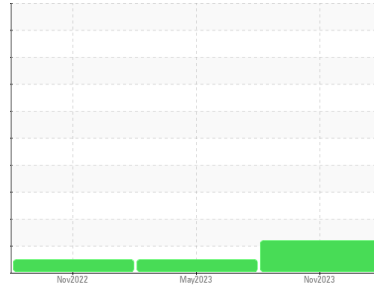




# PROBLEM SUMMARY

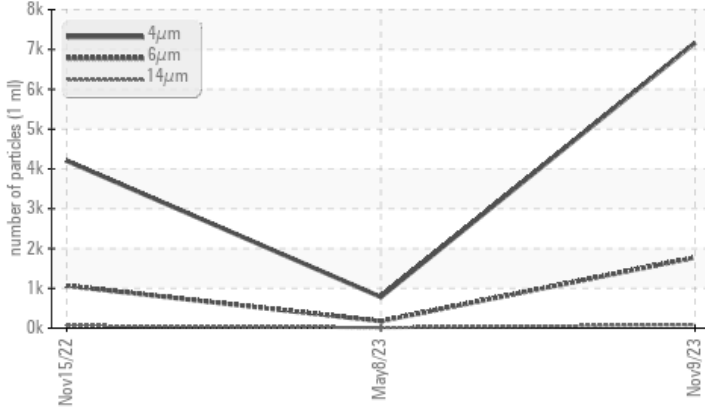
Sample Rating Trend



Machine Id  
**KAESER 7782205**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- QTS)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## 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.

## PROBLEMATIC TEST RESULTS

| Sample Status   |              |           | ATTENTION  | NORMAL   | NORMAL   |
|-----------------|--------------|-----------|------------|----------|----------|
| Particles >6µm  | ASTM D7647   | >1300     | ▲ 1773     | 174      | 1064     |
| Particles >14µm | ASTM D7647   | >80       | ▲ 84       | 12       | 64       |
| Oil Cleanliness | ISO 4406 (c) | >--/17/13 | ▲ 20/18/14 | 17/15/11 | 19/17/13 |

Customer Id: AAOLON  
 Sample No.: KCPA06998  
 Lab Number: 06009674  
 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

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 08 May 2023 Diag: Doug Bogart

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



### 15 Nov 2022 Diag: Angela Borella

NORMAL



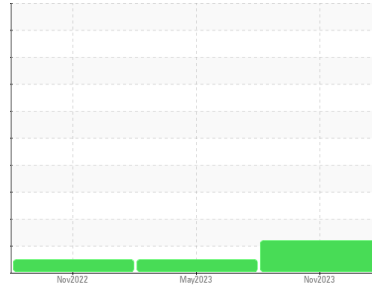
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable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

view report



# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id  
**KAESER 7782205**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) M-460 (--- QTS)**

### 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.

#### Wear

All component wear rates are normal.

#### ▲ Contamination

There is a moderate 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>KCPA06998</b>   | KCP53770    | KCP47618    |
| Sample Date        | Client Info |             |            | <b>09 Nov 2023</b> | 08 May 2023 | 15 Nov 2022 |
| Machine Age        | hrs         | Client Info |            | <b>8012</b>        | 6042        | 4772        |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | 1269        | 1725        |
| Oil Changed        | Client Info |             |            | <b>N/A</b>         | Not Changd  | Changed     |
| Sample Status      |             |             |            | <b>ATTENTION</b>   | NORMAL      | NORMAL      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >50        | <b>0</b>     | 0        | 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>0</b>     | <1       | 0        |
| Silver      | ppm | ASTM D5185m | >2         | <b>0</b>     | <1       | 2        |
| Aluminum    | ppm | ASTM D5185m | >10        | <b>&lt;1</b> | 2        | 0        |
| Lead        | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | 0        |
| Copper      | ppm | ASTM D5185m | >50        | <b>22</b>    | 14       | 17       |
| Tin         | ppm | ASTM D5185m | >10        | <b>0</b>     | <1       | 0        |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |

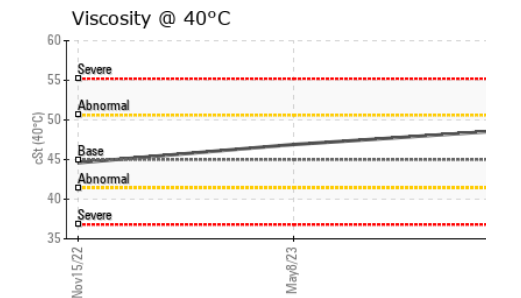
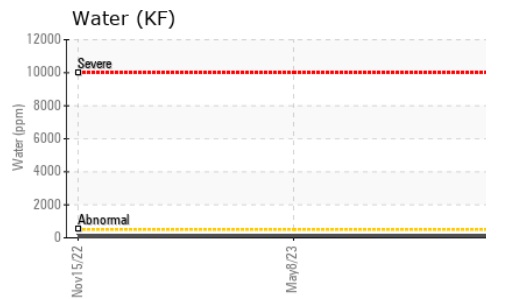
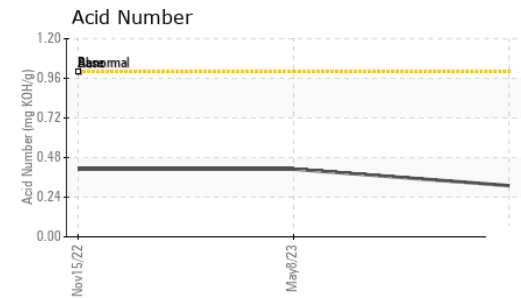
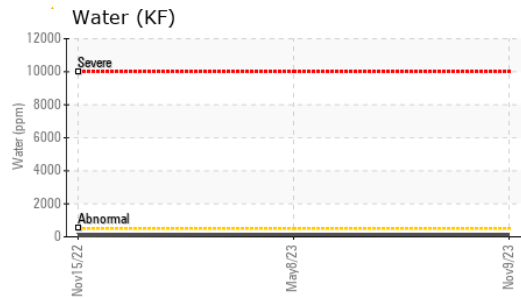
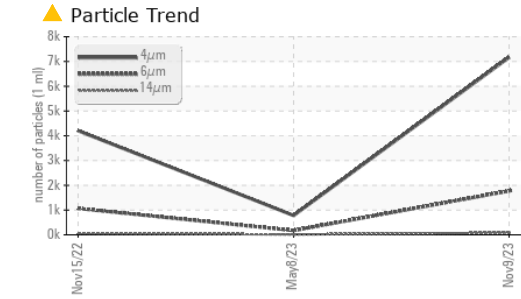
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m | 0          | <b>0</b>     | 0        | 0        |
| Barium     | ppm | ASTM D5185m | 90         | <b>7</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m | 0          | <b>0</b>     | 0        | 0        |
| Manganese  | ppm | ASTM D5185m |            | <b>0</b>     | <1       | 0        |
| Magnesium  | ppm | ASTM D5185m | 100        | <b>&lt;1</b> | 10       | 2        |
| Calcium    | ppm | ASTM D5185m | 0          | <b>&lt;1</b> | 0        | 0        |
| Phosphorus | ppm | ASTM D5185m | 0          | <b>18</b>    | 0        | 3        |
| Zinc       | ppm | ASTM D5185m | 0          | <b>0</b>     | 6        | 0        |
| Sulfur     | ppm | ASTM D5185m | 23500      | <b>20487</b> | 20242    | 19567    |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>0</b>     | 0        | 0        |
| Sodium       | ppm | ASTM D5185m |            | <b>0</b>     | 4        | 0        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | 1        |
| Water        | %   | ASTM D6304  | >0.05      | <b>0.011</b> | 0.012    | 0.007    |
| ppm Water    | ppm | ASTM D6304  | >500       | <b>110.3</b> | 129.4    | 76.5     |

| FLUID CLEANLINESS |  | method       | limit/base | current           | history1 | history2 |
|-------------------|--|--------------|------------|-------------------|----------|----------|
| Particles >4µm    |  | ASTM D7647   |            | <b>7167</b>       | 781      | 4204     |
| Particles >6µm    |  | ASTM D7647   | >1300      | ▲ <b>1773</b>     | 174      | 1064     |
| Particles >14µm   |  | ASTM D7647   | >80        | ▲ <b>84</b>       | 12       | 64       |
| Particles >21µm   |  | ASTM D7647   | >20        | <b>16</b>         | 3        | 11       |
| Particles >38µm   |  | ASTM D7647   | >4         | <b>0</b>          | 1        | 0        |
| Particles >71µm   |  | ASTM D7647   | >3         | <b>0</b>          | 1        | 0        |
| Oil Cleanliness   |  | ISO 4406 (c) | >--/17/13  | ▲ <b>20/18/14</b> | 17/15/11 | 19/17/13 |

| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 1.0        | <b>0.31</b> | 0.41     | 0.41     |

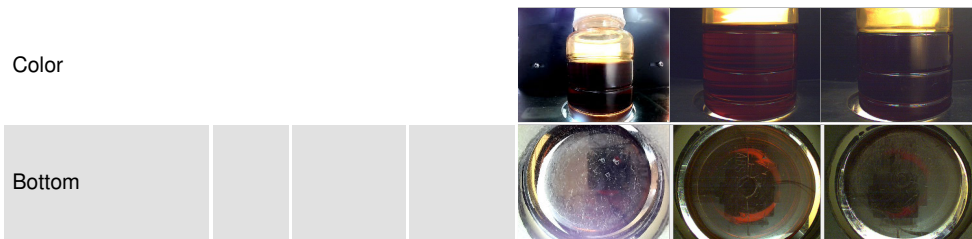
# OIL ANALYSIS REPORT



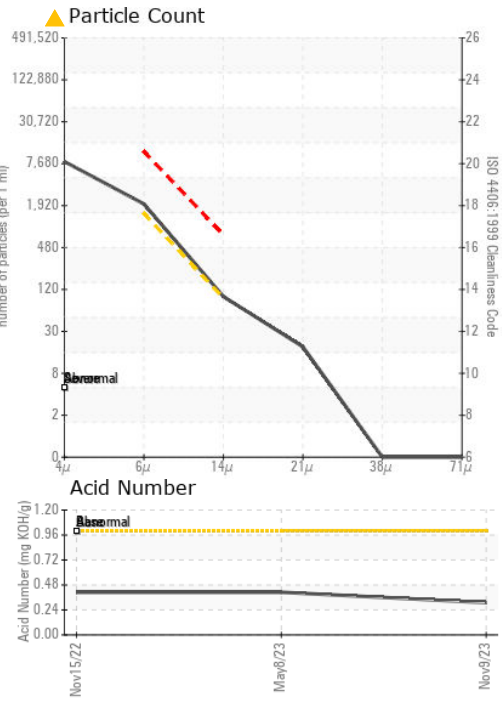
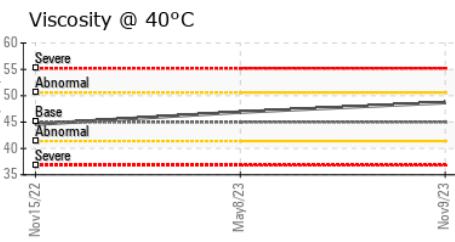
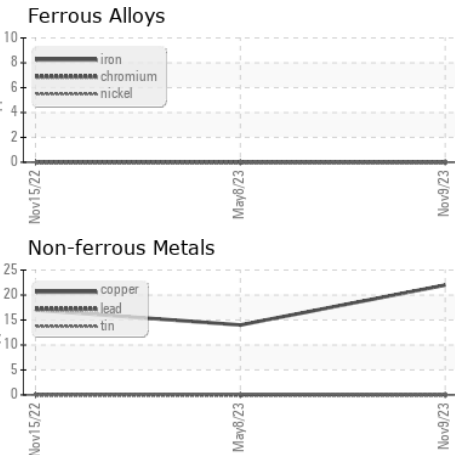
| VISUAL           | method | limit/base | current | history1     | history2 |
|------------------|--------|------------|---------|--------------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE         | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE         | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE         | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE         | NONE     |
| Debris           | scalar | *Visual    | NONE    | <b>LIGHT</b> | NONE     |
| 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   | <b>NEG</b>   | NEG      |
| Free Water       | scalar | *Visual    |         | <b>NEG</b>   | NEG      |

| FLUID PROPERTIES | method | limit/base   | current     | history1 | history2 |
|------------------|--------|--------------|-------------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445 45 | <b>48.7</b> | 46.9     | 44.6     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA06998 **Received** : 16 Nov 2023  
**Lab Number** : 06009674 **Diagnosed** : 19 Nov 2023  
**Unique Number** : 10743436 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**AAON COIL**  
 203 GUM SPRINGS RD  
 LONGVIEW, TX  
 US 75602  
 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: