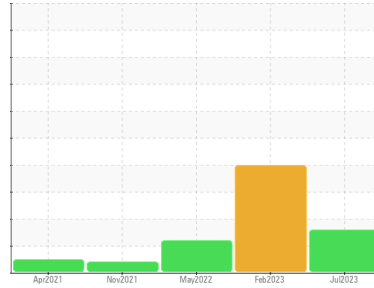




PROBLEM SUMMARY

Sample Rating Trend



WATER

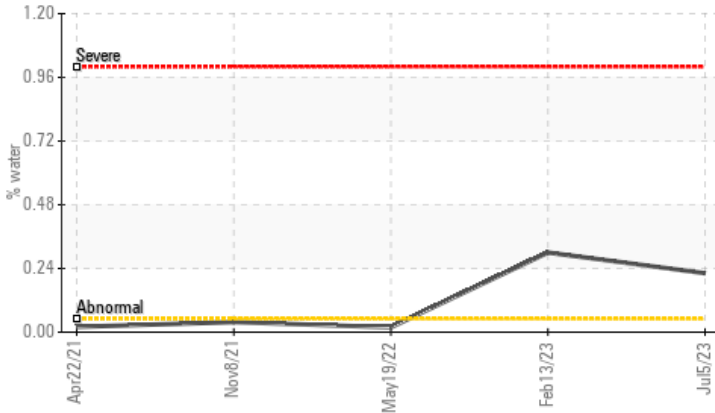


Machine Id
KAESER 6086885

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

COMPONENT CONDITION SUMMARY

▲ Water



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We were unable to perform a particle count on this sample. We recommend an early resample in 500 hours to monitor this condition.

PROBLEMATIC TEST RESULTS

| Sample Status | | | | ABNORMAL | ABNORMAL | ATTENTION |
|------------------|--------|------------|-------|-----------------|----------|-----------|
| Water | % | ASTM D6304 | >0.05 | ▲ 0.222 | ▲ 0.300 | 0.018 |
| ppm Water | ppm | ASTM D6304 | >500 | ▲ 2220 | ▲ 3000 | 186.8 |
| Emulsified Water | scalar | *Visual | >0.05 | ▲ 0.2% | ▲ 0.2% | NEG |

Customer Id: AMAVAC
Sample No.: KCPA003336
Lab Number: 05899967
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

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. |
| Alert | --- | --- | ? | We were unable to perform a particle count due to a high concentration of particles present in this sample. |

HISTORICAL DIAGNOSIS

13 Feb 2023 Diag: Angela Borella

WATER



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. All component wear rates are normal. There is a light concentration of water present in the oil. Free water present. 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 acceptable for the time in service.

[view report](#)



19 May 2022 Diag: Doug Bogart

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](#)



08 Nov 2021 Diag: Angela Borella

ISO



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

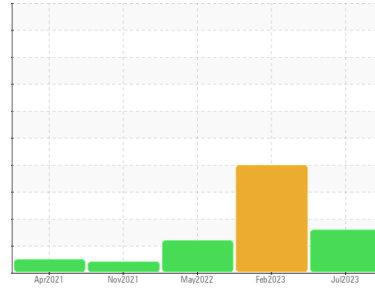
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
KAESER 6086885

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

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We were unable to perform a particle count on this sample. We recommend an early resample in 500 hours to monitor this condition.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | KCPA003336 | KCP49174 | KCP51223 |
| Sample Date | Client Info | | 05 Jul 2023 | 13 Feb 2023 | 19 May 2022 |
| Machine Age | hrs | Client Info | 27186 | 25601 | 23134 |
| Oil Age | hrs | Client Info | 0 | 0 | 3000 |
| Oil Changed | Client Info | | Changed | Not Changd | Changed |
| Sample Status | | | ABNORMAL | ABNORMAL | ATTENTION |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|---------|----------|----------|
| Iron | ppm | ASTM D5185m >50 | <1 | 5 | 0 |
| Chromium | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m >3 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m >3 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m >2 | 0 | <1 | <1 |
| Aluminum | ppm | ASTM D5185m >10 | <1 | <1 | 1 |
| Lead | ppm | ASTM D5185m >10 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185m >50 | <1 | 2 | <1 |
| Tin | ppm | ASTM D5185m >10 | 0 | 0 | <1 |
| Antimony | ppm | ASTM D5185m | --- | --- | --- |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------------|---------|----------|----------|
| Boron | ppm | ASTM D5185m 0 | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m 90 | 2 | 2 | 2 |
| Molybdenum | ppm | ASTM D5185m 0 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m 100 | 44 | 29 | 63 |
| Calcium | ppm | ASTM D5185m 0 | 0 | <1 | 0 |
| Phosphorus | ppm | ASTM D5185m 0 | 4 | 44 | 7 |
| Zinc | ppm | ASTM D5185m 0 | 9 | 60 | 7 |
| Sulfur | ppm | ASTM D5185m 23500 | 25188 | 16739 | 19053 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|---------|----------|----------|
| Silicon | ppm | ASTM D5185m >25 | 1 | 0 | 1 |
| Sodium | ppm | ASTM D5185m | 7 | 3 | 12 |
| Potassium | ppm | ASTM D5185m >20 | 1 | 1 | 2 |
| Water | % | ASTM D6304 >0.05 | ▲ 0.222 | ▲ 0.300 | 0.018 |
| ppm Water | ppm | ASTM D6304 >500 | ▲ 2220 | ▲ 3000 | 186.8 |

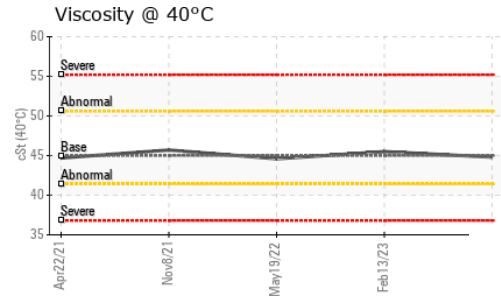
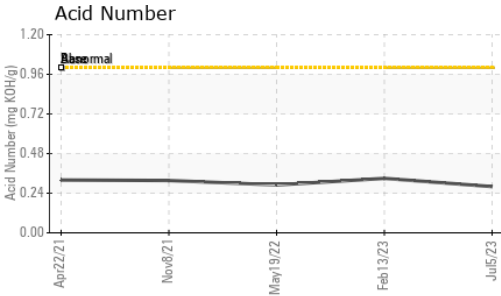
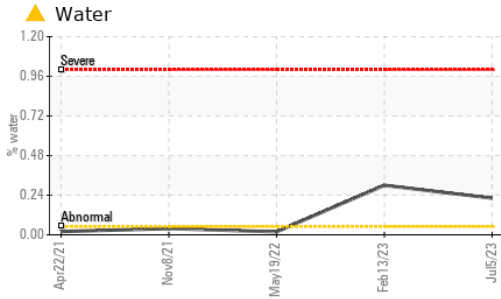
FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|---------|----------|------------|
| Particles >4µm | ASTM D7647 | | --- | 626 | 5635 |
| Particles >6µm | ASTM D7647 | >1300 | --- | 341 | ▲ 1479 |
| Particles >14µm | ASTM D7647 | >80 | --- | 58 | ▲ 116 |
| Particles >21µm | ASTM D7647 | >20 | --- | 20 | 19 |
| Particles >38µm | ASTM D7647 | >4 | --- | 3 | 1 |
| Particles >71µm | ASTM D7647 | >3 | --- | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >--/17/13 | --- | 16/16/13 | ▲ 20/18/14 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|----------------|---------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 1.0 | 0.28 | 0.33 | 0.29 |

OIL ANALYSIS REPORT



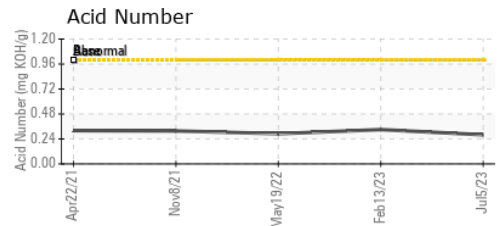
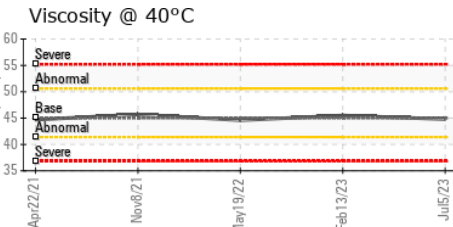
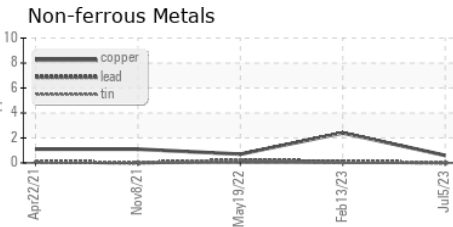
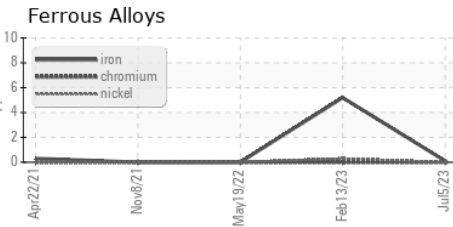
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|---------------|----------|
| White Metal | scalar | *Visual | NONE | HEAVY | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | VLITE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | ▲ HAZY |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.05 | ▲ 0.2% | ▲ 0.2% |
| Free Water | scalar | *Visual | | NEG | ▲ 1.0 |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|-------------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 45 | 44.8 | 45.5 |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA003336 **Received** : 17 Jul 2023
Lab Number : 05899967 **Diagnosed** : 18 Jul 2023
Unique Number : 10561323 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

AMAZON
 300 CROCKER DR
 VACAVILLE, CA
 US 95688
 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: