

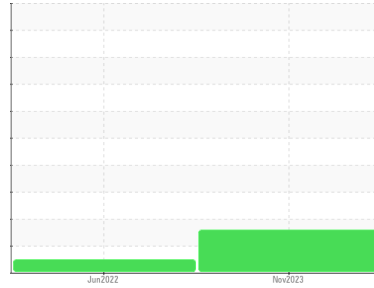
# OIL ANALYSIS REPORT

Sample Rating Trend

WATER



Area  
**Analyse D'huile Ch#1 Circ A [0068795-H0652]**  
 Machine Id  
**CARRIER 3919Q26057(1A)**  
 Component  
**Chiller**  
 Fluid  
**REFRIGERATION OIL (POE) (--- GAL)**



## DIAGNOSIS

### ▲ Recommendation

If not recently done change any filter driers to reduce moisture level. 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 elevated moisture content is associated with POE oils which are hygroscopic, and can absorb moisture from sampling and processing.

### 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>GTT0001308</b>  | GTT12549    | ---      |
| Sample Date   | Client Info |             | <b>03 Nov 2023</b> | 13 Jun 2022 | ---      |
| 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         | ---      |
| Sample Status |             |             | <b>ATTENTION</b>   | NORMAL      | ---      |

## WEAR METALS

|           | method | limit/base       | current      | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Iron      | ppm    | ASTM D5185(m) >8 | <b>1</b>     | 1        | ---      |
| Chromium  | ppm    | ASTM D5185(m) >2 | <b>0</b>     | <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 | <b>&lt;1</b> | <1       | ---      |
| Lead      | ppm    | ASTM D5185(m) >2 | <b>4</b>     | <1       | ---      |
| Copper    | ppm    | ASTM D5185(m) >8 | <b>3</b>     | 1        | ---      |
| Tin       | ppm    | ASTM D5185(m) >4 | <b>0</b>     | <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>1</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   | <b>&lt;1</b> | ---      | ---      |
| Calcium    | ppm    | ASTM D5185(m) 10  | <b>0</b>     | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185(m) 250 | <b>45</b>    | ---      | ---      |
| Zinc       | ppm    | ASTM D5185(m) 0   | <b>2</b>     | <1       | ---      |
| Sulfur     | ppm    | ASTM D5185(m) 400 | <b>12</b>    | ---      | ---      |
| Lithium    | ppm    | ASTM D5185(m)     | <b>&lt;1</b> | ---      | ---      |

## CONTAMINANTS

|           | method | limit/base        | current      | history1 | history2 |
|-----------|--------|-------------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185(m) >15 | <b>33</b>    | ---      | ---      |
| Sodium    | ppm    | ASTM D5185(m)     | <b>0</b>     | ---      | ---      |
| Potassium | ppm    | ASTM D5185(m) >20 | <b>5</b>     | ---      | ---      |
| ppm Water | ppm    | ASTM D6304* >200  | <b>▲ 502</b> | 180      | ---      |



## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* 0.07 | <b>0.05</b> | 0.007    | ---      |

# 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) | <b>147</b> | ---      | ---      |

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

## GRAPHS



**Sample No.** : GTT0001308      **Recieved** : 03 Jan 2024  
**Lab Number** : 02606382      **Diagnosed** : 12 Jan 2024  
**Unique Number** : 5707468      **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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