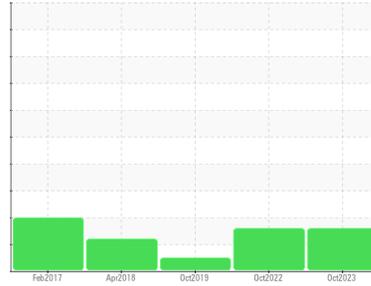




PROBLEM SUMMARY

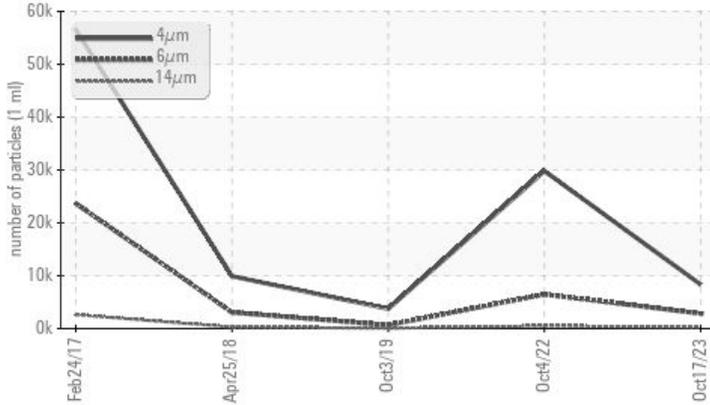
Sample Rating Trend



Machine Id
KAESER AS 20T 5559554 (S/N 1120)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



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 | ABNORMAL | NORMAL |
|-----------------|--------------|--------|----------|----------|--------|
| Particles >6µm | ASTM D7647 | >1300 | ▲ 2840 | ▲ 6474 | 654 |
| Particles >14µm | ASTM D7647 | >80 | ▲ 257 | ▲ 495 | 50 |
| Particles >21µm | ASTM D7647 | >20 | ▲ 65 | ▲ 147 | 17 |
| Oil Cleanliness | ISO 4406 (c) | >17/13 | ▲ 19/15 | ▲ 20/16 | 17/13 |

Customer Id: CHUWALMD
 Sample No.: KCPA006892
 Lab Number: 05999847
 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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

04 Oct 2022 Diag: Angela Borella

ISO



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 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.

view report



03 Oct 2019 Diag: Don Baldrige

NORMAL



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. 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.

view report



25 Apr 2018 Diag: Angela Borella

ISO



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 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.

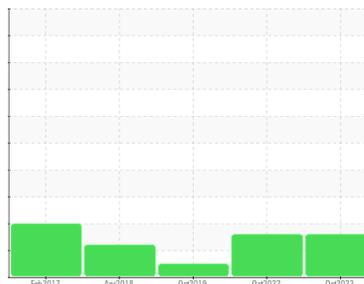
view report



Machine Id
KAESER AS 20T 5559554 (S/N 1120)

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.

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 | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | | KCPA006892 | KCP47279D | KCP21145 |
| Sample Date | Client Info | | | 17 Oct 2023 | 04 Oct 2022 | 03 Oct 2019 |
| Machine Age | hrs | Client Info | | 21714 | 19055 | 10876 |
| Oil Age | hrs | Client Info | | 0 | 2346 | 4000 |
| Oil Changed | Client Info | | | N/A | Changed | Changed |
| Sample Status | | | | ABNORMAL | ABNORMAL | NORMAL |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|------------|----------|----------|
| Iron | ppm | ASTM D5185m | >50 | 0 | <1 | <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 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Lead | ppm | ASTM D5185m | >10 | 0 | 2 | 0 |
| Copper | ppm | ASTM D5185m | >50 | 16 | 13 | 28 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | <1 |
| Antimony | ppm | ASTM D5185m | | --- | --- | 2 |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |

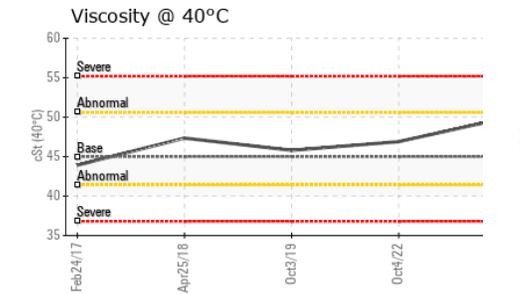
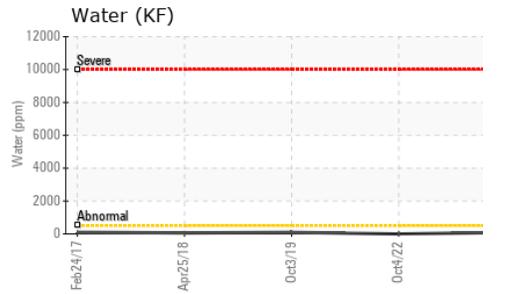
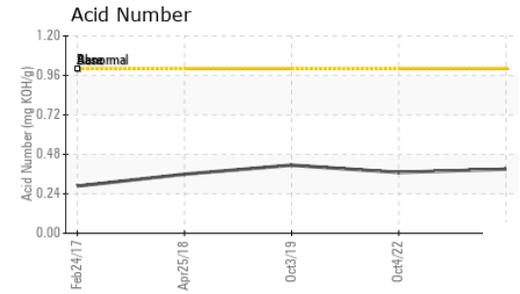
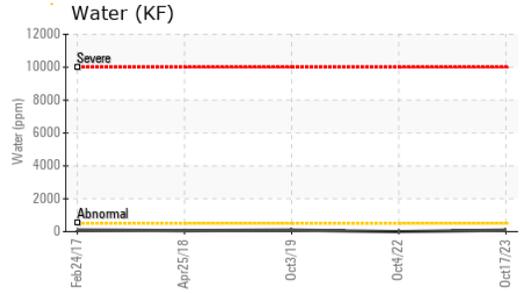
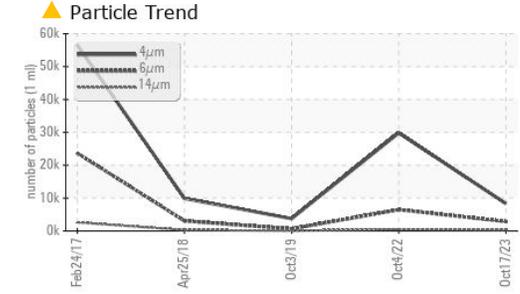
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 0 | 0 | 0 | <1 |
| Barium | ppm | ASTM D5185m | 90 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 | <1 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | 100 | 7 | 11 | 0 |
| Calcium | ppm | ASTM D5185m | 0 | <1 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 0 | 2 | 16 | 1 |
| Zinc | ppm | ASTM D5185m | 0 | 62 | 58 | 6 |
| Sulfur | ppm | ASTM D5185m | 23500 | 17849 | 22594 | 9013 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >25 | <1 | 1 | <1 |
| Sodium | ppm | ASTM D5185m | | 2 | 4 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | <1 | <1 |
| Water | % | ASTM D6304 | >0.05 | 0.009 | 0.00 | 0.009 |
| ppm Water | ppm | ASTM D6304 | >500 | 90.3 | 0.00 | 93.6 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--|--------------|------------|----------------|----------|----------|
| Particles >4µm | | ASTM D7647 | | 8337 | 29813 | 3746 |
| Particles >6µm | | ASTM D7647 | >1300 | ▲ 2840 | ▲ 6474 | 654 |
| Particles >14µm | | ASTM D7647 | >80 | ▲ 257 | ▲ 495 | 50 |
| Particles >21µm | | ASTM D7647 | >20 | ▲ 65 | ▲ 147 | 17 |
| Particles >38µm | | ASTM D7647 | >4 | 3 | 5 | 1 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >17/13 | ▲ 19/15 | ▲ 20/16 | 17/13 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | 0.39 | 0.37 | 0.414 |

OIL ANALYSIS REPORT

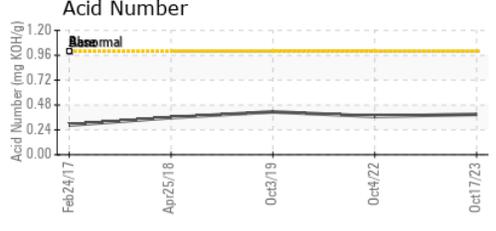
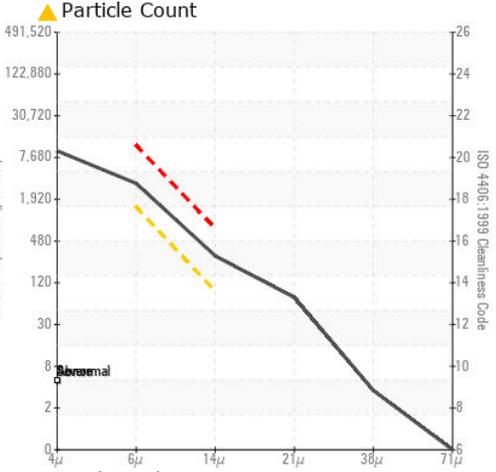
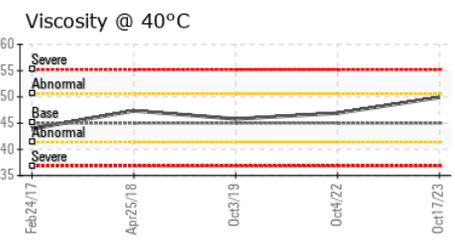
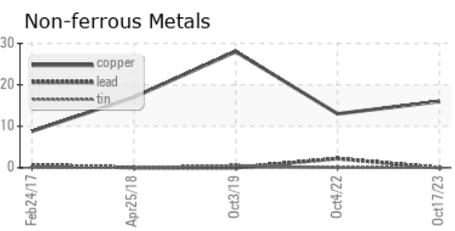
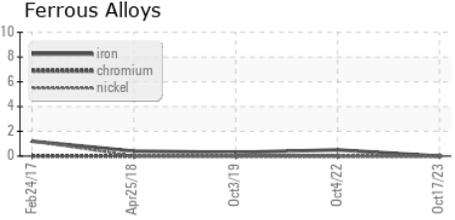


| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE |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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 45 | 49.9 | 46.9 |

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA006892 **Received** : 06 Nov 2023
Lab Number : 05999847 **Diagnosed** : 08 Nov 2023
Unique Number : 10728207 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

CHUTES
 33 INDUSTRIAL PARK DR
 WALDORF, MD
 US 20602
 Contact: NELSON GUZMAN
 nelson.guzman@chutes.com
 T:
 F:

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)