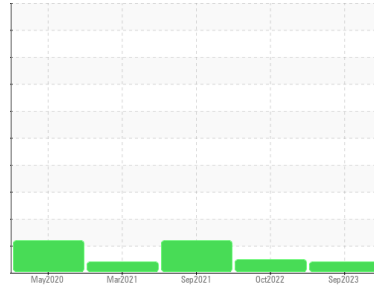




PROBLEM SUMMARY

Sample Rating Trend



VIS DEBRIS



Machine Id
KAESER 5909711

Component
Compressor

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

COMPONENT CONDITION SUMMARY

No relevant graphs to display

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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

| Sample Status | | ABNORMAL | NORMAL | ABNORMAL |
|---------------|----------------|----------|--------|----------|
| Debris | scalar *Visual | ▲ MODER | NONE | NONE |

Customer Id: APOLOG
Sample No.: KCPA006153
Lab Number: 05980420
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

| Action | Status | Date | Done By | Description |
|--------|--------|------|---------|---|
| Alert | --- | --- | ? | We were unable to perform a particle count due to a high concentration of particles present in this sample. |

HISTORICAL DIAGNOSIS

05 Oct 2022 Diag: Jonathan Hester

NORMAL



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



02 Sep 2021 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



01 Mar 2021 Diag: Don Baldrige

ISO



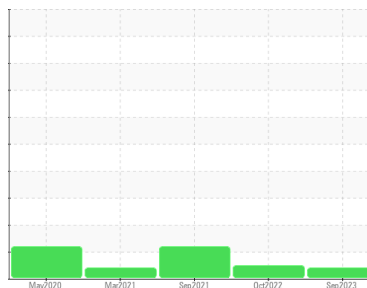
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id
KAESER 5909711

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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

▲ Contamination

Moderate concentration of visible dirt/debris 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 | | KCPA006153 | KCP33287 | KCP36500 |
| Sample Date | Client Info | | 21 Sep 2023 | 05 Oct 2022 | 02 Sep 2021 |
| Machine Age | hrs | Client Info | 11874 | 10132 | 8194 |
| Oil Age | hrs | Client Info | 0 | 2997 | 1100 |
| Oil Changed | Client Info | | N/A | Changed | Not Chngd |
| Sample Status | | | ABNORMAL | NORMAL | ABNORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >50 | 0 | 0 | 3 |
| Chromium | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m >3 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m >3 | 0 | <1 | 0 |
| Silver | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >10 | <1 | <1 | <1 |
| Lead | ppm | ASTM D5185m >10 | 0 | 3 | <1 |
| Copper | ppm | ASTM D5185m >50 | 13 | 11 | 14 |
| Tin | ppm | ASTM D5185m >10 | <1 | <1 | <1 |
| Antimony | ppm | ASTM D5185m | --- | --- | 0 |
| 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 |
| Barium | ppm | ASTM D5185m 90 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m 90 | 30 | 11 | 37 |
| Calcium | ppm | ASTM D5185m 2 | 2 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | <1 | 123 | 14 |
| Zinc | ppm | ASTM D5185m | 41 | 20 | 18 |
| Sulfur | ppm | ASTM D5185m | 19844 | 15622 | 16338 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >25 | 0 | <1 | <1 |
| Sodium | ppm | ASTM D5185m | 10 | 4 | 19 |
| Potassium | ppm | ASTM D5185m >20 | 3 | 4 | 5 |
| Water | % | ASTM D6304 >0.05 | 0.024 | 0.010 | 0.026 |
| ppm Water | ppm | ASTM D6304 >500 | 241.3 | 107.7 | 269.2 |

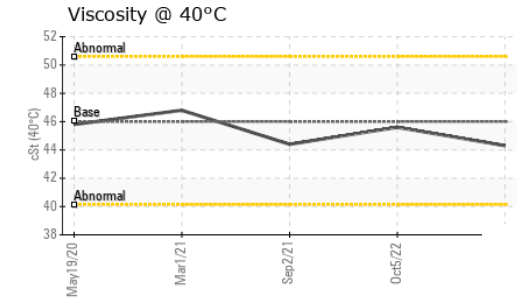
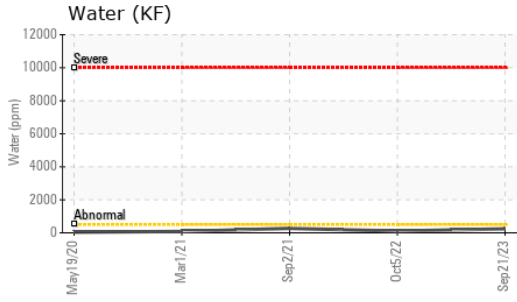
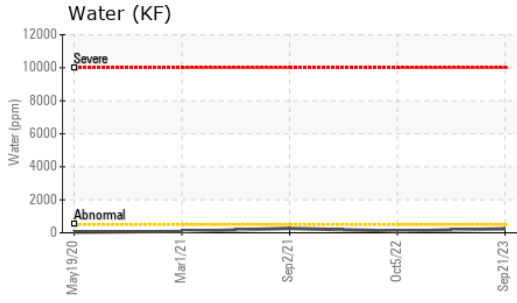
FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|------------------------|------------|------------|----------|----------|
| Particles >4µm | ASTM D7647 | | --- | 5615 | 22593 |
| Particles >6µm | ASTM D7647 >1300 | | --- | 859 | ▲ 5984 |
| Particles >14µm | ASTM D7647 >80 | | --- | 33 | ▲ 244 |
| Particles >21µm | ASTM D7647 >20 | | --- | 10 | ▲ 37 |
| Particles >38µm | ASTM D7647 >4 | | --- | 0 | 0 |
| Particles >71µm | ASTM D7647 >3 | | --- | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) >--/17/13 | | --- | 20/17/12 | ▲ 20/15 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.4 | 0.27 | 0.26 | 0.255 |

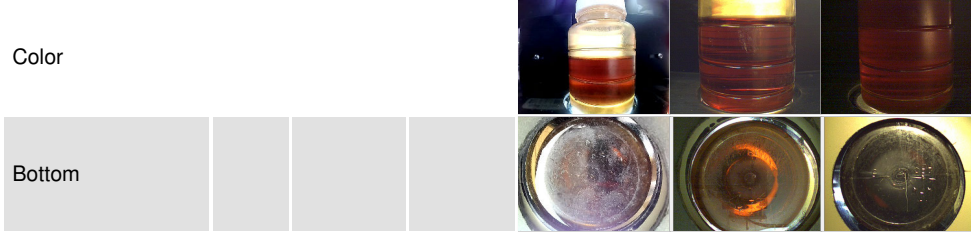
OIL ANALYSIS REPORT



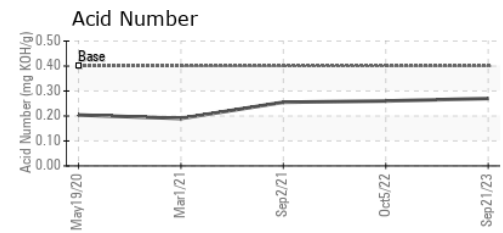
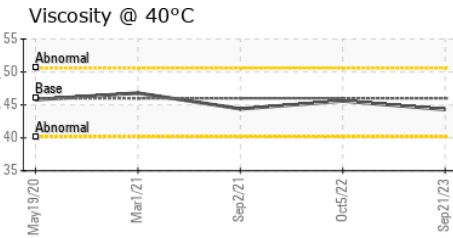
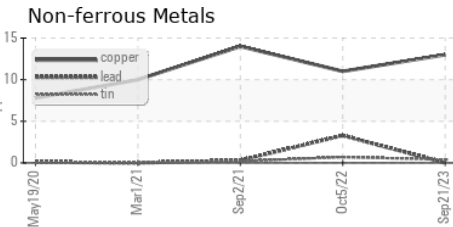
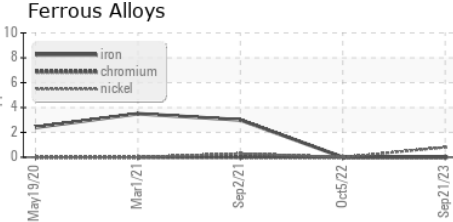
| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------------|----------|-------|
| White Metal | scalar | *Visual | NONE | NONE | VLITE | VLITE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate |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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|--------------|-------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 46 | 44.3 | 45.6 | 44.4 |

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA006153 **Received** : 16 Oct 2023
Lab Number : 05980420 **Diagnosed** : 18 Oct 2023
Unique Number : 10697715 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

A POLISHED FINISH INC
 504 PLANTATION PARK DR
 LOGANVILLE, GA
 US 30052
 Contact: Service Manager
 thompson5371@yahoo.com

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)