

OIL ANALYSIS REPORT

Sample Rating Trend



KAESER 7894008

Compressor Fluid KAESER SIGMA (OEM) S-460 (--- QTS)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. 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. The amount and size of particulates present in the system are acceptable.

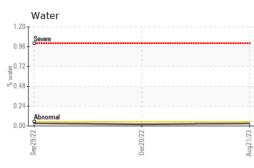
Fluid Condition

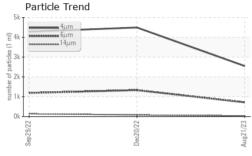
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

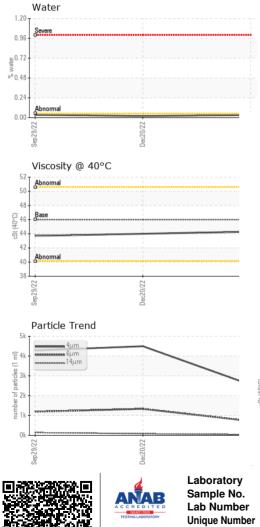
| | | | 2022 | Dec2022 Aug20 | 123 | |
|------------------|----------|--------------|------------|---------------|--------------|-------------|
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | KC124305 | KC91680 | KC98491 |
| Sample Date | | Client Info | | 21 Aug 2023 | 20 Dec 2022 | 29 Sep 2022 |
| Machine Age | hrs | Client Info | | 9771 | 7602 | 0 |
| Oil Age | hrs | Client Info | | 0 | 1200 | 0 |
| Oil Changed | | Client Info | | Changed | Not Changd | N/A |
| Sample Status | | | | NORMAL | ATTENTION | ATTENTION |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | <1 | 0 | 0 |
| Chromium | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | <1 | <1 | <1 |
| Lead | ppm | ASTM D5185m | >10 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >50 | 3 | 1 | 1 |
| Tin | ppm | ASTM D5185m | >10 | 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 | 90 | 12 | 37 | 71 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | 90 | 55 | 78 | 88 |
| Calcium | ppm | ASTM D5185m | 2 | 0 | 1 | 2 |
| Phosphorus | ppm | ASTM D5185m | | <1 | <1 | 30 |
| Zinc | ppm | ASTM D5185m | | 8 | 6 | 4 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | <1 | <1 | 3 |
| Sodium | ppm | ASTM D5185m | | 14 | 18 | 9 |
| Potassium | ppm | ASTM D5185m | >20 | 8 | 5 | 3 |
| Water | % | ASTM D6304 | >0.05 | 0.031 | 0.020 | 0.033 |
| ppm Water | ppm | ASTM D6304 | >500 | 310.4 | 202.9 | 333.0 |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | | 2550 | 4494 | 4284 |
| Particles >6µm | | ASTM D7647 | >1300 | 717 | 1 334 | 1192 |
| Particles >14µm | | ASTM D7647 | >80 | 35 | 79 | 1 37 |
| Particles >21µm | | ASTM D7647 | >20 | 8 | 17 | A 35 |
| Particles >38µm | | ASTM D7647 | >4 | 0 | 1 | 2 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >17/13 | 17/12 | ▲ 18/13 | ▲ 17/14 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.4 | 0.33 | 0.36 | 0.37 |
| | | | | | | |



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 | >0.05 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D445 | 46 | 44.3 | 44.0 | 43.7 |
| SAMPLE IMAGES | | method | limit/base | current | history1 | history2 |
| Color | | | | | | |
| | | | | | | |

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