

### **OIL ANALYSIS REPORT**

Sample Rating Trend



# CREPACO RECYCLED NH3

Refrigeration Compressor Fluid CAMCO 717 HT (--- GAL)

#### DIAGNOSIS

#### Recommendation

This is a baseline read-out on the submitted sample.

#### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

#### 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  |            | USP0003909  | USP218480   | USP224039   |
| Sample Date      |          | Client Info  |            | 06 Dec 2023 | 18 Aug 2022 | 16 May 2022 |
| Machine Age      | hrs      | Client Info  |            | 0           | 0           | 0           |
| Oil Age          | hrs      | Client Info  |            | 0           | 0           | 0           |
| Oil Changed      |          | Client Info  |            | N/A         | N/A         | N/A         |
| Sample Status    |          |              |            | NORMAL      | NORMAL      | NORMAL      |
| WEAR METALS      |          | method       | limit/base | current     | history1    | history2    |
| Iron             | ppm      | ASTM D5185m  | >8         | 0           | 4           | 0           |
| Chromium         | ppm      | ASTM D5185m  | >2         | 0           | 0           | 0           |
| Nickel           | ppm      | ASTM D5185m  |            | 0           | <1          | 0           |
| Titanium         | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Silver           | ppm      | ASTM D5185m  | >2         | 0           | <1          | <1          |
| Aluminum         | ppm      | ASTM D5185m  | >3         | 0           | 2           | 0           |
| Lead             | ppm      | ASTM D5185m  | >2         | 0           | 0           | 0           |
| Copper           | ppm      | ASTM D5185m  | >8         | <1          | <1          | 0           |
| Tin              | ppm      | ASTM D5185m  | >4         | 0           | <1          | 0           |
| Vanadium         | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Cadmium          | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| ADDITIVES        |          | method       | limit/base | current     | history1    | history2    |
| Boron            | ppm      | ASTM D5185m  |            | 0           | 0           | <1          |
| Barium           | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Molybdenum       | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Manganese        | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Magnesium        | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Calcium          | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Phosphorus       | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Zinc             | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Sulfur           | ppm      | ASTM D5185m  |            | <1          | 8           | 0           |
| CONTAMINANTS     |          | method       | limit/base | current     | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m  | >15        | 1           | 1           | <1          |
| Sodium           | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Potassium        | ppm      | ASTM D5185m  | >20        | <1          | 0           | 0           |
| Water            | %        | ASTM D6304   | >0.01      | 0.002       | 0.003       | 0.001       |
| ppm Water        | ppm      | ASTM D6304   | >100       | 20          | 36.0        | 0.00        |
| FLUID CLEANLIN   | ESS      | method       | limit/base | current     | history1    | history2    |
| Particles >4µm   |          | ASTM D7647   | >10000     | 1117        | 2488        | 2879        |
| Particles >6µm   |          | ASTM D7647   | >2500      | 127         | 378         | 378         |
| Particles >14µm  |          | ASTM D7647   | >320       | 3           | 17          | 5           |
| Particles >21µm  |          | ASTM D7647   | >80        | 1           | 4           | 1           |
| Particles >38µm  |          | ASTM D7647   | >20        | 0           | 0           | 0           |
| Particles >71µm  |          | ASTM D7647   | >4         | 0           | 0           | 0           |
| Oil Cleanliness  |          | ISO 4406 (c) | >20/18/15  | 17/14/9     | 18/16/11    | 19/16/10    |
| FLUID DEGRADA    | TION     | method       | limit/base | current     | history1    | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D974    | 0.007      | 0.015       | 0.013       | 0.014       |



## **OIL ANALYSIS REPORT**







| VISUAL           |        | method    | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Sand/Dirt        | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Appearance       | scalar | *Visual   | NORML      | NORML   | NORML    | NORML    |
| Odor             | scalar | *Visual   | NORML      | NORML   | NORML    | NORML    |
| Emulsified Water | scalar | *Visual   | >0.01      | NEG     | NEG      | NEG      |
| Free Water       | scalar | *Visual   |            | NEG     | NEG      | NEG      |
| FLUID PROPERTIES |        | method    | limit/base | current | history1 | history2 |
| Visc @ 40°C      | cSt    | ASTM D445 | 69         | 60.0    | 55.7     | 61.6     |
| SAMPLE IMAGES    |        | method    |            |         |          | history2 |
| Color            |        |           |            |         |          | - A      |
|                  |        |           |            | 1-1     |          |          |

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Bottom



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)