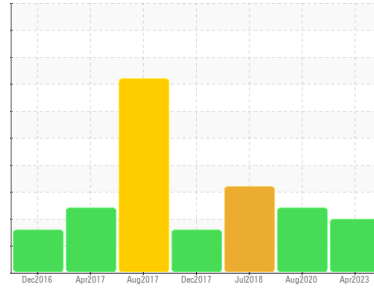




PROBLEM SUMMARY

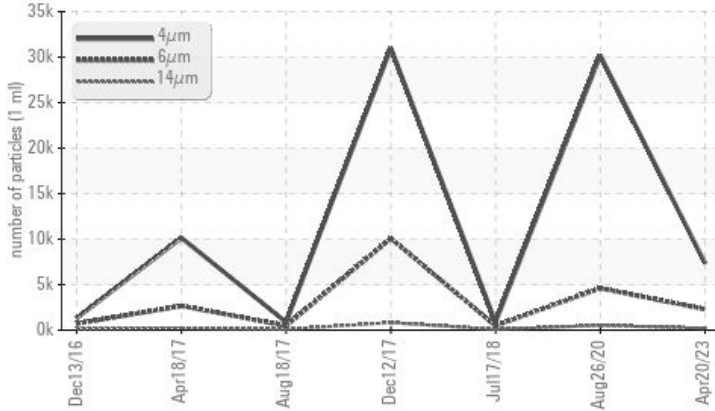
Sample Rating Trend



Machine Id
KAESER SFC 45 4624528 (S/N 1019)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-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 | ABNORMAL |
|-----------------|--------------|--------|----------|----------|----------|
| Particles >6µm | ASTM D7647 | >1300 | ▲ 2289 | ▲ 4600 | 481 |
| Particles >14µm | ASTM D7647 | >80 | ▲ 197 | ▲ 522 | ▲ 82 |
| Particles >21µm | ASTM D7647 | >20 | ▲ 68 | ▲ 173 | ▲ 27 |
| Particles >38µm | ASTM D7647 | >4 | ▲ 5 | ▲ 9 | 4 |
| Oil Cleanliness | ISO 4406 (c) | >17/13 | ▲ 18/15 | ▲ 19/16 | ▲ 16/14 |

Customer Id: FTEAUB
 Sample No.: KCPA000315
 Lab Number: 05933672
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

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

26 Aug 2020 Diag: Angela Borella

WEAR



The filter change at the time of sampling has been noted. The aluminum level is abnormal. All other 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



17 Jul 2018 Diag: Doug Bogart

WATER



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. The aluminum level is abnormal. There is a moderate 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.

view report



12 Dec 2017 Diag: Don Baldrige

ISO



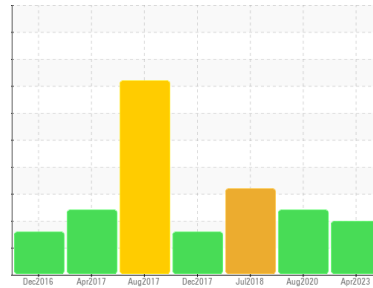
No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The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

view report



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER SFC 45 4624528 (S/N 1019)

Component
Compressor

Fluid
KAESER SIGMA (OEM) S-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 | | KCPA000315 | KCP30224 | KCP14547 |
| Sample Date | Client Info | | 20 Apr 2023 | 26 Aug 2020 | 17 Jul 2018 |
| Machine Age | hrs | Client Info | 36458 | 33486 | 30643 |
| Oil Age | hrs | Client Info | 0 | 4000 | 780 |
| Oil Changed | Client Info | | N/A | Not Changd | N/A |
| Sample Status | | | ABNORMAL | ABNORMAL | ABNORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|------------|----------|----------|
| Iron | ppm | ASTM D5185m >50 | 1 | 3 | 5 |
| 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 | <1 | 0 |
| Aluminum | ppm | ASTM D5185m >10 | 6 | ▲ 15 | ▲ 13 |
| Lead | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >50 | 3 | 20 | 9 |
| Tin | ppm | ASTM D5185m >10 | 0 | <1 | 0 |
| 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 | history1 | history2 |
|------------|--------|----------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 0 | <1 | <1 |
| Barium | ppm | ASTM D5185m 90 | 28 | <1 | <1 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m 90 | 52 | 2 | 1 |
| Calcium | ppm | ASTM D5185m 2 | 4 | <1 | 0 |
| Phosphorus | ppm | ASTM D5185m | 61 | 336 | 398 |
| Zinc | ppm | ASTM D5185m | 7 | 20 | 28 |
| Sulfur | ppm | ASTM D5185m | 19907 | 6522 | 11294 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >25 | 0 | 2 | 1 |
| Sodium | ppm | ASTM D5185m | 19 | 3 | 2 |
| Potassium | ppm | ASTM D5185m >20 | 3 | 2 | 2 |
| Water | % | ASTM D6304 >0.05 | 0.020 | 0.013 | ▲ 0.094 |
| ppm Water | ppm | ASTM D6304 >500 | 203.3 | 132.3 | ▲ 940 |

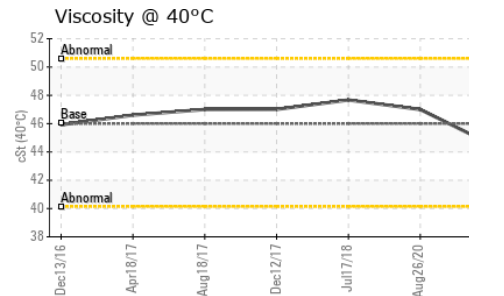
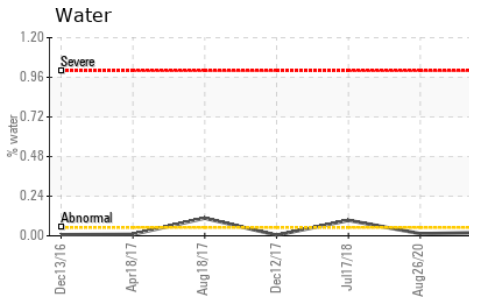
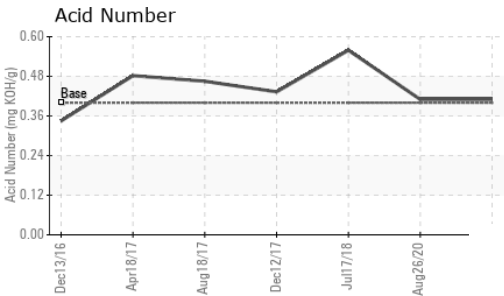
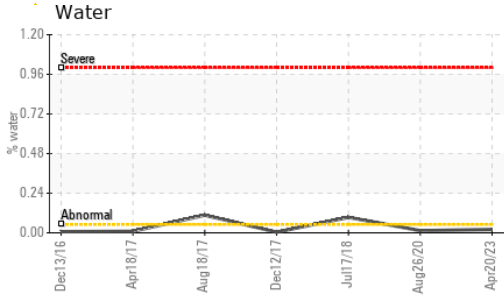
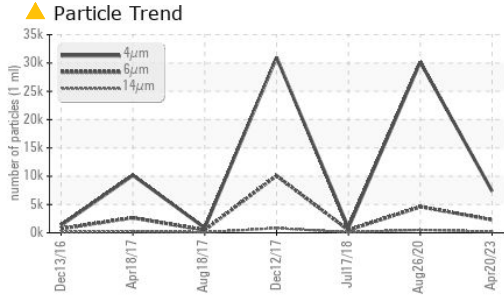
FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|------------------|------------|----------------|----------|----------|
| Particles >4µm | ASTM D7647 | | 7362 | 30173 | 884 |
| Particles >6µm | ASTM D7647 >1300 | | ▲ 2289 | ▲ 4600 | 481 |
| Particles >14µm | ASTM D7647 >80 | | ▲ 197 | ▲ 522 | ▲ 82 |
| Particles >21µm | ASTM D7647 >20 | | ▲ 68 | ▲ 173 | ▲ 27 |
| Particles >38µm | ASTM D7647 >4 | | ▲ 5 | ▲ 9 | 4 |
| Particles >71µm | ASTM D7647 >3 | | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >17/13 | ▲ 18/15 | ▲ 19/16 | ▲ 16/14 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.4 | 0.41 | 0.410 | 0.559 |

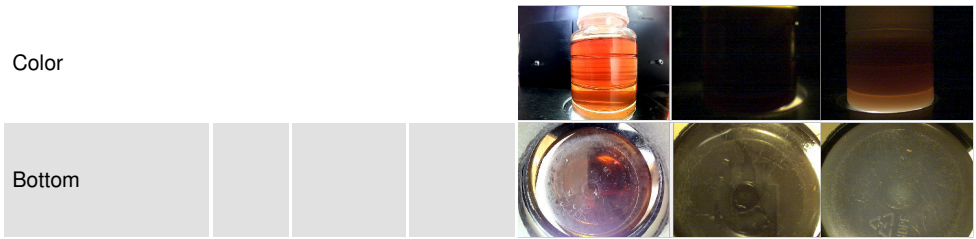
OIL ANALYSIS REPORT



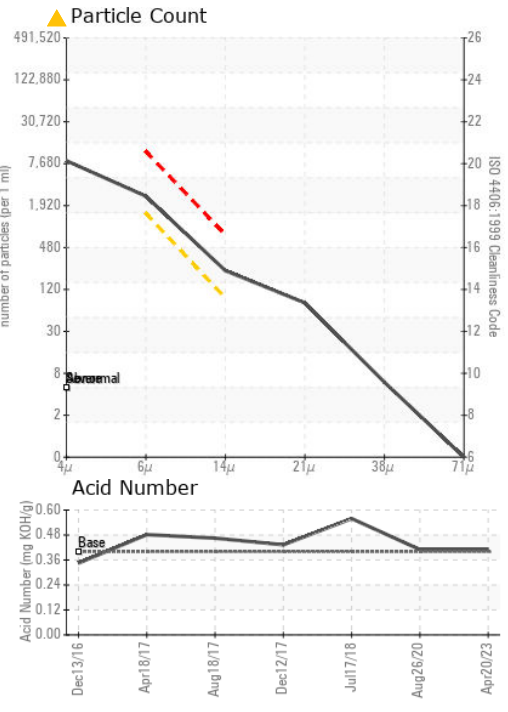
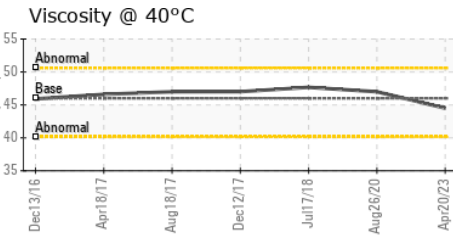
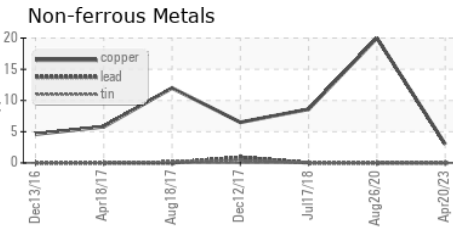
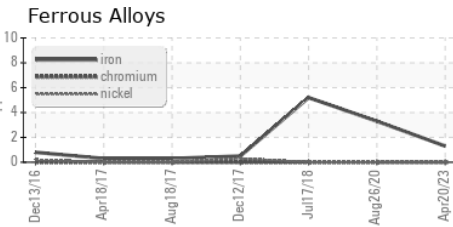
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | LIGHT | LIGHT |
| 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 | ▲ 0.1% |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|--------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 46 | 44.5 | 47.0 | 47.67 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA000315 **Received** : 24 Aug 2023
Lab Number : 05933672 **Diagnosed** : 25 Aug 2023
Unique Number : 10618943 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

FTE AUTOMOTIVE USA
 4000 PINNACLE CT
 AUBURN HILLS, MI
 US 48326
 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: