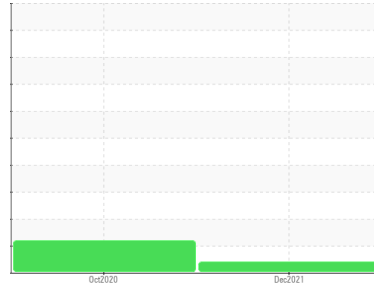




PROBLEM SUMMARY

Sample Rating Trend



VIS DEBRIS



Machine Id
7053225 (S/N 1215)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

We recommend you service the filters on this component. 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 | ABNORMAL | --- |
|---------------|----------------|----------|----------|----------|
| Debris | scalar *Visual | NONE | ▲ MODER | NONE --- |

Customer Id: CUSNOR
 Sample No.: KC88979
 Lab Number: 05429808
 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 |
|---------------|--------|------|---------|---|
| Change Filter | --- | --- | ? | We recommend you service the filters on this component. |
| Alert | --- | --- | ? | We were unable to perform a particle count due to a high concentration of particles present in this sample. |

HISTORICAL DIAGNOSIS

02 Oct 2020 Diag: Angela Borella

ISO



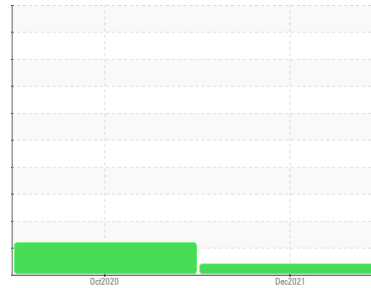
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id
7053225 (S/N 1215)

Component
Compressor

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

DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component. 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 | | KC88979 | KC84059 | --- |
| Sample Date | Client Info | | 16 Dec 2021 | 02 Oct 2020 | --- |
| Machine Age | hrs | Client Info | 2435 | 942 | --- |
| Oil Age | hrs | Client Info | 0 | 942 | --- |
| Oil Changed | Client Info | | Not Changed | Changed | --- |
| Sample Status | | | ABNORMAL | ABNORMAL | --- |

WEAR METALS

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

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-----------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m 0 | 1 | <1 | --- |
| Barium | ppm | ASTM D5185m 90 | 0 | 6 | --- |
| Molybdenum | ppm | ASTM D5185m 0 | 0 | 0 | --- |
| Manganese | ppm | ASTM D5185m | <1 | <1 | --- |
| Magnesium | ppm | ASTM D5185m 100 | 62 | 63 | --- |
| Calcium | ppm | ASTM D5185m 0 | 0 | 3 | --- |
| Phosphorus | ppm | ASTM D5185m 0 | 2 | 6 | --- |
| Zinc | ppm | ASTM D5185m 0 | 0 | 0 | --- |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >25 | <1 | 0 | --- |
| Sodium | ppm | ASTM D5185m | 15 | 11 | --- |
| Potassium | ppm | ASTM D5185m >20 | 5 | 7 | --- |
| Water | % | ASTM D6304 >0.05 | 0.042 | 0.024 | --- |
| ppm Water | ppm | ASTM D6304 >500 | 421.5 | 247.9 | --- |

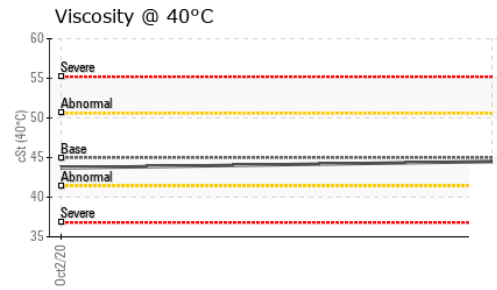
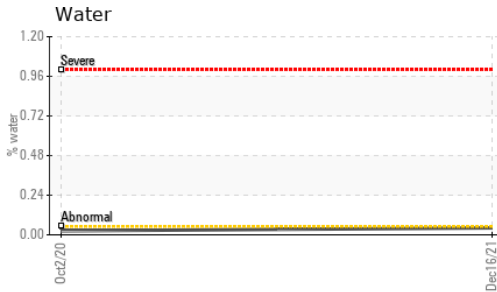
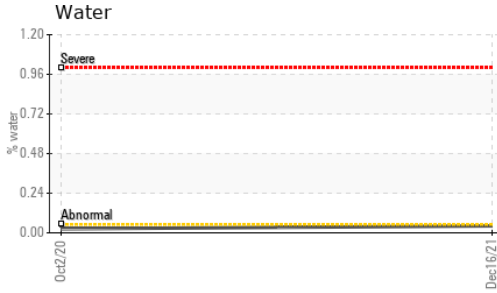
FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|---------|----------|----------|
| Particles >4µm | ASTM D7647 | | --- | 10777 | --- |
| Particles >6µm | ASTM D7647 | >1300 | --- | ▲ 3472 | --- |
| Particles >14µm | ASTM D7647 | >80 | --- | ▲ 220 | --- |
| Particles >21µm | ASTM D7647 | >20 | --- | ▲ 49 | --- |
| Particles >38µm | ASTM D7647 | >4 | --- | 2 | --- |
| Particles >71µm | ASTM D7647 | >3 | --- | 0 | --- |
| Oil Cleanliness | ISO 4406 (c) | >--/17/13 | --- | ▲ 19/15 | --- |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|----------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 1.0 | 0.323 | 0.345 | --- |

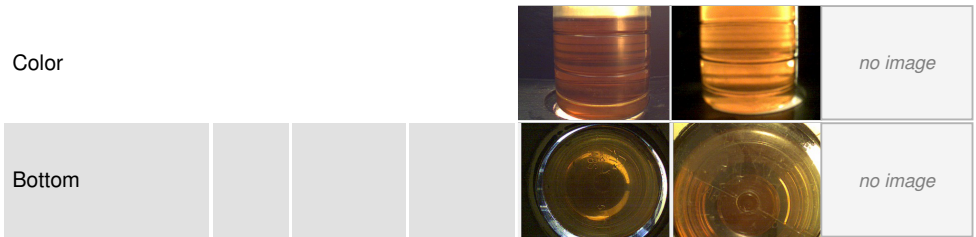
OIL ANALYSIS REPORT



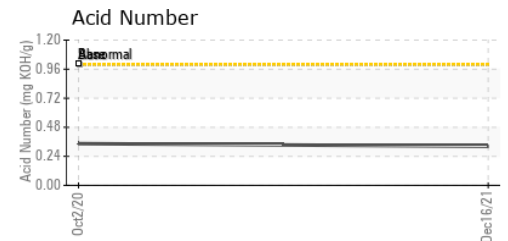
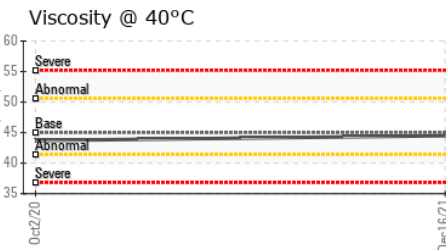
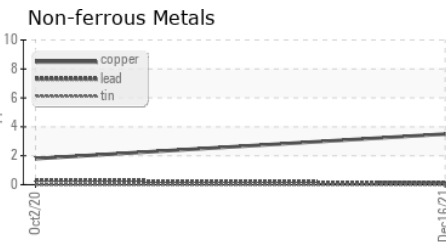
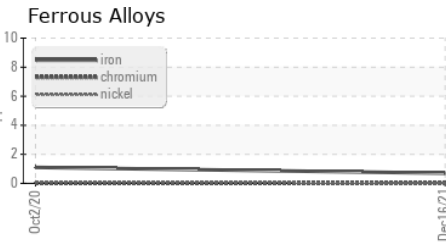
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE | ---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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 45 | 44.5 | 43.7 |

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



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : KC88979 Received : 22 Dec 2021
 Lab Number : 05429808 Diagnosed : 24 Dec 2021
 Unique Number : 9789000 Diagnostician : Don Baldrige
 Test Package : IND 2

CUSTOM METAL WORKS
 2896 ST RT 61 SOUTH
 NORWALK, OH
 US 44857
 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: