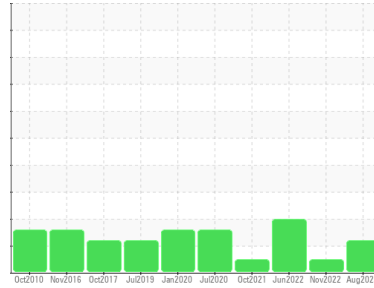




PROBLEM SUMMARY

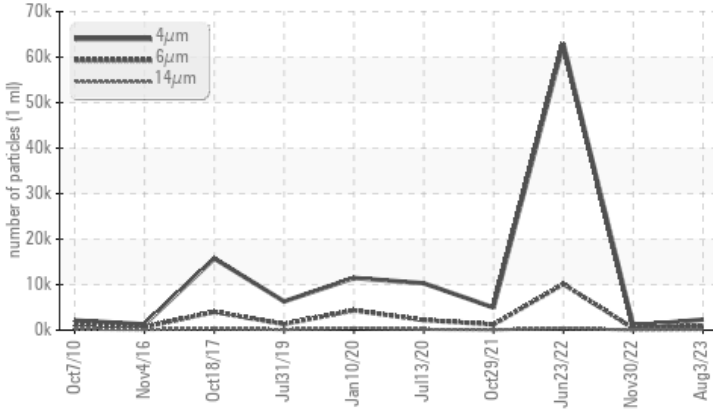
Sample Rating Trend



Machine Id
KAESER ASD 30 3727067 (S/N 1535)
 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 | | | ATTENTION | NORMAL | ABNORMAL |
|-----------------|--------------|-----------|------------|----------|------------|
| Particles >14µm | ASTM D7647 | >80 | ▲ 112 | 25 | ▲ 410 |
| Particles >21µm | ASTM D7647 | >20 | ▲ 28 | 4 | ▲ 74 |
| Oil Cleanliness | ISO 4406 (c) | >--/17/13 | ▲ 18/17/14 | 17/16/12 | ▲ 23/21/16 |

Customer Id: UPSPHI
 Sample No.: KCPA005672
 Lab Number: 05931546
 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

30 Nov 2022 Diag: Angela Borella

NORMAL



No corrective action is recommended at this time. 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 suitable for further service.

view report



23 Jun 2022 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



29 Oct 2021 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.

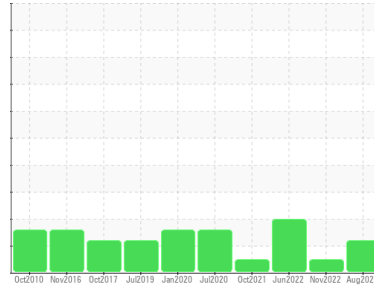
view report





OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
KAESER ASD 30 3727067 (S/N 1535)

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 moderate 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 | | KCPA005672 | KCP46453 | KCP49528 |
| Sample Date | Client Info | | 03 Aug 2023 | 30 Nov 2022 | 23 Jun 2022 |
| Machine Age | hrs | Client Info | 80356 | 78596 | 76718 |
| Oil Age | hrs | Client Info | 0 | 5243 | 1739 |
| Oil Changed | Client Info | | N/A | N/A | Not Changd |
| Sample Status | | | ATTENTION | NORMAL | ABNORMAL |

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 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >10 | 0 | 0 | <1 |
| Lead | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >50 | 10 | 11 | 7 |
| Tin | ppm | ASTM D5185m >10 | <1 | 0 | 0 |
| 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 | 2 |
| Barium | ppm | ASTM D5185m 90 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | <1 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m 90 | <1 | 0 | 0 |
| Calcium | ppm | ASTM D5185m 2 | <1 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 2 | 2 | 3 |
| Zinc | ppm | ASTM D5185m | 0 | 0 | 2 |
| Sulfur | ppm | ASTM D5185m | 19664 | 19485 | 17708 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >25 | <1 | 0 | 0 |
| Sodium | ppm | ASTM D5185m | 2 | <1 | <1 |
| Potassium | ppm | ASTM D5185m >20 | <1 | 0 | 0 |
| Water | % | ASTM D6304 >0.05 | 0.006 | 0.00 | 0.011 |
| ppm Water | ppm | ASTM D6304 >500 | 63.3 | 0.00 | 113.6 |

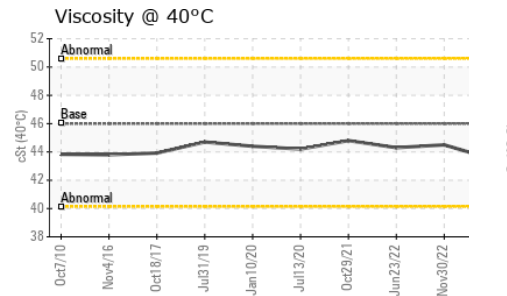
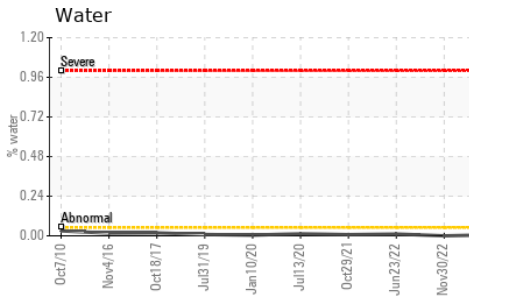
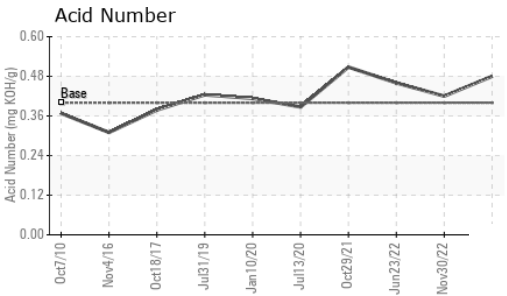
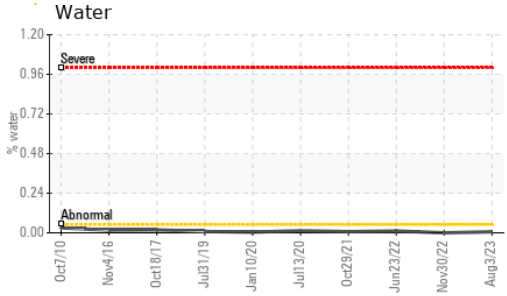
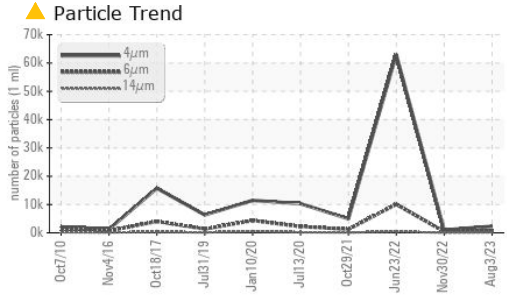
FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|------------------|------------|-------------------|----------|------------|
| Particles >4µm | ASTM D7647 | | 2318 | 1003 | 62968 |
| Particles >6µm | ASTM D7647 >1300 | | 808 | 421 | ▲ 10100 |
| Particles >14µm | ASTM D7647 >80 | | ▲ 112 | 25 | ▲ 410 |
| Particles >21µm | ASTM D7647 >20 | | ▲ 28 | 4 | ▲ 74 |
| Particles >38µm | ASTM D7647 >4 | | 1 | 0 | ▲ 5 |
| Particles >71µm | ASTM D7647 >3 | | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >--/17/13 | ▲ 18/17/14 | 17/16/12 | ▲ 23/21/16 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.4 | 0.48 | 0.42 | 0.46 |

OIL ANALYSIS REPORT

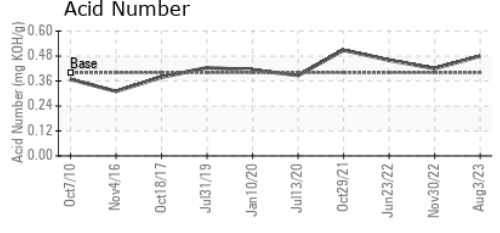
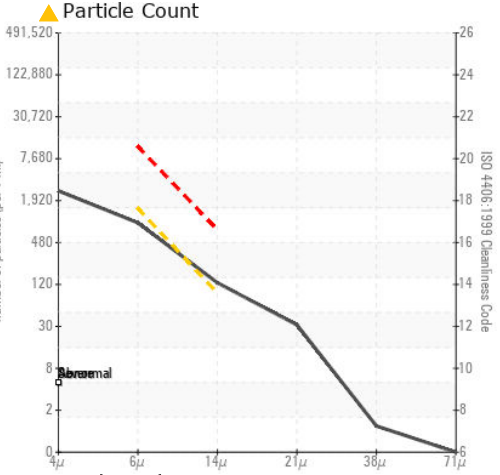
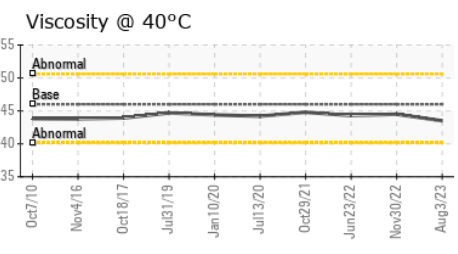
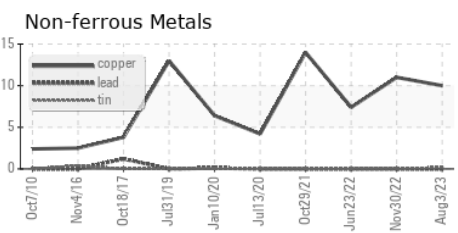
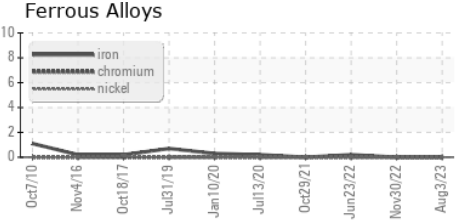


| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | 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 46 | 43.5 | 44.5 | 44.3 |

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA005672 **Received** : 22 Aug 2023
Lab Number : 05931546 **Diagnosed** : 24 Aug 2023
Unique Number : 10616817 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

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 PHILADELPHIA, PA
 US 19153
 Contact: C BARKLEY
 CBARKLEY@UPS.COM
 T:
 F: (215)937-2411

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)