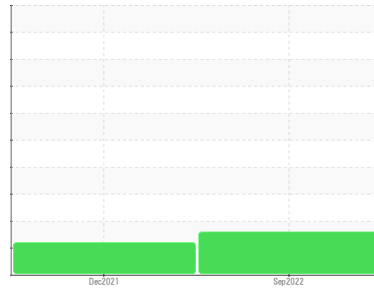


PROBLEM SUMMARY

Sample Rating Trend



ISO



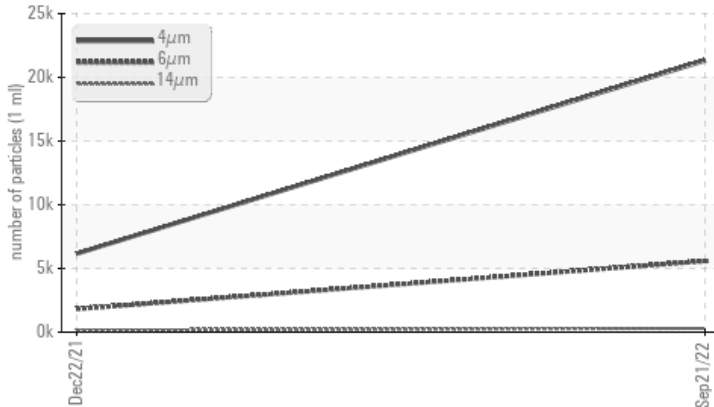
Machine Id
KAESER 6331311

Component
Compressor

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

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

| Sample Status | | | ABNORMAL | ATTENTION | --- |
|-----------------|--------------|--------|-----------------|-----------|-----|
| Particles >6µm | ASTM D7647 | >1300 | ▲ 5577 | ▲ 1817 | --- |
| Particles >14µm | ASTM D7647 | >80 | ▲ 296 | ▲ 153 | --- |
| Particles >21µm | ASTM D7647 | >20 | ▲ 37 | ▲ 35 | --- |
| Oil Cleanliness | ISO 4406 (c) | >17/13 | ▲ 20/15 | ▲ 18/14 | --- |

Customer Id: RIGBER
Sample No.: KCP50178
Lab Number: 05648946
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
jhester@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

22 Dec 2021 Diag: Jonathan Hester

ISO



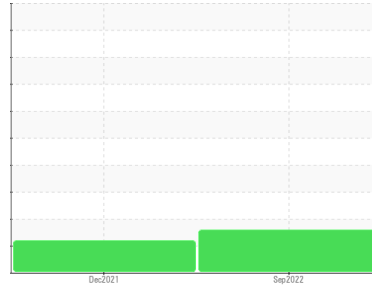
No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report





Machine Id
KAESER 6331311
Component
Compressor
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)



DIAGNOSIS

▲ Recommendation

Oil and 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.

SAMPLE INFORMATION

| | method | limit/base | current | history 1 | history 2 |
|---------------|--------|------------|--------------------|-------------|-----------|
| Sample Number | | | KCP50178 | KCP30122 | --- |
| Sample Date | | | 21 Sep 2022 | 22 Dec 2021 | --- |
| Machine Age | hrs | | 35380 | 28999 | --- |
| Oil Age | hrs | | 3000 | 2127 | --- |
| Oil Changed | | | Changed | Changed | --- |
| Sample Status | | | ABNORMAL | ATTENTION | --- |

WEAR METALS

| | method | limit/base | current | history 1 | history 2 |
|----------|-----------------|------------|------------|-----------|-----------|
| Iron | ppm ASTM D5185m | >50 | 0 | <1 | --- |
| Chromium | ppm ASTM D5185m | >10 | 0 | 0 | --- |
| Nickel | ppm ASTM D5185m | >3 | 0 | 0 | --- |
| Titanium | ppm ASTM D5185m | >3 | 0 | 0 | --- |
| Silver | ppm ASTM D5185m | >2 | 0 | 0 | --- |
| Aluminum | ppm ASTM D5185m | >10 | 0 | <1 | --- |
| Lead | ppm ASTM D5185m | >10 | 0 | 0 | --- |
| Copper | ppm ASTM D5185m | >50 | 16 | 3 | --- |
| Tin | ppm ASTM D5185m | >10 | 0 | 0 | --- |
| Antimony | ppm ASTM D5185m | | --- | 0 | --- |
| Vanadium | ppm ASTM D5185m | | 0 | 0 | --- |
| Cadmium | ppm ASTM D5185m | | 0 | 0 | --- |

ADDITIVES

| | method | limit/base | current | history 1 | history 2 |
|------------|-----------------|------------|--------------|-----------|-----------|
| Boron | ppm ASTM D5185m | 0 | 0 | 0 | --- |
| Barium | ppm ASTM D5185m | 90 | 0 | 11 | --- |
| Molybdenum | ppm ASTM D5185m | 0 | 0 | 0 | --- |
| Manganese | ppm ASTM D5185m | | 0 | 0 | --- |
| Magnesium | ppm ASTM D5185m | 100 | <1 | 29 | --- |
| Calcium | ppm ASTM D5185m | 0 | 0 | <1 | --- |
| Phosphorus | ppm ASTM D5185m | 0 | 11 | 5 | --- |
| Zinc | ppm ASTM D5185m | 0 | 30 | 21 | --- |
| Sulfur | ppm ASTM D5185m | 23500 | 22047 | 15586 | --- |

CONTAMINANTS

| | method | limit/base | current | history 1 | history 2 |
|-----------|-----------------|------------|--------------|-----------|-----------|
| Silicon | ppm ASTM D5185m | >25 | <1 | <1 | --- |
| Sodium | ppm ASTM D5185m | | <1 | 4 | --- |
| Potassium | ppm ASTM D5185m | >20 | 0 | 0 | --- |
| Water | % ASTM D6304 | >0.05 | 0.010 | 0.020 | --- |
| ppm Water | ppm ASTM D6304 | >500 | 104.5 | 204.7 | --- |

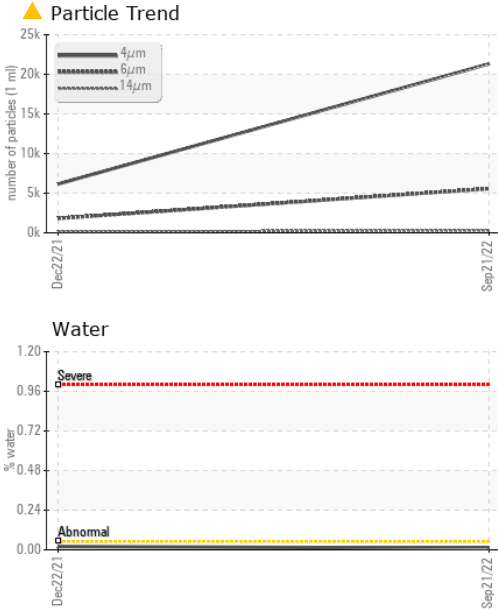
FLUID CLEANLINESS

| | method | limit/base | current | history 1 | history 2 |
|-----------------|--------------|------------|----------------|-----------|-----------|
| Particles >4µm | ASTM D7647 | | 21322 | 6161 | --- |
| Particles >6µm | ASTM D7647 | >1300 | ▲ 5577 | ▲ 1817 | --- |
| Particles >14µm | ASTM D7647 | >80 | ▲ 296 | ▲ 153 | --- |
| Particles >21µm | ASTM D7647 | >20 | ▲ 37 | ▲ 35 | --- |
| Particles >38µm | ASTM D7647 | >4 | 1 | 0 | --- |
| Particles >71µm | ASTM D7647 | >3 | 1 | 0 | --- |
| Oil Cleanliness | ISO 4406 (c) | >17/13 | ▲ 20/15 | ▲ 18/14 | --- |

FLUID DEGRADATION

| | method | limit/base | current | history 1 | history 2 |
|------------------|---------------------|------------|-------------|-----------|-----------|
| Acid Number (AN) | mg KOH/g ASTM D8045 | 1.0 | 0.37 | 0.319 | --- |

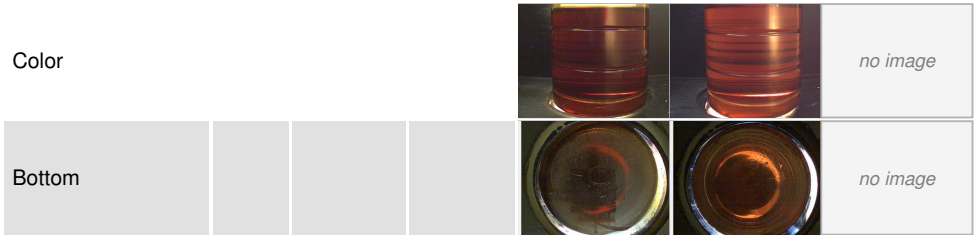
OIL ANALYSIS REPORT



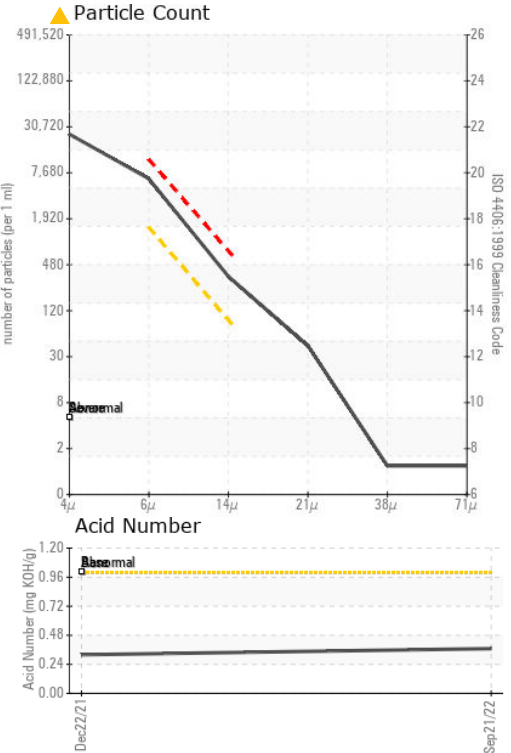
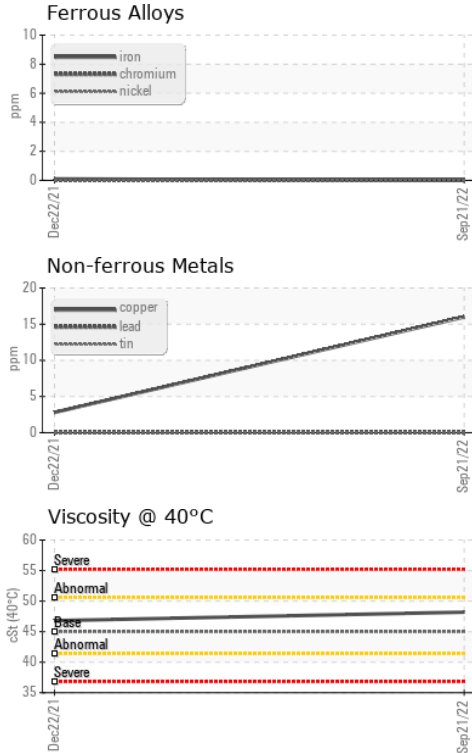
| VISUAL | method | limit/base | current | history 1 | history 2 |
|------------------|--------|------------|---------|-----------|-----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE | --- |
| 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 PROPERTIES | method | limit/base | current | history 1 | history 2 |
|------------------|--------|------------|---------|-----------|-----------|
| Visc @ 40°C | cSt | ASTM D445 | 45 | 48.2 | 46.8 |

| SAMPLE IMAGES | method | limit/base | current | history 1 | history 2 |
|---------------|--------|------------|---------|-----------|-----------|
|---------------|--------|------------|---------|-----------|-----------|



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP50178 **Received** : 22 Sep 2022
Lab Number : 05648946 **Diagnosed** : 26 Sep 2022
Unique Number : 10143485 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

RIGETH CO INC
 775 HEINZ AVE
 BERKELEY, CA
 USA 94710
 Contact: Service Manager

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)

T:
F: