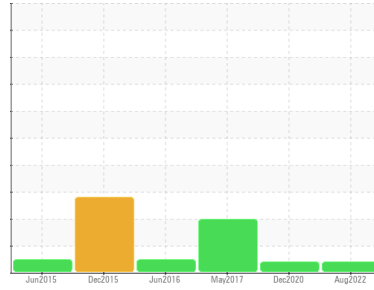


# PROBLEM SUMMARY

Sample Rating Trend



**VIS DEBRIS**



Machine Id  
**KAESER SFC55T 5165914 (S/N 1013)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

No relevant graphs to display

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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 |        |         |      | <b>ABNORMAL</b> | ABNORMAL | ABNORMAL |
|---------------|--------|---------|------|-----------------|----------|----------|
| Debris        | scalar | *Visual | NONE | <b>▲ MODER</b>  | ▲ MODER  | NONE     |

**Customer Id:** EBENOR  
**Sample No.:** KCP37369  
**Lab Number:** 05635016  
**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](mailto:don.b505@comcast.net)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

| Action        | Status | Date | Done By | Description   |
|---------------|--------|------|---------|---|
| Change Fluid  | ---    | ---  | ?       | Oil and filter change at the time of sampling has been noted.   |
| Change Filter | ---    | ---  | ?       | Oil and filter change at the time of sampling has been noted.   |
| Alert         | ---    | ---  | ?       | We were unable to perform a particle count due to a high concentration of particles present in this sample. |

## HISTORICAL DIAGNOSIS

### 22 Dec 2020 Diag: Jonathan Hester

#### VIS DEBRIS



Oil and 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. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 15 May 2017 Diag: Doug Bogart

#### 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



### 01 Jun 2016 Diag: Don Baldrige

#### NORMAL



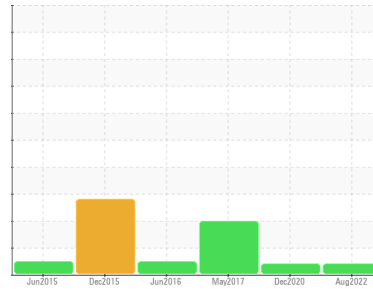
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Machine Id  
**KAESER SFC55T 5165914 (S/N 1013)**

Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**



## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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            | history 1   | history 2   |
|---------------|--------|------------|--------------------|-------------|-------------|
| Sample Number |        |            | <b>KCP37369</b>    | KCP27394    | KCP01374    |
| Sample Date   |        |            | <b>31 Aug 2022</b> | 22 Dec 2020 | 15 May 2017 |
| Machine Age   | hrs    |            | <b>55060</b>       | 42617       | 17822       |
| Oil Age       | hrs    |            | <b>12443</b>       | 6300        | 4098        |
| Oil Changed   |        |            | <b>Changed</b>     | Changed     | Changed     |
| Sample Status |        |            | <b>ABNORMAL</b>    | ABNORMAL    | ABNORMAL    |

## WEAR METALS

|          | method          | limit/base | current      | history 1 | history 2 |
|----------|-----------------|------------|--------------|-----------|-----------|
| Iron     | ppm ASTM D5185m | >50        | <b>4</b>     | 0         | 0         |
| Chromium | ppm ASTM D5185m | >10        | <b>0</b>     | 0         | 0         |
| Nickel   | ppm ASTM D5185m | >3         | <b>0</b>     | 0         | <1        |
| Titanium | ppm ASTM D5185m | >3         | <b>0</b>     | 0         | 0         |
| Silver   | ppm ASTM D5185m | >2         | <b>0</b>     | <1        | 0         |
| Aluminum | ppm ASTM D5185m | >10        | <b>&lt;1</b> | 0         | 0         |
| Lead     | ppm ASTM D5185m | >10        | <b>0</b>     | 0         | 0         |
| Copper   | ppm ASTM D5185m | >50        | <b>9</b>     | 7         | 5         |
| Tin      | ppm ASTM D5185m | >10        | <b>0</b>     | 0         | 0         |
| Antimony | ppm ASTM D5185m |            | <b>---</b>   | 0         | <1        |
| Vanadium | ppm ASTM D5185m |            | <b>0</b>     | 0         | 0         |
| Cadmium  | ppm ASTM D5185m |            | <b>0</b>     | 0         | <1        |

## ADDITIVES

|            | method          | limit/base | current      | history 1 | history 2 |
|------------|-----------------|------------|--------------|-----------|-----------|
| Boron      | ppm ASTM D5185m | 0          | <b>0</b>     | 0         | 0         |
| Barium     | ppm ASTM D5185m | 90         | <b>0</b>     | 0         | 0         |
| Molybdenum | ppm ASTM D5185m | 0          | <b>0</b>     | 0         | 0         |
| Manganese  | ppm ASTM D5185m |            | <b>0</b>     | 0         | 0         |
| Magnesium  | ppm ASTM D5185m | 100        | <b>0</b>     | <1        | 0         |
| Calcium    | ppm ASTM D5185m | 0          | <b>0</b>     | 0         | 0         |
| Phosphorus | ppm ASTM D5185m | 0          | <b>1</b>     | 7         | <1        |
| Zinc       | ppm ASTM D5185m | 0          | <b>0</b>     | 0         | <1        |
| Sulfur     | ppm ASTM D5185m | 23500      | <b>12744</b> | 14793     | 15786     |

## CONTAMINANTS

|           | method          | limit/base | current      | history 1 | history 2 |
|-----------|-----------------|------------|--------------|-----------|-----------|
| Silicon   | ppm ASTM D5185m | >25        | <b>0</b>     | 0         | 1         |
| Sodium    | ppm ASTM D5185m |            | <b>2</b>     | 0         | <1        |
| Potassium | ppm ASTM D5185m | >20        | <b>0</b>     | 0         | 0         |
| Water     | % ASTM D6304    | >0.05      | <b>0.016</b> | 0.009     | 0.009     |
| ppm Water | ppm ASTM D6304  | >500       | <b>165.0</b> | 97.2      | 90        |

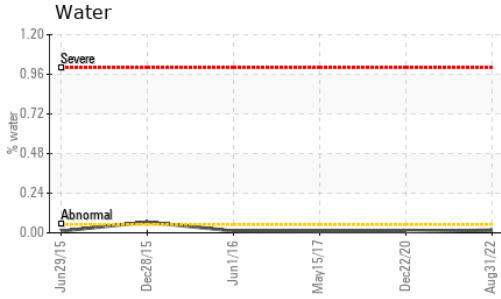
## FLUID CLEANLINESS

|                 | method       | limit/base | current    | history 1 | history 2 |
|-----------------|--------------|------------|------------|-----------|-----------|
| Particles >4µm  | ASTM D7647   |            | <b>---</b> | ---       | 3053      |
| Particles >6µm  | ASTM D7647   | >1300      | <b>---</b> | ---       | 1018      |
| Particles >14µm | ASTM D7647   | >80        | <b>---</b> | ---       | ▲ 191     |
| Particles >21µm | ASTM D7647   | >20        | <b>---</b> | ---       | ▲ 83      |
| Particles >38µm | ASTM D7647   | >4         | <b>---</b> | ---       | ▲ 22      |
| Particles >71µm | ASTM D7647   | >3         | <b>---</b> | ---       | ▲ 11      |
| Oil Cleanliness | ISO 4406 (c) | >--/17/13  | <b>---</b> | ---       | ▲ 17/15   |

## FLUID DEGRADATION

|                  | method              | limit/base | current     | history 1 | history 2 |
|------------------|---------------------|------------|-------------|-----------|-----------|
| Acid Number (AN) | mg KOH/g ASTM D8045 | 1.0        | <b>0.44</b> | 0.354     | 0.451     |

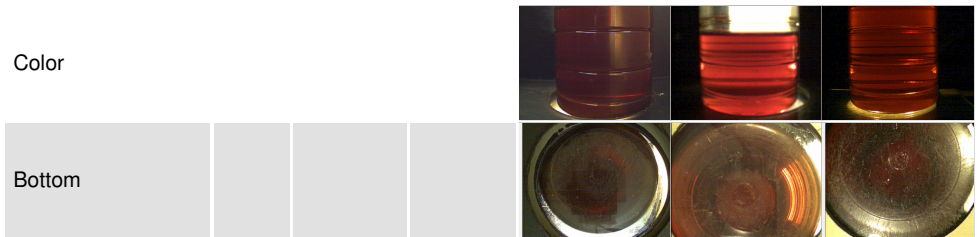
# OIL ANALYSIS REPORT



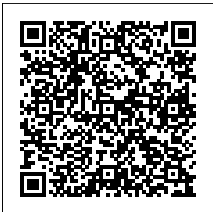
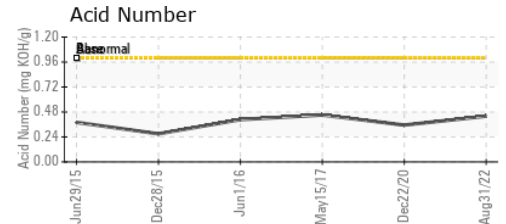
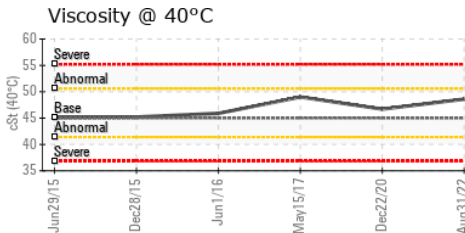
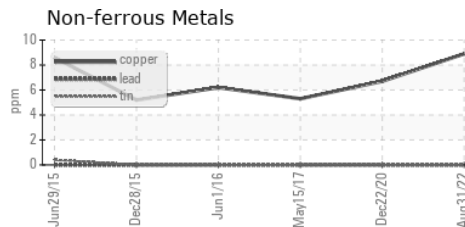
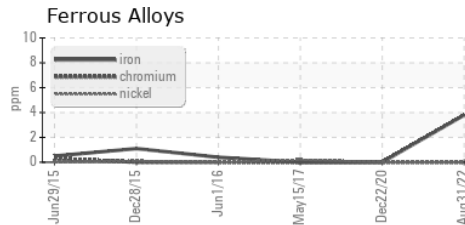
| VISUAL           | method | limit/base | current | history 1 | history 2 |
|------------------|--------|------------|---------|-----------|-----------|
| White Metal      | scalar | *Visual    | NONE    | NONE      | VLITE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE      | NONE      |
| Precipitate      | scalar | *Visual    | NONE    | NONE      | NONE      |
| Silt             | scalar | *Visual    | NONE    | NONE      | NONE      |
| Debris           | scalar | *Visual    | NONE    | ▲ MODER   | ▲ MODER   |
| 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 | history 1 | history 2 |
|------------------|--------|--------------|---------|-----------|-----------|
| Visc @ 40°C      | cSt    | ASTM D445 45 | 48.6    | 46.7      | 49.01     |

| SAMPLE IMAGES | method | limit/base | current | history 1 | history 2 |
|---------------|--------|------------|---------|-----------|-----------|
|---------------|--------|------------|---------|-----------|-----------|



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP37369 **Received** : 06 Sep 2022  
**Lab Number** : 05635016 **Diagnosed** : 08 Sep 2022  
**Unique Number** : 10124546 **Diagnostician** : Don Baldrige

**EBERSPACHER**  
 6801B 5TH ST  
 NORTHPORT, AL  
 USA 35476  
 Contact:

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: