

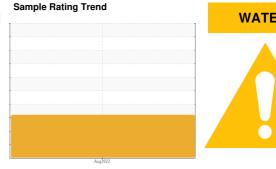
PROBLEM SUMMARY

KAESER 8043469

Component

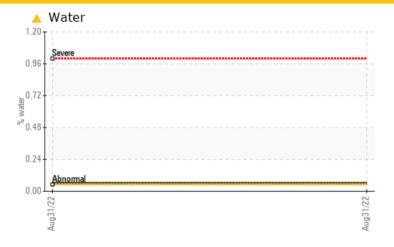
Compressor

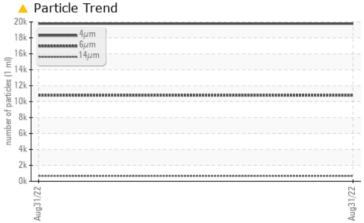
KAESER SIGMA (OEM) M-460 (--- GAL)





COMPONENT CONDITION SUMMARY





RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

| PROBLEMATIC TEST RESULTS | | | | | | | |
|--------------------------|-----|--------------|---------|-----------------|--|--|--|
| Sample Status | | | | ABNORMAL | | | |
| Water | % | ASTM D6304 | >0.05 | △ 0.059 | | | |
| ppm Water | ppm | ASTM D6304 | >500 | △ 599.3 | | | |
| Particles >6µm | | ASTM D7647 | >1300 | 10784 | | | |
| Particles >14µm | | ASTM D7647 | >80 | 666 | | | |
| Particles >21µm | | ASTM D7647 | >20 | △ 30 | | | |
| Oil Cleanliness | | ISO 4406 (c) | >/17/13 | 21/21/17 | | | |

Customer Id: KENBRIWIS Sample No.: KCP50052 Lab Number: 05634998 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 ihester@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

| RECOMMENDED ACTIONS | | | | | | |
|---------------------|--------|------|---------|---|--|--|
| Action | Status | Date | Done By | Description | | |
| Change Fluid | | | ? | Oil and filter change at the time of sampling has been noted. | | |
| Change Filter | | | ? | Oil and filter change at the time of sampling has been noted. | | |

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



WATER



KAESER 8043469

Component

Compressor

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

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

All component wear rates are normal.

