

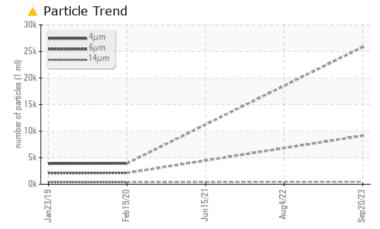
PROBLEM SUMMARY

KAESER SM 10 5017873 (S/N 1027)

Compressor

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

COMPONENT CONDITION SUMMARY



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.

| PROBLEMATIC TEST RESULTS | | | | | | |
|--------------------------|--------------|---------|-------------------|--------|----------|--|
| Sample Status | | | ABNORMAL | SEVERE | ABNORMAL | |
| Particles >6µm | ASTM D7647 | >1300 | <u> </u> | | | |
| Particles >14µm | ASTM D7647 | >80 | 473 | | | |
| Particles >21µm | ASTM D7647 | >20 | <u> </u> | | | |
| Oil Cleanliness | ISO 4406 (c) | >/17/13 | A 22/20/16 | | | |

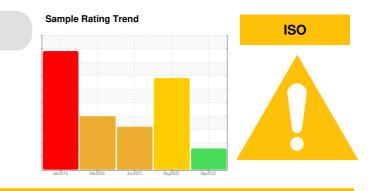
Customer Id: SHEBURNC Sample No.: KCPA001089 Lab Number: 05964219 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 <u>don.b505@comcast.net</u>

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



There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS



04 Aug 2022 Diag: Jonathan Hester

Oil and filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. We recommend an early resample in 500 hours to monitor this condition.All component wear rates are normal. Excessive free water present. There is a moderate concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



The filter change at the time of sampling has been noted. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition. There is too much water present in this sample to perform a particle count.All component wear rates are normal. There is a light concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.



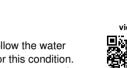
view repor



19 Feb 2020 Diag: Jonathan Hester

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition. Please note that this is a corrected copy for laboratory data updates.All component wear rates are normal. Appearance is hazy. There is a high amount of particulates present in the oil. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





Report Id: SHEBURNC [WUSCAR] 05964219 (Generated: 10/01/2023 14:27:10) Rev: 1



OIL ANALYSIS REPORT

Machine Id KAESER SM 10 5017873 (S/N 1027) 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

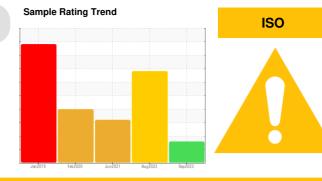
All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil. The water content is negligible.

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 | | KCPA001089 | KCP50219 | KCP36650 |
| Sample Date | | Client Info | | 20 Sep 2023 | 04 Aug 2022 | 15 Jun 2021 |
| Machine Age | hrs | Client Info | | 24352 | 20039 | 12149 |
| Oil Age | hrs | Client Info | | 0 | 0 | 4000 |
| Oil Changed | | Client Info | | N/A | Changed | Not Changd |
| Sample Status | | | | ABNORMAL | SEVERE | ABNORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | 0 | <1 | 2 |
| Chromium | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >3 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | 0 | 2 | 0 |
| Lead | ppm | ASTM D5185m | >10 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >50 | 18 | 41 | 13 |
| Tin | ppm | ASTM D5185m | >10 | 0 | <1 | 0 |
| Antimony | ppm | ASTM D5185m | | | | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | ppin | | | Ū | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 0 | 0 | <1 | <1 |
| Barium | ppm | ASTM D5185m | 90 | 0 | 0 | 1 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | 100 | 0 | <1 | 15 |
| Calcium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 0 | <1 | 6 | 4 |
| Zinc | ppm | ASTM D5185m | 0 | 0 | 27 | 27 |
| Sulfur | ppm | ASTM D5185m | 23500 | 12651 | 17670 | 18774 |
| CONTAMINANTS | 6 | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | <1 | <1 | <1 |
| Sodium | ppm | ASTM D5185m | | 0 | <1 | 1 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 3 | 0 |
| Water | % | ASTM D6304 | >0.05 | 0.003 | ▲ 0.660 | ▲ 0.388 |
| ppm Water | ppm | ASTM D6304 | >500 | 26.2 | ▲ 6600 | ▲ 3880 |
| FLUID CLEANLIN | NESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | | 25845 | | |
| Particles >6µm | | ASTM D7647 | >1300 | <u> </u> | | |
| Particles >14µm | | ASTM D7647 | >80 | 473 | | |
| Particles >21µm | | ASTM D7647 | >20 | <u> </u> | | |
| Particles >38µm | | ASTM D7647 | >4 | 2 | | |
| Particles >71µm | | ASTM D7647 | >3 | 0 | | |
| Oil Cleanliness | | ISO 4406 (c) | >/17/13 | 22/20/16 | | |
| FLUID DEGRADA | ATION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | 0.36 | 0.34 | 0.267 |
| | ing NOTI/g | 70 IN D0040 | 1.0 | 0.00 | 0.04 | |

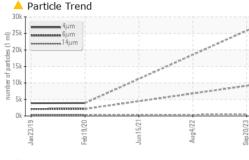
Report Id: SHEBURNC [WUSCAR] 05964219 (Generated: 10/01/2023 14:27:11) Rev: 1

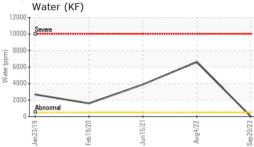
Contact/Location: K LANE - SHEBURNC

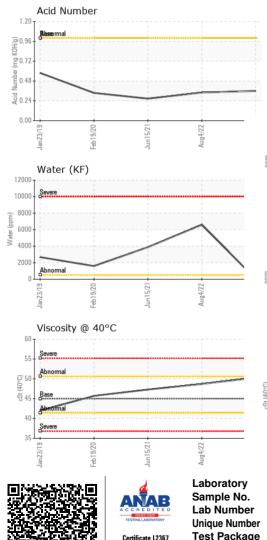
-COMPRESSORS

Built for a lifetime.

OIL ANALYSIS REPORT



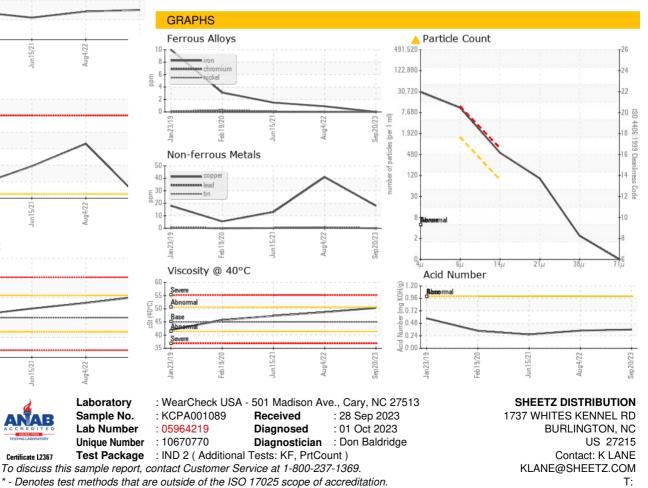




| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | VLITE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | 🔺 MODER | LIGHT |
| 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% | 0.2% |
| Free Water | scalar | *Visual | | NEG | ● >10% | ▲ 1.0 |
| FLUID PROPERT | IES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D445 | 45 | 50.3 | 48.7 | 47.3 |
| SAMPLE IMAGES | S | method | limit/base | current | history1 | history2 |
| Color | | | | | | - i |



Bottom



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

Contact/Location: K LANE - SHEBURNC

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