

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

[AFTER FILTRATION] **RECYCLED NH3** Component

Refrigeration Compressor USPI ALT-68 SC (--- GAL)

Recommendation

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

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.





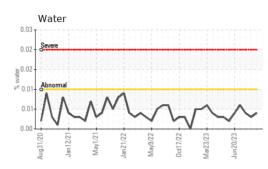
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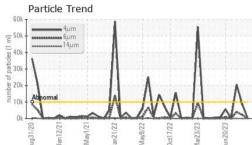
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|------------------|---------------|--------------|------------|-------------|-------------|------------------|
| Sample Number | | Client Info | | USP245874 | USP221392 | USP221398 |
| Sample Date | | Client Info | | 16 Aug 2023 | 02 Aug 2023 | 13 Jul 2023 |
| Machine Age | hrs | Client Info | | 0 | 0 | 72 |
| Oil Age | hrs | Client Info | | 0 | 0 | 36 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | ABNORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >8 | 0 | 0 | 0 |
| Chromium | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >3 | 0 | <1 | 0 |
| Lead | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >8 | 0 | 0 | 0 |
| Tin | ppm | ASTM D5185m | >4 | 0 | 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 | <1 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | | 0 | 6 | 0 |
| Zinc | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | 50 | 0 | 39 | 0 |
| CONTAMINANTS | ; | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >15 | 3 | 2 | 2 |
| Sodium | ppm | ASTM D5185m | | 1 | 0 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | <1 |
| Water | % | ASTM D6304 | >0.01 | 0.004 | 0.003 | 0.004 |
| ppm Water | ppm | ASTM D6304 | >100 | 43.6 | 36.7 | 49.1 |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >10000 | 220 | 8834 | ▲ 20684 |
| Particles >6µm | | ASTM D7647 | >2500 | 71 | 2239 | 4029 |
| Particles >14µm | | ASTM D7647 | >320 | 13 | 79 | 127 |
| Particles >21µm | | ASTM D7647 | >80 | 5 | 9 | 21 |
| Particles >38µm | | ASTM D7647 | >20 | 0 | 0 | 1 |
| Particles >71µm | | ASTM D7647 | >4 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | 15/13/11 | 20/18/13 | 2 2/19/14 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D974 | 0.005 | 0.013 | 0.013 | 0.013 |

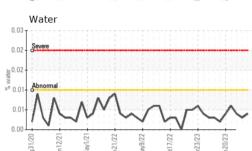
Contact/Location: SERVICE MANAGER - TYSALBAL

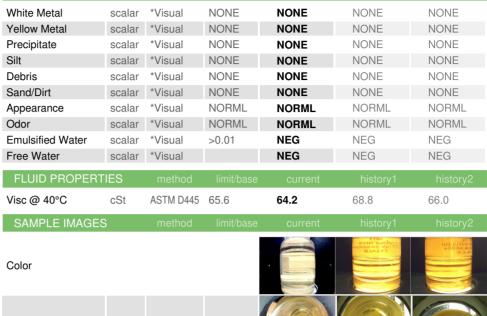


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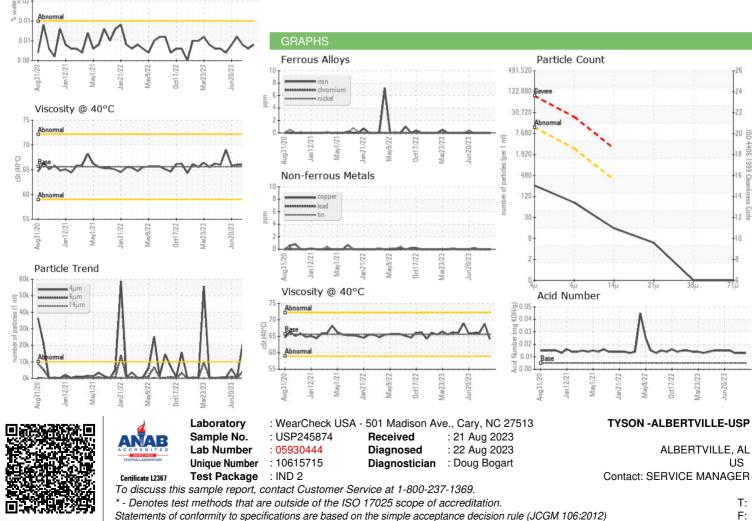








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