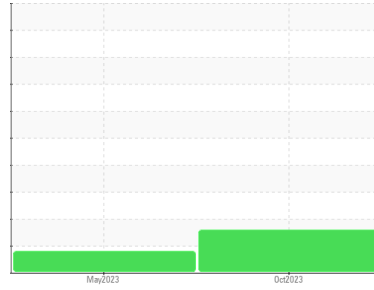


# PROBLEM SUMMARY

Sample Rating Trend



ISO

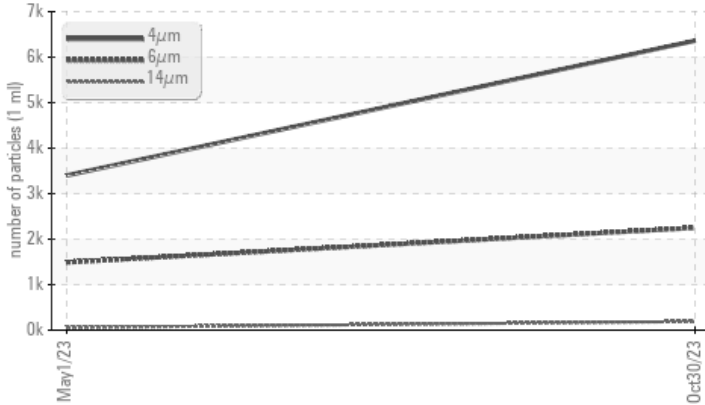


Machine Id  
**8077852 (S/N 1406)**

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

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

| Sample Status   |              |           | <b>ABNORMAL</b>   | ATTENTION  | --- |
|-----------------|--------------|-----------|-------------------|------------|-----|
| Particles >6µm  | ASTM D7647   | >1300     | ▲ <b>2249</b>     | ▲ 1490     | --- |
| Particles >14µm | ASTM D7647   | >80       | ▲ <b>190</b>      | 56         | --- |
| Particles >21µm | ASTM D7647   | >20       | ▲ <b>54</b>       | 12         | --- |
| Oil Cleanliness | ISO 4406 (c) | >--/17/13 | ▲ <b>20/18/15</b> | ▲ 19/18/13 | --- |

Customer Id: ICOOVI  
Sample No.: KC121986  
Lab Number: 06001047  
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 Filter | ---    | ---  | ?       | We recommend you service the filters on this component. |

## HISTORICAL DIAGNOSIS

### 01 May 2023 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 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 acceptable for the time in service.

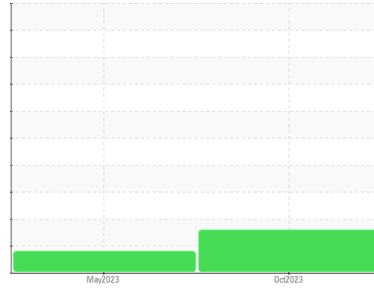
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**8077852 (S/N 1406)**

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

## DIAGNOSIS

### ▲ Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a high 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 |             |            | <b>KC121986</b>    | KC110704    | ---      |
| Sample Date        | Client Info |             |            | <b>30 Oct 2023</b> | 01 May 2023 | ---      |
| Machine Age        | hrs         | Client Info |            | <b>9800</b>        | 7273        | ---      |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | 4941        | ---      |
| Oil Changed        | Client Info |             |            | <b>N/A</b>         | Changed     | ---      |
| Sample Status      |             |             |            | <b>ABNORMAL</b>    | ATTENTION   | ---      |

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

| ADDITIVES  |     | method      | limit/base | current   | history1 | history2 |
|------------|-----|-------------|------------|-----------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>  | 0        | ---      |
| Barium     | ppm | ASTM D5185m | 90         | <b>0</b>  | 2        | ---      |
| Molybdenum | ppm | ASTM D5185m |            | <b>0</b>  | 0        | ---      |
| Manganese  | ppm | ASTM D5185m |            | <b>0</b>  | 0        | ---      |
| Magnesium  | ppm | ASTM D5185m | 90         | <b>53</b> | 44       | ---      |
| Calcium    | ppm | ASTM D5185m | 2          | <b>0</b>  | 0        | ---      |
| Phosphorus | ppm | ASTM D5185m |            | <b>0</b>  | <1       | ---      |
| Zinc       | ppm | ASTM D5185m |            | <b>19</b> | 27       | ---      |

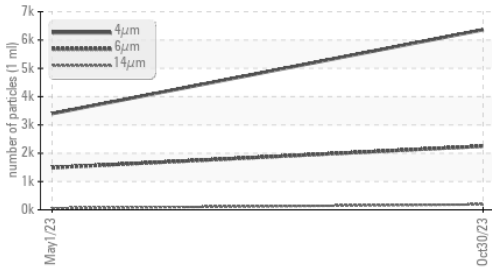
| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>0</b>     | 0        | ---      |
| Sodium       | ppm | ASTM D5185m |            | <b>23</b>    | 9        | ---      |
| Potassium    | ppm | ASTM D5185m | >20        | <b>8</b>     | 5        | ---      |
| Water        | %   | ASTM D6304  | >0.05      | <b>0.029</b> | 0.016    | ---      |
| ppm Water    | ppm | ASTM D6304  | >500       | <b>291.7</b> | 162.6    | ---      |

| FLUID CLEANLINESS |  | method       | limit/base | current           | history1   | history2 |
|-------------------|--|--------------|------------|-------------------|------------|----------|
| Particles >4µm    |  | ASTM D7647   |            | <b>6362</b>       | 3400       | ---      |
| Particles >6µm    |  | ASTM D7647   | >1300      | ▲ <b>2249</b>     | ▲ 1490     | ---      |
| Particles >14µm   |  | ASTM D7647   | >80        | ▲ <b>190</b>      | 56         | ---      |
| Particles >21µm   |  | ASTM D7647   | >20        | ▲ <b>54</b>       | 12         | ---      |
| Particles >38µm   |  | ASTM D7647   | >4         | <b>3</b>          | 1          | ---      |
| Particles >71µm   |  | ASTM D7647   | >3         | <b>0</b>          | 0          | ---      |
| Oil Cleanliness   |  | ISO 4406 (c) | >--/17/13  | ▲ <b>20/18/15</b> | ▲ 19/18/13 | ---      |

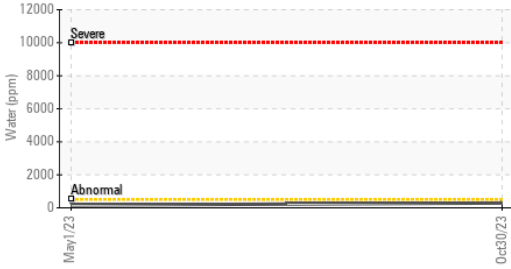
| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 0.4        | <b>0.33</b> | 0.37     | ---      |

# OIL ANALYSIS REPORT

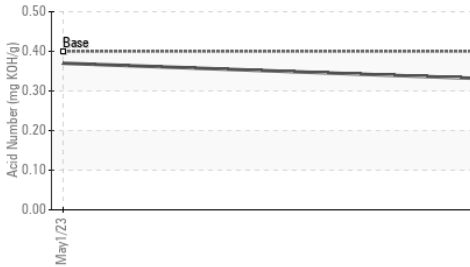
### ▲ Particle Trend



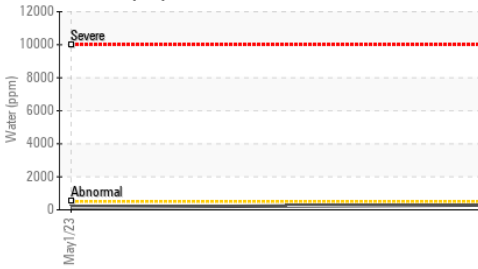
### Water (KF)



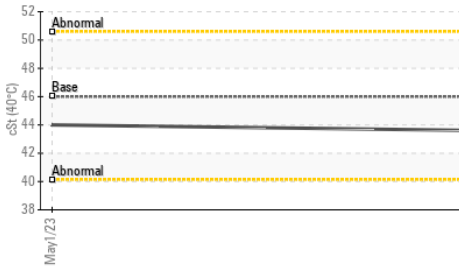
### Acid Number



### Water (KF)



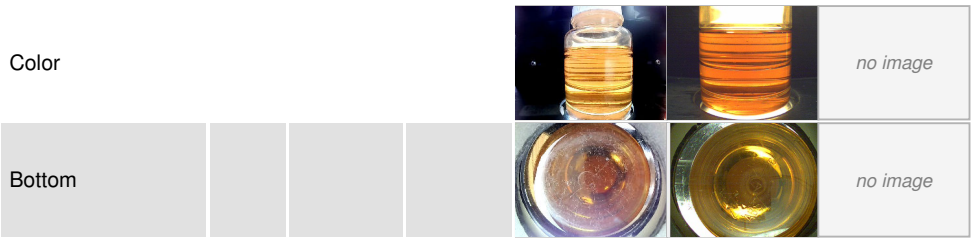
### Viscosity @ 40°C



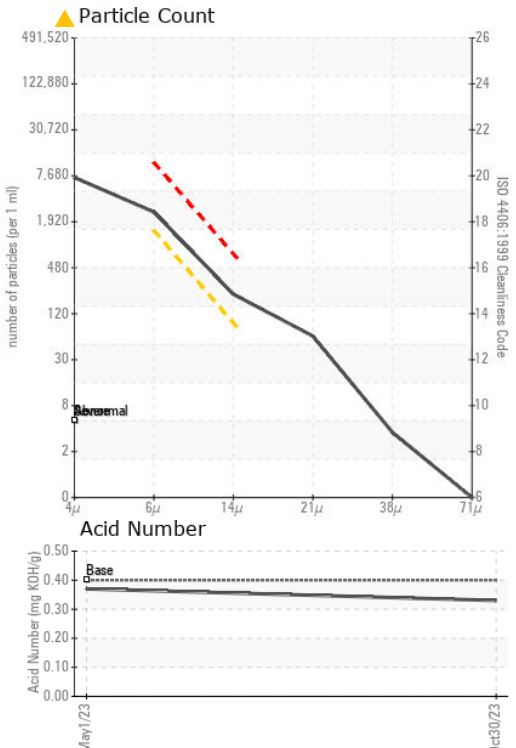
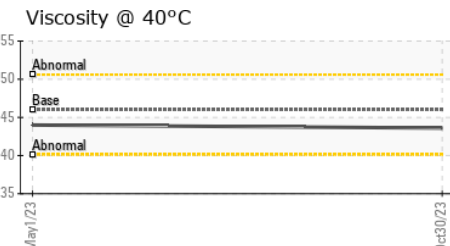
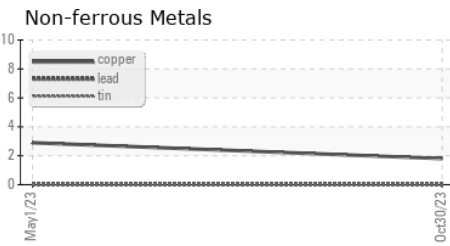
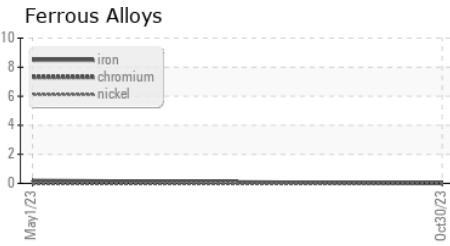
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | ---      |
| Silt             | scalar | *Visual    | NONE    | NONE     | ---      |
| Debris           | scalar | *Visual    | NONE    | NONE     | ---      |
| 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 46 | 43.6    | 44.0     | ---      |

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



### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC121986 **Received** : 07 Nov 2023  
**Lab Number** : 06001047 **Diagnosed** : 09 Nov 2023  
**Unique Number** : 10729407 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**I-CON SYSTEMS**  
 3100 CAMP RD  
 OVIEDO, FL  
 US 32765  
 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: