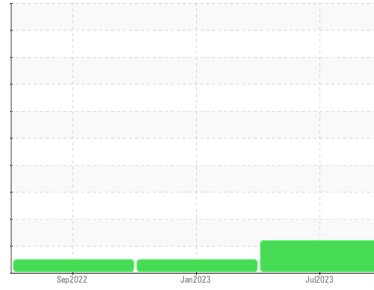




PROBLEM SUMMARY

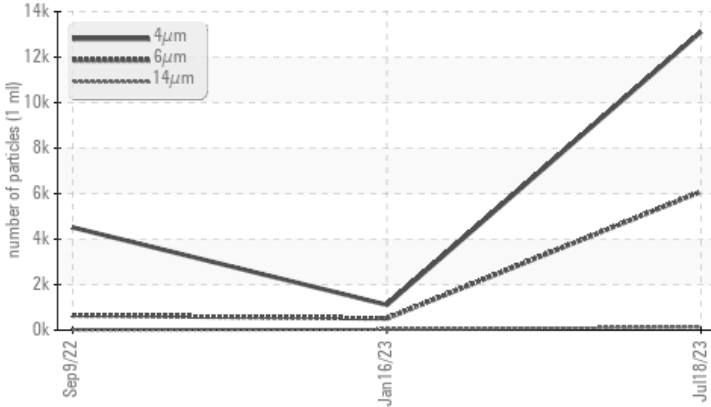
Sample Rating Trend



Machine Id
KAESER ASD40 8077875 (S/N 1408)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

| Sample Status | | | ABNORMAL | NORMAL | NORMAL |
|-----------------|--------------|-----------|-------------------|----------|----------|
| Particles >6µm | ASTM D7647 | >1300 | ▲ 6090 | 514 | 652 |
| Particles >14µm | ASTM D7647 | >80 | ▲ 133 | 34 | 14 |
| Oil Cleanliness | ISO 4406 (c) | >--/17/13 | ▲ 21/20/14 | 17/16/12 | 19/17/11 |

Customer Id: WINKEW
 Sample No.: KC05904386
 Lab Number: 05904386
 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 |
|---------------|--------|------|---------|---|
| Change Filter | --- | --- | ? | We recommend you service the filters on this component. |

HISTORICAL DIAGNOSIS

16 Jan 2023 Diag: Doug Bogart

NORMAL



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 no indication of any contamination in the oil. 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 suitable for further service.

view report



09 Sep 2022 Diag: Angela Borella

NORMAL



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. 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.

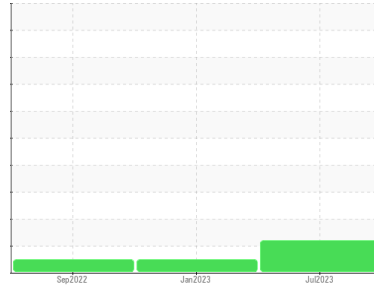
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER ASD40 8077875 (S/N 1408)

Component
Compressor

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

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. 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 acceptable for the time in service.

SAMPLE INFORMATION

| method | limit/base | current | history1 | history2 |
|---------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | KC05904386 | KC87091 | KC95836 |
| Sample Date | Client Info | 18 Jul 2023 | 16 Jan 2023 | 09 Sep 2022 |
| Machine Age | hrs | 5143 | 3420 | 2043 |
| Oil Age | hrs | 0 | 1197 | 2043 |
| Oil Changed | Client Info | N/A | Not Changd | Changed |
| Sample Status | | ABNORMAL | NORMAL | NORMAL |

WEAR METALS

| method | limit/base | current | history1 | history2 | |
|----------|------------|-----------------|--------------|----------|----|
| Iron | ppm | ASTM D5185m >50 | 0 | 0 | <1 |
| Chromium | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m >3 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m >3 | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >10 | <1 | 0 | <1 |
| Lead | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >50 | 15 | 4 | 9 |
| Tin | ppm | ASTM D5185m >10 | 0 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| method | limit/base | current | history1 | history2 | |
|------------|------------|----------------|--------------|----------|----|
| Boron | ppm | ASTM D5185m | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m 90 | 0 | 24 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | <1 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m 90 | 1 | 47 | 21 |
| Calcium | ppm | ASTM D5185m 2 | 0 | 1 | 0 |
| Phosphorus | ppm | ASTM D5185m | <1 | 9 | 1 |
| Zinc | ppm | ASTM D5185m | 0 | 10 | 21 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 | |
|-----------|------------|------------------|--------------|----------|-------|
| Silicon | ppm | ASTM D5185m >25 | 0 | 1 | <1 |
| Sodium | ppm | ASTM D5185m | 2 | 16 | 7 |
| Potassium | ppm | ASTM D5185m >20 | 0 | 7 | 5 |
| Water | % | ASTM D6304 >0.05 | 0.005 | 0.012 | 0.012 |
| ppm Water | ppm | ASTM D6304 >500 | 51.3 | 125.6 | 121.2 |

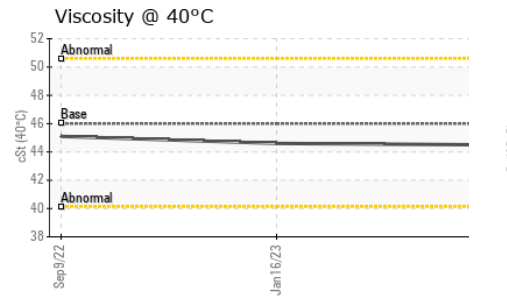
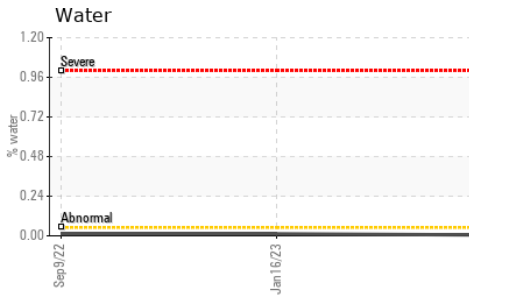
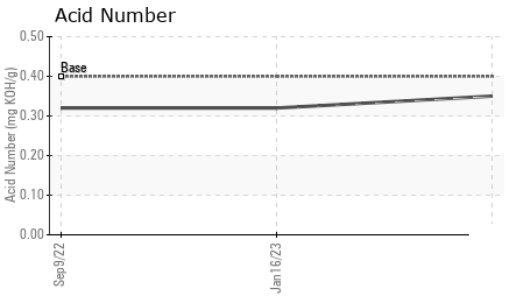
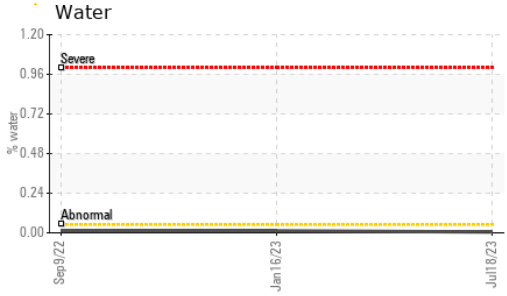
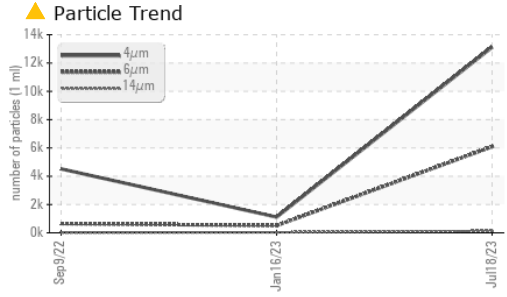
FLUID CLEANLINESS

| method | limit/base | current | history1 | history2 |
|-----------------|------------------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | 13115 | 1110 | 4517 |
| Particles >6µm | ASTM D7647 >1300 | 6090 | 514 | 652 |
| Particles >14µm | ASTM D7647 >80 | 133 | 34 | 14 |
| Particles >21µm | ASTM D7647 >20 | 13 | 7 | 2 |
| Particles >38µm | ASTM D7647 >4 | 0 | 1 | 0 |
| Particles >71µm | ASTM D7647 >3 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) >--/17/13 | 21/20/14 | 17/16/12 | 19/17/11 |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 | |
|------------------|------------|----------------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.4 | 0.35 | 0.32 | 0.32 |

OIL ANALYSIS REPORT

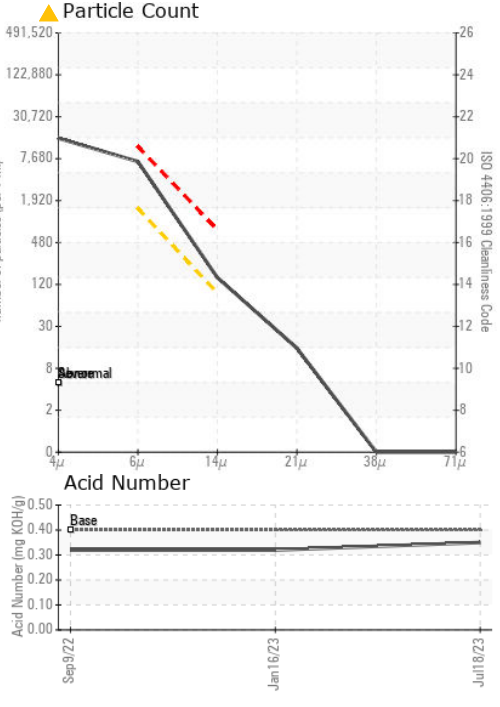
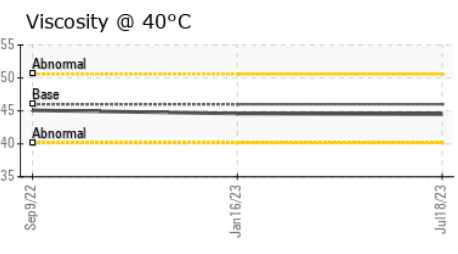
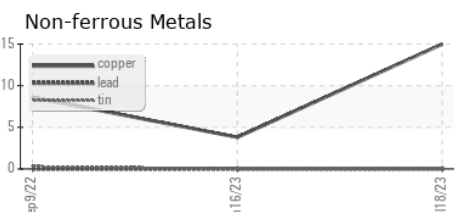
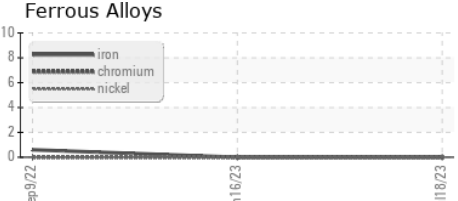


| PARAMETER | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | LIGHT |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | 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 | 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 46 | 44.5 | 44.6 | 45.1 |

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC05904386 **Received** : 21 Jul 2023
Lab Number : 05904386 **Diagnosed** : 25 Jul 2023
Unique Number : 10565742 **Diagnostician** : Angela Borella
Test Package : IND 2

WINAMAC COIL
 521 N SMITH ST
 KEWANA, IN
 US 46939
 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: