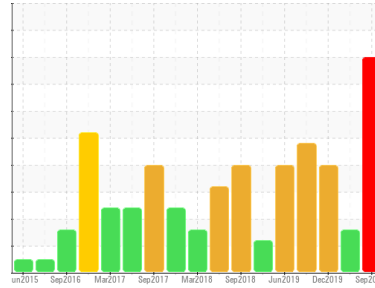


PROBLEM SUMMARY

Sample Rating Trend



WATER

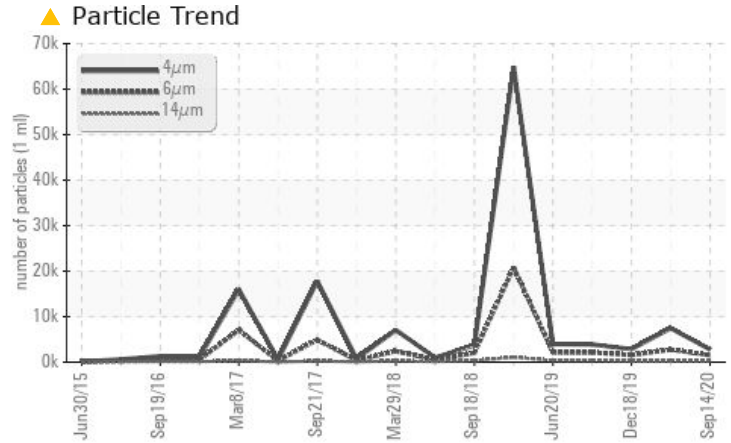
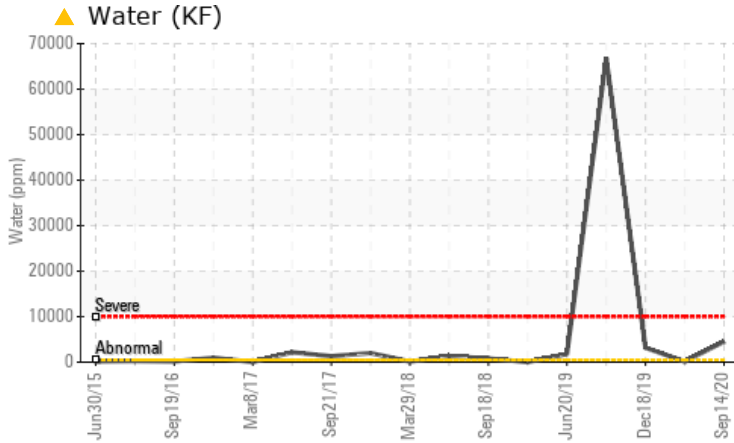


Machine Id
KAESER SK 7.5 4702064 (S/N 1135)

Component
Compressor

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you shut down the unit and follow the water drain-off procedure for this component. The filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

PROBLEMATIC TEST RESULTS

| Sample Status | | | | SEVERE | ABNORMAL | ABNORMAL |
|-----------------|--------|--------------|--------|---------|----------|----------|
| Water | % | ASTM D6304 | >0.05 | ▲ 0.452 | 0.014 | ▲ 0.317 |
| ppm Water | ppm | ASTM D6304 | >500 | ▲ 4520 | 140.4 | ▲ 3170 |
| Particles >6µm | | ASTM D7647 | >1300 | ▲ 1510 | ▲ 2752 | ▲ 1557 |
| Particles >14µm | | ASTM D7647 | >80 | ▲ 257 | ▲ 286 | ▲ 265 |
| Particles >21µm | | ASTM D7647 | >20 | ▲ 87 | ▲ 89 | ▲ 89 |
| Particles >38µm | | ASTM D7647 | >4 | ▲ 13 | ▲ 5 | ▲ 13 |
| Oil Cleanliness | | ISO 4406 (c) | >17/13 | ▲ 18/15 | ▲ 19/15 | ▲ 18/15 |
| Free Water | scalar | *Visual | | ◆ 1.0 | NEG | NEG |

Customer Id: Mergai
Sample No.: KC05075874
Lab Number: 05075874
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
angela.borella@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 |
|-----------------|--------|------|---------|---|
| Water Drain-off | --- | --- | ? | We advise that you follow the water drain-off procedure for this component. |
| Resample | --- | --- | ? | We recommend an early resample to monitor this condition. |

HISTORICAL DIAGNOSIS

09 Apr 2020 Diag: Jonathan Hester

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



18 Dec 2019 Diag: Jonathan Hester

WATER



We advise that you stop the unit and follow the water drain-off procedure for this component. The filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition. 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.

view report



24 Sep 2019 Diag: Jonathan Hester

WATER



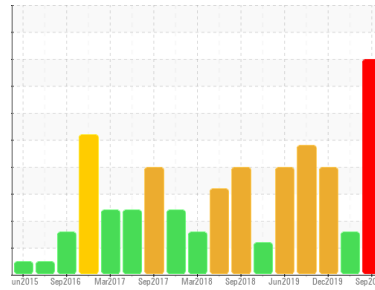
We advise that you stop the unit and follow the water drain-off procedure for this component. The filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition. All component wear rates are normal. There is a high amount of particulates present in the oil. There is a high 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.

view report



OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
KAESER SK 7.5 4702064 (S/N 1135)

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

DIAGNOSIS

Recommendation

We advise that you shut down the unit and follow the water drain-off procedure for this component. The filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil. There is a light concentration of water present in the oil. Free water present.

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 | | KC05075874 | KC04958729 | KC04884895 |
| Sample Date | Client Info | | 14 Sep 2020 | 09 Apr 2020 | 18 Dec 2019 |
| Machine Age | hrs | Client Info | 37122 | 34849 | 33194 |
| Oil Age | hrs | Client Info | 2273 | 11049 | 4175 |
| Oil Changed | Client Info | | Not Changed | Changed | Not Changed |
| Sample Status | | | SEVERE | ABNORMAL | ABNORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|-----------|----------|----------|
| Iron | ppm | ASTM D5185m >50 | 0 | 0 | 0 |
| Chromium | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m >3 | 1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m >3 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >10 | 0 | <1 | 0 |
| Lead | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >50 | 15 | 7 | 12 |
| Tin | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185m | 0 | 0 | 0 |
| 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 | 10 | 0 | <1 |
| 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 | 0 | 0 |
| Calcium | ppm | ASTM D5185m 2 | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 2 | 0 | <1 |
| Zinc | ppm | ASTM D5185m | 8 | 0 | <1 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|----------------|----------|----------------|
| Silicon | ppm | ASTM D5185m >25 | <1 | <1 | <1 |
| Sodium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Potassium | ppm | ASTM D5185m >20 | <1 | 0 | 0 |
| Water | % | ASTM D6304 >0.05 | ▲ 0.452 | 0.014 | ▲ 0.317 |
| ppm Water | ppm | ASTM D6304 >500 | ▲ 4520 | 140.4 | ▲ 3170 |

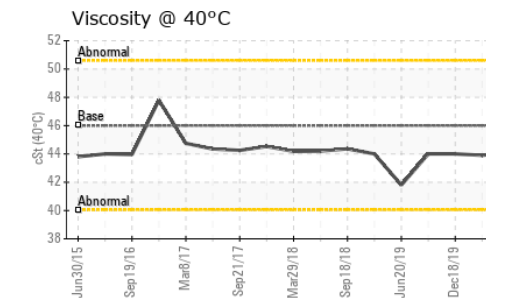
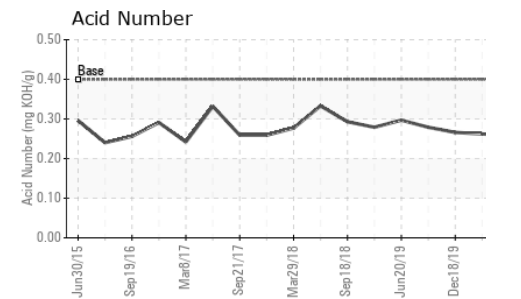
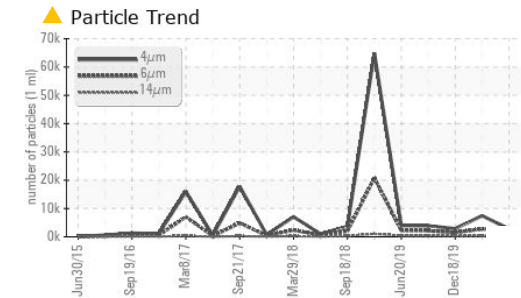
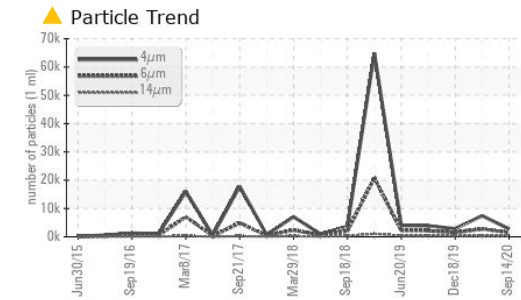
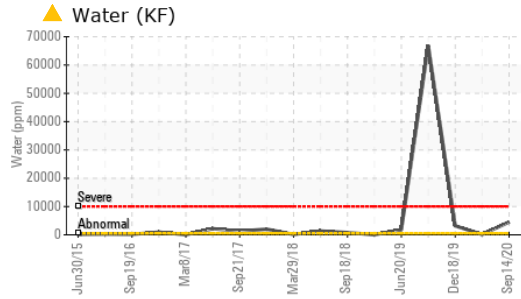
FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|----------------|----------------|----------------|
| Particles >4µm | ASTM D7647 | | 2773 | 7452 | 2859 |
| Particles >6µm | ASTM D7647 | >1300 | ▲ 1510 | ▲ 2752 | ▲ 1557 |
| Particles >14µm | ASTM D7647 | >80 | ▲ 257 | ▲ 286 | ▲ 265 |
| Particles >21µm | ASTM D7647 | >20 | ▲ 87 | ▲ 89 | ▲ 89 |
| Particles >38µm | ASTM D7647 | >4 | ▲ 13 | ▲ 5 | ▲ 13 |
| Particles >71µm | ASTM D7647 | >3 | 1 | 0 | 1 |
| Oil Cleanliness | ISO 4406 (c) | >17/13 | ▲ 18/15 | ▲ 19/15 | ▲ 18/15 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|----------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.4 | 0.259 | 0.262 | 0.266 |

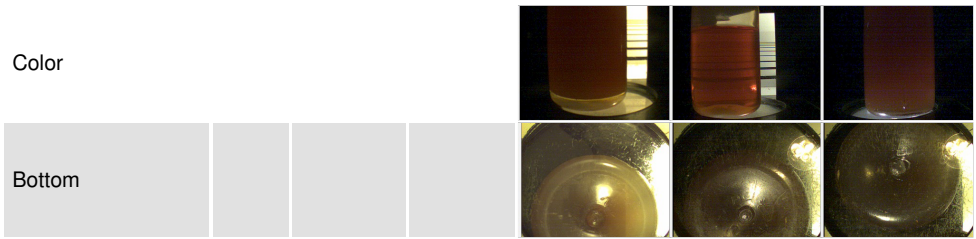
OIL ANALYSIS REPORT



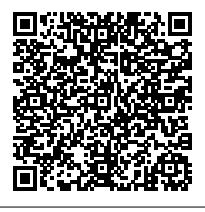
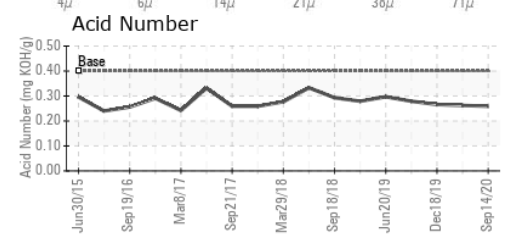
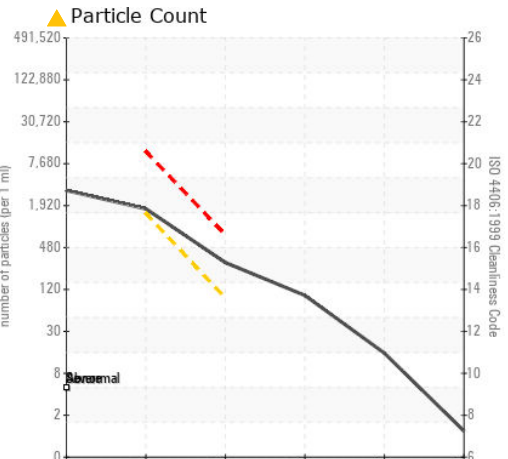
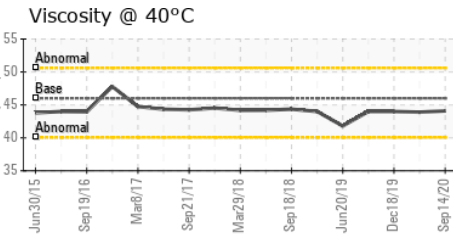
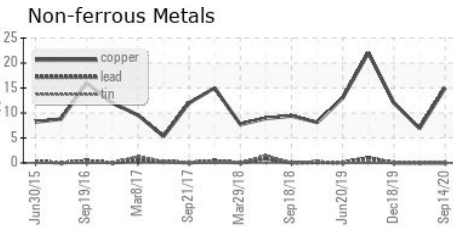
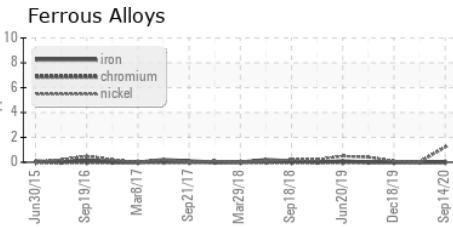
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE |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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 46 | 44.1 | 43.9 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC05075874
Lab Number : 05075874
Unique Number : 9191105
Test Package : IND 2

MERIAL SELECT - BOENRINGER
 1113 AIRPORT PKWY
 GAINESVILLE, GA
 US 30501
 Contact:

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: