

OIL ANALYSIS REPORT

Area SYSTEM 2 2C2 (S/N 2555880) Refrigeration Compressor

Fluid USPI ALT-68 SC (60 GAL)

DIAGNOSIS

A Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

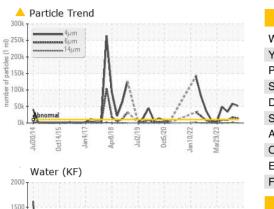
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | ISO |
|----------------------|--------------------------------|-----------|
| | | |
| | | |
| | | |
| 2014 Oct2015 Jan2017 | Apr2018 Jul2019 Oct2020 Jan202 | 2 Mar2023 |

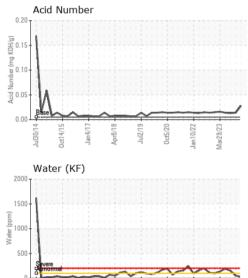
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|------------------|----------|--------------|------------|-------------------|---------------|-----------------|
| Sample Number | | Client Info | | USP0008022 | USP0005039 | USP0001654 |
| Sample Date | | Client Info | | 04 Apr 2024 | 15 Jan 2024 | 04 Oct 2023 |
| 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 | | | | ABNORMAL | ABNORMAL | ABNORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >8 | 0 | 2 | 5 |
| Chromium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | r = | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >3 | <1 | 0 | 0 |
| Lead | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >8 | 0 | 0 | <1 |
| Tin | ppm | ASTM D5185m | >0 >4 | ۰ <1 | 0 | 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 | 0 |
| 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 | <1 |
| Phosphorus | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Zinc | ppm | ASTM D5185m | | 0 | 0 | 3 |
| Sulfur | ppm | ASTM D5185m | 50 | 0 | 0 | 0 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >15 | 0 | 0 | <1 |
| Sodium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | <1 | 0 |
| Water | % | ASTM D6304 | >0.01 | 0.002 | 0.005 | 0.015 |
| ppm Water | ppm | ASTM D6304 | >100 | 24 | 53 | 150.5 |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >10000 | <u> </u> | ▲ 58323 | ▲ 33663 |
| Particles >6µm | | ASTM D7647 | >2500 | <u> </u> | 1 7237 | ▲ 8706 |
| Particles >14µm | | ASTM D7647 | >320 | <u> </u> | 1 057 | A 393 |
| Particles >21µm | | ASTM D7647 | >80 | <u> </u> | <u> </u> | 80 |
| Particles >38µm | | ASTM D7647 | >20 | 0 | 2 | 2 |
| Particles >71µm | | ASTM D7647 | >4 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | 4 23/21/16 | ▲ 23/21/17 | 22/20/16 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D974 | 0.005 | 0.028 | 0.014 | 0.013 |

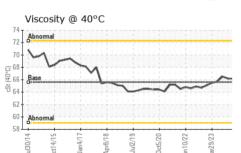


OIL ANALYSIS REPORT







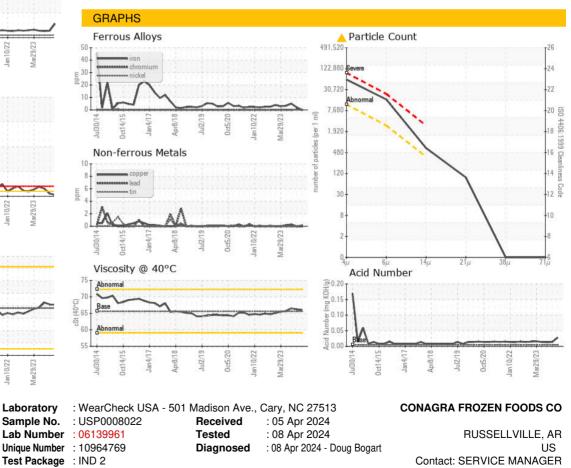


Jul30/1

an4

| 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 | LIGHT | NONE | LIGHT |
| 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 PROPERT | IES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D445 | 65.6 | 66.1 | 66.2 | 66.5 |
| SAMPLE IMAGES | | method | limit/base | current | history1 | history2 |
| Color | | | | • | | |
| | | | | 1000 | | |

Bottom



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)

Report Id: CONRUS [WUSCAR] 06139961 (Generated: 04/08/2024 13:27:59) Rev: 1

Certificate 12367

Contact/Location: SERVICE MANAGER ? - CONRUS

T:

F: