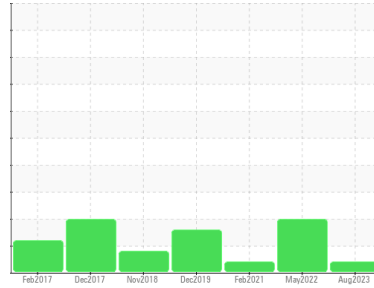




# PROBLEM SUMMARY

Sample Rating Trend



## VIS DEBRIS



Machine Id  
**KAESER SFC 30ST 5469355 (S/N 1013)**

Component  
**Compressor**

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

### COMPONENT CONDITION SUMMARY

No relevant graphs to display

### RECOMMENDATION

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.

### PROBLEMATIC TEST RESULTS

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

Customer Id: ACCSOM  
Sample No.: KC101887  
Lab Number: 05929590  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

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

### 18 May 2022 Diag: Jonathan Hester

ISO



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. 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



### 17 Feb 2021 Diag: Don Baldrige

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 acceptable for the time in service.

view report



### 19 Dec 2019 Diag: Doug Bogart

ISO



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. 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



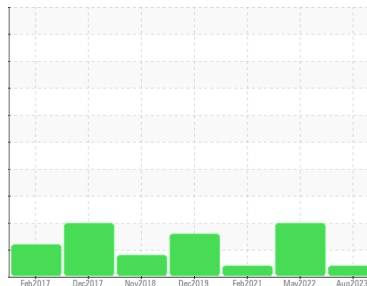
Machine Id  
**KAESER SFC 30ST 5469355 (S/N 1013)**

Component

**Compressor**

Fluid

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



## DIAGNOSIS

### ▲ Recommendation

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.

### 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 acceptable for the time in service.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2    |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info |             | <b>KC101887</b>    | KC95996     | KC92302     |
| Sample Date   | Client Info |             | <b>10 Aug 2023</b> | 18 May 2022 | 17 Feb 2021 |
| Machine Age   | hrs         | Client Info | <b>23452</b>       | 21023       | 16731       |
| Oil Age       | hrs         | Client Info | <b>2439</b>        | 4292        | 4476        |
| Oil Changed   | Client Info |             | <b>Changed</b>     | Changed     | Changed     |
| Sample Status |             |             | <b>ABNORMAL</b>    | ABNORMAL    | ABNORMAL    |

## WEAR METALS

|          | method | limit/base      | current      | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >50 | <b>0</b>     | <1       | 0        |
| Chromium | ppm    | ASTM D5185m >10 | <b>0</b>     | 0        | 0        |
| Nickel   | ppm    | ASTM D5185m >3  | <b>0</b>     | 0        | 0        |
| Titanium | ppm    | ASTM D5185m >3  | <b>&lt;1</b> | 0        | 0        |
| Silver   | ppm    | ASTM D5185m >2  | <b>0</b>     | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >10 | <b>0</b>     | <1       | 0        |
| Lead     | ppm    | ASTM D5185m >10 | <b>0</b>     | 2        | 0        |
| Copper   | ppm    | ASTM D5185m >50 | <b>6</b>     | 7        | 8        |
| Tin      | ppm    | ASTM D5185m >10 | <b>0</b>     | <1       | <1       |
| Antimony | ppm    | ASTM D5185m     | <b>---</b>   | ---      | 0        |
| Vanadium | ppm    | ASTM D5185m     | <b>&lt;1</b> | 0        | 0        |
| Cadmium  | ppm    | ASTM D5185m     | <b>0</b>     | 0        | 0        |

## ADDITIVES

|            | method | limit/base     | current   | history1 | history2 |
|------------|--------|----------------|-----------|----------|----------|
| Boron      | ppm    | ASTM D5185m    | <b>0</b>  | <1       | 9        |
| Barium     | ppm    | ASTM D5185m 90 | <b>0</b>  | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m    | <b>0</b>  | 0        | 0        |
| Manganese  | ppm    | ASTM D5185m    | <b>0</b>  | 0        | 0        |
| Magnesium  | ppm    | ASTM D5185m 90 | <b>31</b> | 8        | 25       |
| Calcium    | ppm    | ASTM D5185m 2  | <b>0</b>  | 0        | 0        |
| Phosphorus | ppm    | ASTM D5185m    | <b>3</b>  | 9        | 6        |
| Zinc       | ppm    | ASTM D5185m    | <b>66</b> | 53       | 57       |

## CONTAMINANTS

|           | method | limit/base       | current      | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >25  | <b>&lt;1</b> | <1       | 0        |
| Sodium    | ppm    | ASTM D5185m      | <b>10</b>    | 3        | 15       |
| Potassium | ppm    | ASTM D5185m >20  | <b>4</b>     | 0        | 6        |
| Water     | %      | ASTM D6304 >0.05 | <b>0.024</b> | 0.013    | 0.012    |
| ppm Water | ppm    | ASTM D6304 >500  | <b>240.7</b> | 132.2    | 121.2    |

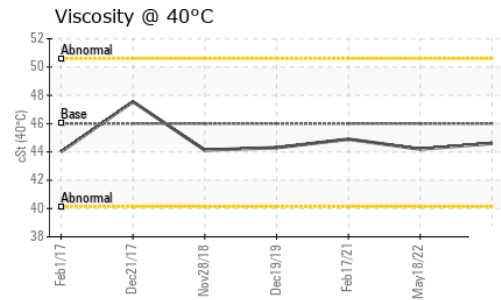
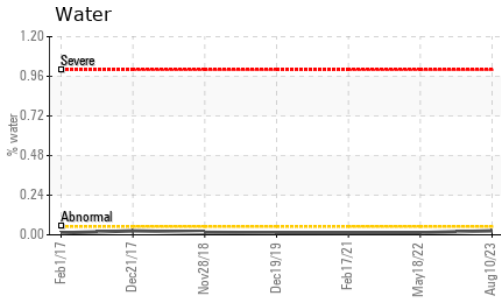
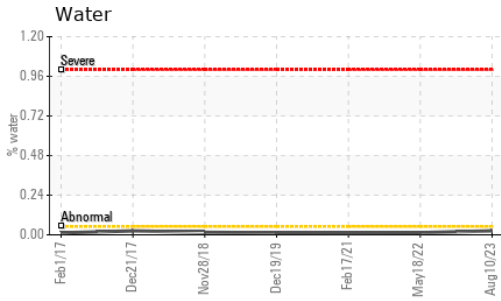
## FLUID CLEANLINESS

|                 | method                 | limit/base | current    | history1   | history2 |
|-----------------|------------------------|------------|------------|------------|----------|
| Particles >4µm  | ASTM D7647             |            | <b>---</b> | 8386       | ---      |
| Particles >6µm  | ASTM D7647 >1300       |            | <b>---</b> | ▲ 2548     | ---      |
| Particles >14µm | ASTM D7647 >80         |            | <b>---</b> | ▲ 331      | ---      |
| Particles >21µm | ASTM D7647 >20         |            | <b>---</b> | ▲ 108      | ---      |
| Particles >38µm | ASTM D7647 >4          |            | <b>---</b> | ▲ 8        | ---      |
| Particles >71µm | ASTM D7647 >3          |            | <b>---</b> | 0          | ---      |
| Oil Cleanliness | ISO 4406 (c) >--/17/13 |            | <b>---</b> | ▲ 20/19/16 | ---      |

## FLUID DEGRADATION

|                  | method   | limit/base     | current     | history1 | history2 |
|------------------|----------|----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.4 | <b>0.38</b> | 0.42     | 0.355    |

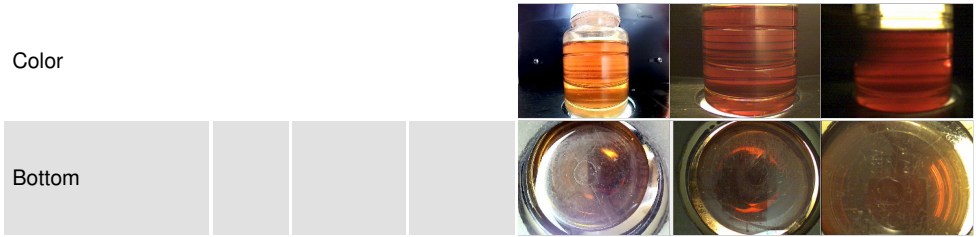
# OIL ANALYSIS REPORT



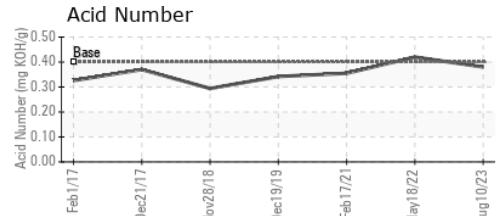
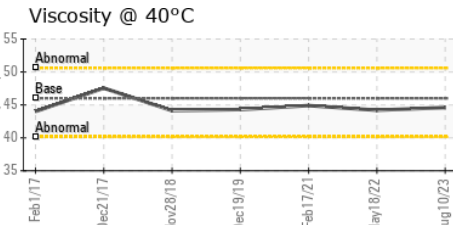
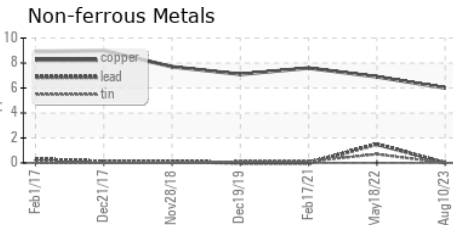
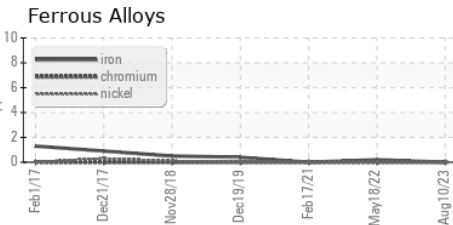
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | NONE    | ▲ 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 | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 46      | 44.2     | 44.9     |

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



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC101887 **Received** : 21 Aug 2023  
**Lab Number** : 05929590 **Diagnosed** : 23 Aug 2023  
**Unique Number** : 10609537 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2

**ACCESS BIO**  
 65 CLYDE RD  
 SOMERSET, NJ  
 US 08873  
 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: