

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

VILTER ARTIC COLD STORAGE C3

Refrigeration Compressor

NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

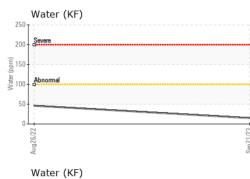
Fluid Condition

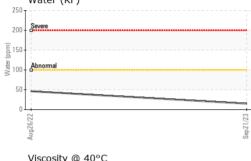
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

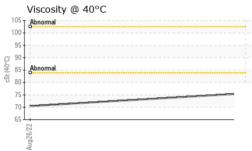
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|--|--|---|---------------------|---|---|----------------------------------|
| Sample Number | | Client Info | | WC0854641 | WC0688826 | |
| Sample Date | | Client Info | | 21 Sep 2023 | 26 Aug 2022 | |
| Machine Age | hrs | Client Info | | 168856 | 0 | |
| Oil Age | hrs | Client Info | | 0 | 0 | |
| Oil Changed | | Client Info | | N/A | N/A | |
| Sample Status | | | | NORMAL | NORMAL | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >8 | 4 | 4 | |
| Chromium | ppm | ASTM D5185m | >2 | 0 | 0 | |
| Nickel | ppm | ASTM D5185m | | 0 | 0 | |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | |
| Aluminum | ppm | ASTM D5185m | >3 | <1 | <1 | |
| Lead | ppm | ASTM D5185m | >2 | 0 | 0 | |
| Copper | ppm | ASTM D5185m | >8 | <1 | <1 | |
| Tin | ppm | ASTM D5185m | >4 | 0 | <1 | |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| | | | | | | |
| Boron | ppm | ASTM D5185m | | 0 | 0 | |
| Boron Barium | ppm ppm | ASTM D5185m ASTM D5185m | | 0 0 | 0 | |
| | | | | - | | |
| Barium | ppm | ASTM D5185m | | 0 | 0 | |
| Barium Molybdenum | ppm ppm | ASTM D5185m ASTM D5185m | | 0 | 0 | |
| Barium Molybdenum Manganese | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | | 0 0 <1 | 0 0 <1 | |
| Barium Molybdenum Manganese Magnesium | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 0 0 <1 0 | 0 0 <1 <1 | |
| Barium Molybdenum Manganese Magnesium Calcium | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 0 0 <1 0 26 | 0 0 <1 <1 1 14 | |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus | ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 0 0 <1 0 26 0 | 0 0 <1 <1 14 <1 | |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 0 0 <1 0 26 0 0 | 0 0 <1 <1 14 <1 3 | |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base >15 | 0 0 <1 0 26 0 0 41 | 0 0 <1 <1 14 <1 3 48 | |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 0 0 <1 0 26 0 0 41 current | 0 0 <1 <1 <1 14 <1 3 48 history1 | history2 |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | | 0 0 <1 0 26 0 0 41 current | 0 0 <1 <1 <1 14 <1 3 48 history1 <1 | history2 |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m | >15 | 0 0 <1 0 26 0 0 41 <1 <1 2 | 0 0 <1 <1 <1 14 <1 3 48 history1 <1 0 | history2 |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | >15 >20 | 0 0 <1 0 26 0 0 41 current <1 2 0 | 0 0 <1 <1 <1 14 <1 3 48 history1 <1 0 <1 | history2 |
| Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | >15 >20 >0.01 | 0 0 <1 0 26 0 0 41 <i>current</i> <1 2 0 0 0.001 | 0 0 <1 <1 <1 14 <1 3 48 history1 <1 0 <1 0.004 | history2 |



OIL ANALYSIS REPORT







| | VISUAL | | method | limit/base | current | history1 | history2 |
|--|--|-------------------------------|--------------------|--|-------------|----------------|--|
| | White Metal | scalar | *Visual | NONE | LIGHT | NONE | |
| | Yellow Metal | | *Visual | NONE | NONE | NONE | |
| | Precipitate | scalar | *Visual | NONE | NONE | NONE | |
| | Silt | scalar | *Visual | NONE | NONE | NONE | |
| | Debris | | *Visual | NONE | NONE | NONE | |
| | Sand/Dirt | | *Visual | NONE | NONE | NONE | |
| 101Cu | Appearance | | *Visual | NORML | NORML | NORML | |
| či t | 0001 | | *Visual | NORML | NORML | NORML | |
| | Emulsified Water Free Water | | *Visual *Visual | >0.01 | NEG NEG | NEG NEG | |
| | | | | | | | |
| | FLUID PROPERT | | method | limit/base | current | history1 | history2 |
| | Visc @ 40°C | | ASTM D445 | | 75.6 | 70.5 | |
| | SAMPLE IMAGES | S | method | limit/base | current | history1 | history2 |
| San 21/23 | Color | | | | | | no image |
| | Bottom | | | | | | no image |
| | GRAPHS | | | | | | |
| | Ferrous Alloys | | | | | | |
| | 8 iron | | | | | | |
| | 6 - nickel | | | | | | |
| | ä 4- | | | | | | |
| | 2 | | | | | | |
| | 6/22 | | | 1/23 | | | |
| | Aug26/22 | | | Sep 21/23 | | | |
| | Non-ferrous Metal | ls | | | | | |
| | copper | | | | | | |
| | e 6 | | | | | | |
| | | | | | | | |
| | 2 | | | | | | |
| | | | | 723 | | | |
| | Aug26/22 | | | Sep21/23 | | | |
| | Viscosity @ 40°C | | | | Acid Number | | |
| | Abnormal | | | €0.40 | | | |
| | 100 | | | (0.40 (0.30)) (0.3 |) | | |
| | (2 90 Abnormal (3) 90 Abnormal (3) 80 Abnormal | | | <u>ق</u> 0.20 |) | | |
| | 70 | | | | 1 | | |
| | 60 | | | 0.00 |] | | |
| | Aug26/22 | | | Sep 21/23 | Aug26/22 | | Sen 21/23 |
| | Au | | | 8 | Au | | a Z |
| Laboratory | : WearCheck USA - 5 | 501 Madiso Received | | ry, NC 27513 Sep 2023 | | 11 ANNICO DRIV | |
| Sample No. Lab Number Unique Numbe Test Package discuss this sample report | r : 05962255 er : 10668806 je : IND 2 | Diagnosed Diagnostic | cian : Dor | Sep 2023 n Baldridge | | | MER GLEN, II US 6049 JOE HANKINS |

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