

OIL ANALYSIS REPORT

KAESER AS 20 4970276 (S/N 1176) Component

Compressor

KAESER SIGMA (OEM) M-460 (--- GAL)

Recommendation

Resample at the next service interval to monitor.

Wear

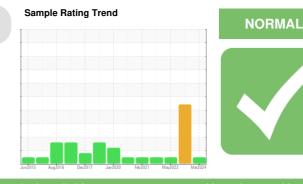
All component wear rates are normal.

Contamination

The water content is negligible. 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.



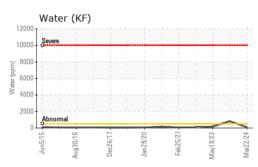
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
|--------------------|----------|--------------------------|------------|------------------|---|-------------|
| Sample Number | | Client Info | | KCPA015763 | KCP46577D | KCP50836 |
| Sample Date | | Client Info | | 22 Mar 2024 | 18 Jan 2023 | 19 May 2022 |
| Machine Age | hrs | Client Info | | 33161 | 29045 | 26755 |
| Oil Age | hrs | Client Info | | 2000 | 2289 | 5230 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Changed |
| Sample Status | | | | NORMAL | ABNORMAL | NORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Chromium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | ppm | | >3 | | | |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Lead | ppm | ASTM D5185m | >10 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | | 5 | 14 | 8 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185m | | | | |
| 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 | 0 |
| Barium | ppm | ASTM D5185m | 90 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | 100 | 0 | <1 | <1 |
| Calcium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 0 | 0 | 5 | 0 |
| Zinc | ppm | ASTM D5185m | | 4 | 9 | 0 |
| Sulfur | ppm | ASTM D5185m | 23500 | 18418 | 16936 | 18079 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | | ASTM D5185m | >25 | <1 | 1 | 0 |
| Sodium | ppm | ASTM D5185m | >20 | | 0 | |
| Potassium | ppm | ASTM D5185m | >20 | 3 0 | 0 | 0 |
| | ppm | | | 0.008 | | <1 |
| Water ppm Water | % | ASTM D6304 ASTM D6304 | | 0.008 84 | ▲ 0.081▲ 810 | 0.017 |
| | ppm | | | | | - |
| FLUID CLEANLIN | NESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | . 1000 | 1820 | 1270 | 269 |
| Particles >6µm | | ASTM D7647 | >1300 | 459 | 692 | 110 |
| Particles >14µm | | ASTM D7647 | >80 | 32 | 118 | 25 |
| Particles >21µm | | ASTM D7647 | | 10 | 40 | 11 |
| Particles >38µm | | ASTM D7647 | >4 | 0 | 6 | 2 |
| Particles >71µm | | ASTM D7647 | | 0 | 1 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >17/13 | 16/12 | 17/14 | 14/12 |
| FLUID DEGRADA | ATION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | 0.41 | 0.38 | 0.40 |
| 1.01.26) Boy: 1 | | | Conta | ot/Location: SEE | | |

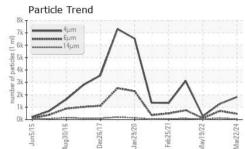
Report Id: CENLAW [WUSCAR] 06132742 (Generated: 04/02/2024 19:01:26) Rev: 1

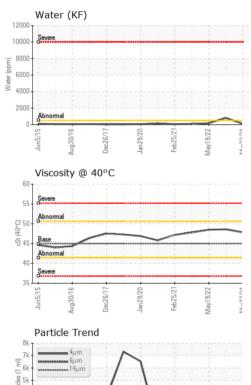
Contact/Location: SERVICE MANAGER ? - CENLAW

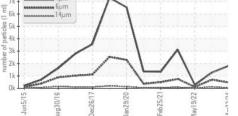


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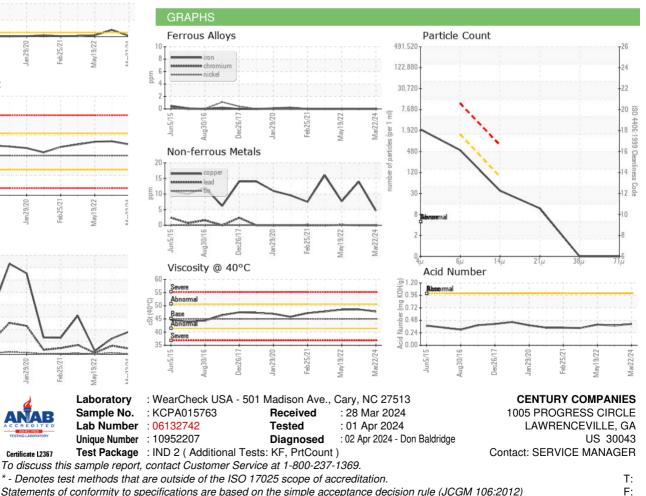






| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | LIGHT | 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 | ▲ 0.2% | NEG |
| Free Water | scalar | *Visual | | NEG | ▲ 10.0 | NEG |
| FLUID PROPERT | IES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D445 | 45 | 47.8 | 48.6 | 48.5 |
| SAMPLE IMAGES | | method | limit/base | current | history1 | history2 |
| Color | | | | • | | |
| | | | | | | |

Bottom



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

Certificate L2367