1197</b> | ---      | ---      |
| Zinc       | ppm    | ASTM D5185(m) 5   | <b>29</b>   | <1       | <1       |
| Sulfur     | ppm    | ASTM D5185(m) 10  | <b>0</b>    | ---      | ---      |
| Lithium    | ppm    | ASTM D5185(m)     | <1          | ---      | ---      |

## CONTAMINANTS

|           | method | limit/base        | current    | history1 | history2 |
|-----------|--------|-------------------|------------|----------|----------|
| Silicon   | ppm    | ASTM D5185(m) >15 | <b>8</b>   | ---      | ---      |
| Sodium    | ppm    | ASTM D5185(m)     | <1         | ---      | ---      |
| Potassium | ppm    | ASTM D5185(m) >20 | <b>0</b>   | ---      | ---      |
| ppm Water | ppm    | ASTM D6304* >100  | <b>112</b> | 58       | 183      |

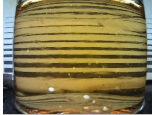

## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* 0.05 | <b>0.09</b> | 0.018    | 0.036    |

# 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>55.7</b> | ---      | --- |

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

## GRAPHS



**Sample No.** : GTT0001319      **Recieved** : 28 Dec 2023  
**Lab Number** : **02605659**      **Diagnosed** : 05 Jan 2024  
**Unique Number** : 5698744      **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.*

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