

OIL ANALYSIS REPORT

Sample Rating Trend



Built for a lifetime."

[053045] **KAESER 8233418**

Component Compressor Fluid KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

Area

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.

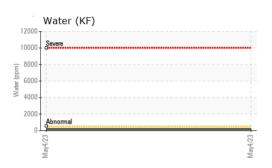
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|------------------|---------------|----------------|------------|-------------------|----------|----------|
| Sample Number | | Client Info | | KCPA001786 | | |
| Sample Date | | Client Info | | 04 May 2023 | | |
| Machine Age | hrs | Client Info | | 9116 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | N/A | | |
| Sample Status | | | | ABNORMAL | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | <1 | | |
| Chromium | ppm | ASTM D5185m | >10 | <1 | | |
| Nickel | ppm | ASTM D5185m | >3 | <1 | | |
| Titanium | ppm | ASTM D5185m | | <1 | | |
| Silver | ppm | ASTM D5185m | >2 | 0 | | |
| Aluminum | ppm | ASTM D5185m | | 0 | | |
| Lead | ppm | ASTM D5185m | >10 | ۰ <1 | | |
| Copper | | ASTM D5185m | | 5 | | |
| Tin | ppm | ASTM D5185m | >10 | ະ 1 | | |
| Vanadium | ppm | | 210 | < 1 | | |
| Cadmium | ppm | ASTM D5185m | | - | | |
| | ppm | ASTM D5185m | | <1 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 0 | 0 | | |
| Barium | ppm | ASTM D5185m | 90 | 0 | | |
| Molybdenum | ppm | ASTM D5185m | 0 | <1 | | |
| Manganese | ppm | ASTM D5185m | | <1 | | |
| Magnesium | ppm | ASTM D5185m | 100 | 27 | | |
| Calcium | ppm | ASTM D5185m | 0 | 1 | | |
| Phosphorus | ppm | ASTM D5185m | 0 | 3 | | |
| Zinc | ppm | ASTM D5185m | 0 | 40 | | |
| Sulfur | ppm | ASTM D5185m | 23500 | 22133 | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | <1 | | |
| Sodium | ppm | ASTM D5185m | | 13 | | |
| Potassium | ppm | ASTM D5185m | >20 | 9 | | |
| Water | % | ASTM D6304 | >0.05 | 0.017 | | |
| ppm Water | ppm | ASTM D6304 | >500 | 170.3 | | |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | | 9760 | | |
| Particles >6µm | | ASTM D7647 | >1300 | <u> </u> | | |
| Particles >14µm | | ASTM D7647 | >80 | <u> </u> | | |
| Particles >21µm | | ASTM D7647 | >20 | <mark>人</mark> 58 | | |
| Particles >38µm | | ASTM D7647 | >4 | 1 | | |
| Particles >71µm | | ASTM D7647 | >3 | 0 | | |
| Oil Cleanliness | | ISO 4406 (c) | >/17/13 | 20/19/15 | | |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | 0.37 | | |
| | ing noning | , to the Doord | 1.0 | 0.07 | | |

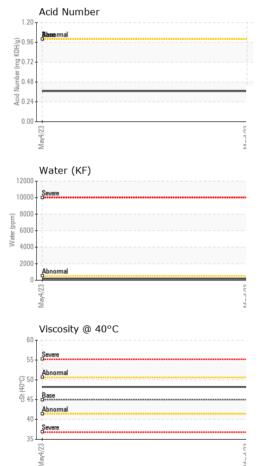
Contact/Location: V. CHANOCUA - CHEOKC Page 1 of 2



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🔺 Particle Trend 10k 4μm μm umber of particles (1 ml) -14µm 6k 4 2 0 May4/23 An/4/73





Certificate 12367

OIL ANALYSIS REPORT

| | VISUAL | | method | limit/base | current | history1 | history |
|----------------|--|--------|-----------|--|---------------------------------|----------|-----------|
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | Precipitate | scalar | *Visual | NONE | NONE | | |
| | Silt | scalar | *Visual | NONE | NONE | | |
| | Debris | scalar | *Visual | NONE | NONE | | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| | Appearance | scalar | *Visual | NORML | NORML | | |
| | Odor | scalar | *Visual | NORML | NORML | | |
| | Emulsified Water | scalar | *Visual | >0.05 | NEG | | |
| | Free Water | scalar | *Visual | | NEG | | |
| | FLUID PROPER | TIES | method | limit/base | current | history1 | histor |
| | Visc @ 40°C | cSt | ASTM D445 | 45 | 48.2 | | |
| | SAMPLE IMAGE | S | method | limit/base | current | history1 | histor |
| | | | | | | | |
| | Color | | | | | no image | no imag |
| | | | | | 10 | Ŭ | |
| | | | | | 10 | | |
| | Bottom | | | | | no image | no imag |
| | Dottom | | | | | noimage | ino intag |
| | | | | | | | |
| | GRAPHS | | | | | | |
| | Ferrous Alloys | | | 491,520 | Particle Count | | |
| | 8- iron | | | | | | |
| | chromium | | | 122,880 | + | | |
| E. | 6 - management nickel | | | | | | |
| bpm | 6 nickel | | | 30,720 | | | |
| bpm | | | | | | | |
| bpm | | | | 7,680 | | | |
| bpm | | | | 7,680 | | | |
| bpm | 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | | | 7,680 | 1.1. | | |
| | | | | 7,680 | 1.1. | į | |
| | Non-ferrous Meta | | | 7,680 | | | |
| | Non-ferrous Meta | | | 7,680 EZ/F/keW EZ/F/keW 1,920 480 120 | 11.1 | | |
| | Non-ferrous Meta | | | 7,680 | 11.1 | | |
| | Non-ferrous Meta | | | CZ/F/keW CZ/F/keW 200 200 200 200 200 200 200 20 | 11.1 | | |
| | Non-ferrous Meta | | | C2U Verw C2U Verw C2U Verw Septied jo aa (120 30 30 8 | | | |
| | Non-ferrous Meta | | | CZ/b/ker CZ/b/b/ker CZ/b/b/ker CZ/b/b/ker CZ/b/b/b/ker CZ/b/b/b/b/b/b/b/b/b/b/b/b/b/b/b/b/b/b/b | Bersemal | | |
| | Non-ferrous Meta | | | (Figure 1, 1, 200) (Figure 1, 1, | Bibrosemal | 14μ 21μ | 38µ |
| mqq | Non-ferrous Meta | | | CZUHVEW CZUHVE CZUHV | Riveremal 6/4 Acid Number | 14μ 21μ | 36μ |
| udd | Non-ferrous Meta | | | CZUHVEW CZUHVE CZUHV | Riveremal 6/4 Acid Number | 14μ 21μ | 38µ |
| bpm | Non-ferrous Meta | | | CZUHVEW CZUHVE CZUHV | Riveremal 6/4 Acid Number | 14μ 21μ | 38μ |
| cSt (40°C) | Non-ferrous Meta | | | CZUHVEW CZUHVE CZUHV | Riveremal 6/4 Acid Number | 14μ 21μ | 38µ |
| cSt (40°C) ppm | Non-ferrous Meta | | | CZUHVEW CZUHVE CZUHV | Riveremal 6/4 Acid Number | 14μ 21μ | 38µ |
| cSt (40°C) ppm | Non-ferrous Meta Non-ferrous Meta Non-ferrous Meta Non-ferrous Meta Non-ferrous Meta Non-ferrous Meta Non-ferrous Meta Non-ferrous Meta Severe | | | CZ/HAEW CZ/ | Berearmal | 14μ 21μ | 36μ |
| cSt (40°C) ppm | Non-ferrous Meta | | | CZUHVEW CZUHVE CZUHV | Riveremal 6/4 Acid Number | 14μ 21μ | 38μ |



* - 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)

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

Test Package : IND 2 (Additional Tests: KF, PrtCount)

Report Id: CHEOKC [WUSCAR] 05856160 (Generated: 04/09/2024 09:12:03) Rev: 1

Contact/Location: V. CHANOCUA - CHEOKC

Т:

F:

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