Contamination

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

Fluid Condition

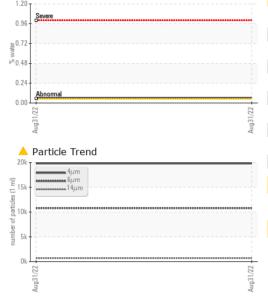
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | | | Aug2022 | | |
|------------------|----------|----------------|------------|----------------|-------------------|----------------|
| CAMPLE INCORA | AATIONI | and the second | | | for the second of | la la tara a O |
| SAMPLE INFORM | MATION | method | limit/base | current | history 1 | history 2 |
| Sample Number | | | | KCP50052 | | |
| Sample Date | | | | 31 Aug 2022 | | |
| Machine Age | hrs | | | 3587 | | |
| Oil Age | hrs | | | 3000 | | |
| Oil Changed | | | | Changed | | |
| Sample Status | | | | ABNORMAL | | |
| WEAR METALS | | method | limit/base | current | history 1 | history 2 |
| Iron | ppm | ASTM D5185m | >50 | 1 | | |
| Chromium | ppm | ASTM D5185m | >10 | 0 | | |
| Nickel | ppm | ASTM D5185m | >3 | 0 | | |
| Titanium | ppm | ASTM D5185m | >3 | 0 | | |
| Silver | ppm | ASTM D5185m | >2 | 0 | | |
| Aluminum | ppm | ASTM D5185m | >10 | <1 | | |
| Lead | ppm | ASTM D5185m | >10 | 0 | | |
| Copper | ppm | ASTM D5185m | >50 | 6 | | |
| Tin | ppm | ASTM D5185m | >10 | 0 | | |
| Vanadium | ppm | ASTM D5185m | | 0 | | |
| Cadmium | ppm | ASTM D5185m | | 0 | | |
| ADDITIVES | la la | method | limit/base | current | history 1 | history 2 |
| | | | | | | |
| Boron | ppm | ASTM D5185m | 0 | 0 | | |
| Barium | ppm | ASTM D5185m | 90 | 0 | | |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | | |
| Manganese | ppm | ASTM D5185m | | <1 | | |
| Magnesium | ppm | ASTM D5185m | 100 | 53 | | |
| Calcium | ppm | ASTM D5185m | 0 | <1 | | |
| Phosphorus | ppm | ASTM D5185m | 0 | 4 | | |
| Zinc | ppm | ASTM D5185m | 0 | 0 | | |
| Sulfur | ppm | ASTM D5185m | 23500 | 17720 | | |
| CONTAMINANTS | | method | limit/base | current | history 1 | history 2 |
| Silicon | ppm | ASTM D5185m | >25 | 0 | | |
| Sodium | ppm | ASTM D5185m | | 18 | | |
| Potassium | ppm | ASTM D5185m | >20 | 1 | | |
| Water | % | ASTM D6304 | >0.05 | <u> </u> | | |
| ppm Water | ppm | ASTM D6304 | >500 | △ 599.3 | | |
| FLUID CLEANLIN | IESS | method | limit/base | current | history 1 | history 2 |
| Particles >4µm | | ASTM D7647 | | 19787 | | |
| Particles >6µm | | ASTM D7647 | >1300 | <u> </u> | | |
| Particles >14µm | | ASTM D7647 | >80 | 666 | | |
| Particles >21µm | | ASTM D7647 | >20 | 4 30 | | |
| Particles >38µm | | ASTM D7647 | >4 | 0 | | |
| Particles >71µm | | ASTM D7647 | >3 | 0 | | |
| Oil Cleanliness | | ISO 4406 (c) | >/17/13 | <u> </u> | | |
| FLUID DEGRADA | TION | method | limit/base | current | history 1 | history 2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | 0.27 | | |



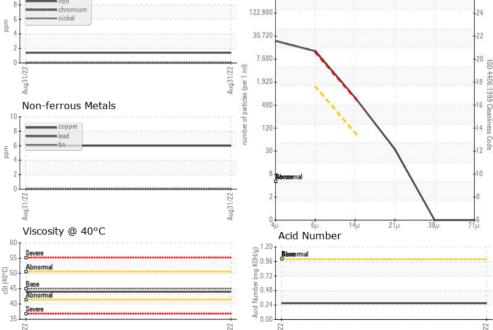
Water

OIL ANALYSIS REPORT



| VISUAL | | method | limit/base | current | history 1 | history 2 |
|-------------------------|--------|-----------|------------|---------|-----------|-----------|
| White Metal | scalar | *Visual | NONE | LIGHT | | |
| Yellow Metal | scalar | *Visual | NONE | NONE | | |
| Precipitate | scalar | *Visual | NONE | NONE | | |
| Silt | scalar | *Visual | NONE | NONE | | |
| Debris | scalar | *Visual | NONE | LIGHT | | |
| 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 PROPERTIES | | method | limit/base | current | history 1 | history 2 |
| Visc @ 40°C | cSt | ASTM D445 | 45 | 44.0 | | |
| SAMPLE IMAGES | | method | limit/base | current | history 1 | history 2 |

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|--------------------|--------|--------------|----------------|-----------|-----------------|
| Color | | | | no image | no image |
| Bottom | | | | no image | no image |
| GRAPHS | | | | | |
| Ferrous Alloys | | 491,520 | Particle Count | | T ²⁶ |







Certificate L2367

Laboratory Sample No. Lab Number

Unique Number : 10124528

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : KCP50052 Received : 05634998 Diagnosed

: 08 Sep 2022 Diagnostician : Jonathan Hester Test Package : IND 2 (Additional Tests: KF, PrtCount)

: 06 Sep 2022

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) **KENOSHA TOYOTA**

8180 120TH AVE BRISTOL, WI USA 53142

Contact: Service Manager

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