

PROBLEM SUMMARY

Sample Rating Trend

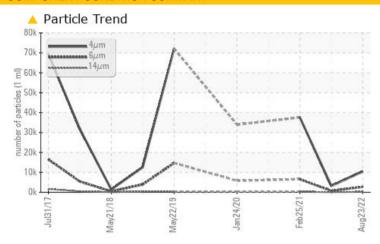
ISO

Machine Id KAESER SFC 18 4218749 (S/N 1003)

Compressor

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

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 | NORMAL | ABNORMAL | | |
| Particles >6µm | ASTM D7647 | >1300 | 2742 | 737 | △ 6546 | | |
| Particles >14μm | ASTM D7647 | >80 | 239 | 61 | △ 320 | | |
| Particles >21µm | ASTM D7647 | >20 | △ 58 | 19 | ▲ 87 | | |
| Oil Cleanliness | ISO 4406 (c) | >/17/13 | 2 1/19/15 | 17/13 | ▲ 20/15 | | |

Customer Id: PROPRO Sample No.: KCP33334 Lab Number: 05638102 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

24 May 2021 Diag: Angela Borella

NORMAL



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



25 Feb 2021 Diag: Angela Borella

150



The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



01 May 2020 Diag: Doug Bogart

NORMAL



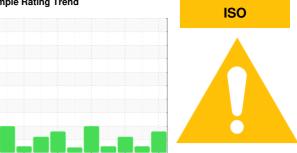
No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to insufficient sample. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend



KAESER SFC 18 4218749 (S/N 1003)

Compressor

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

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.

Fluid Condition

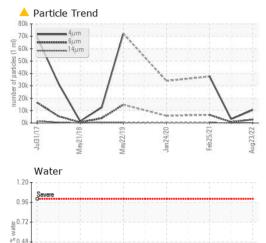
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | Jul2017 | May2018 May2019 | Jan 2020 Feb 2021 | Aug 2022 | |
|-----------------|--------|--------------|-----------------|-------------------|-------------|----------------|
| SAMPLE INFORM | MATION | method | limit/base | current | history 1 | history 2 |
| Sample Number | | | | KCP33334 | KC92616 | KCP27742 |
| Sample Date | | | | 23 Aug 2022 | 24 May 2021 | 25 Feb 2021 |
| Machine Age | hrs | | | 82044 | 72287 | 70578 |
| Oil Age | hrs | | | 3490 | 1709 | 4796 |
| Oil Changed | | | | Not Changd | Changed | Not Changd |
| Sample Status | | | | ABNORMAL | NORMAL | ABNORMAL |
| WEAR METALS | | method | limit/base | current | history 1 | history 2 |
| Iron | ppm | ASTM D5185m | >50 | <1 | 0 | <1 |
| 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 | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | 0 | <1 | 1 |
| Lead | ppm | ASTM D5185m | >10 | <1 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >50 | 6 | 8 | 6 |
| Tin | ppm | ASTM D5185m | >10 | <1 | 0 | <1 |
| Antimony | ppm | ASTM D5185m | | | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history 1 | history 2 |
| Boron | ppm | ASTM D5185m | | 0 | 20 | 10 |
| Barium | ppm | ASTM D5185m | 90 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | 90 | <1 | 7 | 13 |
| Calcium | ppm | ASTM D5185m | 2 | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | | 3 | 4 | 1 |
| Zinc | ppm | ASTM D5185m | | 16 | 13 | 18 |
| Sulfur | ppm | ASTM D5185m | | 17183 | 15256 | 16272 |
| CONTAMINANTS | | method | limit/base | current | history 1 | history 2 |
| Silicon | ppm | ASTM D5185m | >25 | <1 | <1 | <1 |
| Sodium | ppm | ASTM D5185m | | <1 | 3 | 12 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | 2 |
| Water | % | ASTM D6304 | >0.05 | 0.002 | 0.013 | 0.005 |
| ppm Water | ppm | ASTM D6304 | >500 | 24.8 | 132.6 | 51.0 |
| FLUID CLEANLIN | IESS | method | limit/base | current | history 1 | history 2 |
| Particles >4µm | | ASTM D7647 | | 10460 | 3163 | 37564 |
| Particles >6µm | | ASTM D7647 | >1300 | <u>^</u> 2742 | 737 | △ 6546 |
| Particles >14μm | | ASTM D7647 | >80 | 239 | 61 | ▲ 320 |
| Particles >21µm | | ASTM D7647 | >20 | <u>▲</u> 58 | 19 | ▲ 87 |
| Particles >38μm | | ASTM D7647 | >4 | 3 | 1 | 6 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >/17/13 | <u>21/19/15</u> | 17/13 | <u>^</u> 20/15 |
| FLUID DEGRADA | TION | method | limit/base | current | history 1 | history 2 |
| | 1/011/ | 4.0T14.D0045 | 0.4 | | 0.004 | 0.054 |

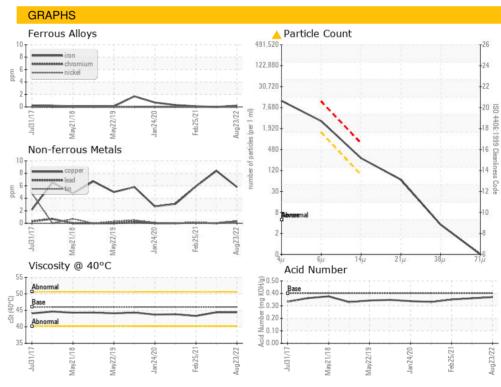


0.00

OIL ANALYSIS REPORT



| VISUAL | | method | limit/base | current | history 1 | history 2 |
|-------------------------|--------|-----------|------------|---------|-----------|-----------|
| 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 | LIGHT | NONE | 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 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPERT | ΓIES | method | limit/base | current | history 1 | history 2 |
| Visc @ 40°C | cSt | ASTM D445 | 46 | 44.4 | 44.4 | 43.3 |
| SAMPLE IMAGES | S | method | limit/base | current | history 1 | history 2 |
| Color | | | | | | |
| Bottom | | | | | | |







Feb25/21

Laboratory Sample No. Lab Number Unique Number : 10127632 Test Package : IND 2 (Additional Tests: KF, PrtCount)

: KCP33334 : 05638102

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received Diagnosed

: 09 Sep 2022 : 13 Sep 2022

Diagnostician : Don Baldridge

USA 02918 Contact: SERVICE MANAGER

PROVIDENCE COLLEGE

549 RIVER AVE

PROVIDENCE, RI

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.

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