

OIL ANALYSIS REPORT



Machine Id HSC-1 Component Refrigeration Compressor Fluid REFRIG COMP OIL ISO 68 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a trace of moisture present in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

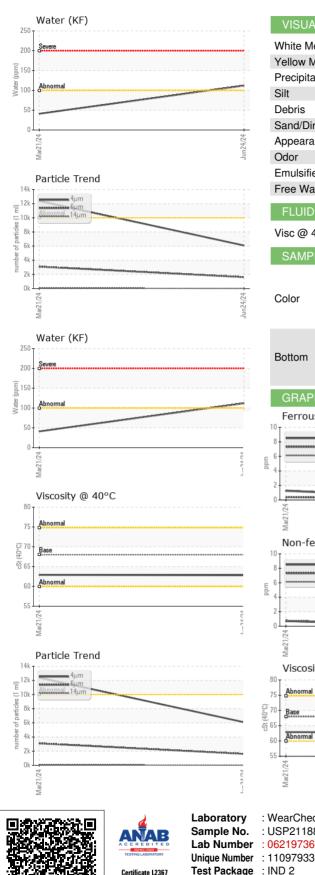
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|------------------|---------------|--------------|------------|-------------|-------------|----------|
| Sample Number | | Client Info | | USP211883 | USP242068 | |
| Sample Date | | Client Info | | 24 Jun 2024 | 21 Mar 2024 | |
| Machine Age | hrs | Client Info | | 0 | 0 | |
| Oil Age | hrs | Client Info | | 0 | 0 | |
| Oil Changed | | Client Info | | N/A | N/A | |
| Sample Status | | | | NORMAL | ATTENTION | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >8 | 0 | 1 | |
| Chromium | ppm | ASTM D5185m | >2 | 0 | <1 | |
| Nickel | ppm | ASTM D5185m | | 0 | 1 | |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | |
| Aluminum | ppm | ASTM D5185m | | 0 | 1 | |
| Lead | ppm | ASTM D5185m | >2 | 0 | <1 | |
| Copper | ppm | ASTM D5185m | | 0 | <1 | |
| Tin | ppm | ASTM D5185m | >4 | 0 | <1 | |
| Vanadium | ppm | ASTM D5185m | ~ 1 | 0 | <1 | |
| Cadmium | ppm | ASTM D5185m | | 0 | <1 | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 5 | 0 | 0 | |
| Barium | ppm | ASTM D5185m | 5 | 0 | <1 | |
| Molybdenum | | ASTM D5185m | 5 | 0 | <1 | |
| Manganese | ppm | ASTM D5185m | 5 | 0 | <1 | |
| Magnesium | ppm | ASTM D5185m | 5 | 0 | <1 | |
| Calcium | ppm | ASTM D5185m | 12 | 0 | 0 | |
| Phosphorus | ppm | ASTM D5185m | 12 | 0 | 0 | |
| Zinc | ppm | ASTM D5185m | 12 | 0 | 0 | |
| Sulfur | ppm | | | | 0 | |
| | ppm | ASTM D5185m | 1000 | 26 | - | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >15 | <1 | 3 | |
| Sodium | ppm | ASTM D5185m | | 1 | 0 | |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 1 | |
| Water | % | ASTM D6304 | | 0.011 | 0.004 | |
| ppm Water | ppm | ASTM D6304 | >100 | 112 | 41 | |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >10000 | 6090 | 12360 | |
| Particles >6µm | | ASTM D7647 | >2500 | 1610 | 3100 | |
| Particles >14µm | | ASTM D7647 | >320 | 30 | 53 | |
| Particles >21µm | | ASTM D7647 | >80 | 2 | 7 | |
| Particles >38µm | | ASTM D7647 | >20 | 0 | 0 | |
| Particles >71µm | | ASTM D7647 | >4 | 0 | 0 | |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | 20/18/12 | 21/19/13 | |
| FLUID DEGRADA | | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D974 | 0.10 | 0.014 | 0.015 | |
| | | | | | | |

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NONE NONE NONE *Visual White Metal scalar Yellow Metal *Visual NONE NONE NONE scalar Precipitate NONE scalar *Visual NONE NONE scalar *Visual NONE NONE NONE Debris *Visual NONE NONE NONE scalar Sand/Dirt NONE NONE NONE scalar *Visual NORML NORML Appearance scalar *Visual NORML Odor *Visual NORML NORML NORML scalar *Visual **Emulsified Water** scalar >0.01 NEG NEG Free Water scalar *Visual NEG NEG FLUID PROPERTIES 62.9 Visc @ 40°C cSt ASTM D445 68 62.8 SAMPLE IMAGES Color no image Bottom no image GRAPHS Ferrous Alloys Particle Count 491,52 122,88 30 72 7,68 (per 1 ml) Jun24/24 4406 1,920 Carl :1999 Cle Non-ferrous Metals 480 120 14 31 210 Viscosity @ 40°C Acid Number (^{0.25} (⁰/HOX) 0.20 Abn Ê 0.15 Ba - e 0.10 Acid Ni 0.05 0.00 Mar21/24 Jun24/24 Mar21 : WearCheck USA - 501 Madison Ave., Cary, NC 27513 LOPEZ FOODS -CHEROKEE-USP : USP211883 Received : 25 Jun 2024 1300 SOUTH LAKE STREET : 06219736 Tested : 26 Jun 2024 CHEROKEE, IA Diagnosed : 26 Jun 2024 - Doug Bogart US 51012

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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

T: (712)225-6558 F: (712)225-6556

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