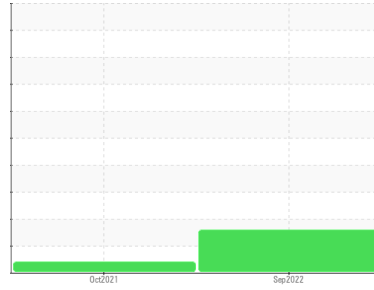




# PROBLEM SUMMARY

Sample Rating Trend



ISO



Machine Id  
**KAESER BSD 60 7266230 (S/N 1607)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

| Sample Status   |              |           | <b>ABNORMAL</b>   | ABNORMAL | --- |
|-----------------|--------------|-----------|-------------------|----------|-----|
| Particles >6µm  | ASTM D7647   | >1300     | ▲ <b>3925</b>     | ---      | --- |
| Particles >14µm | ASTM D7647   | >80       | ▲ <b>347</b>      | ---      | --- |
| Particles >21µm | ASTM D7647   | >20       | ▲ <b>48</b>       | ---      | --- |
| Oil Cleanliness | ISO 4406 (c) | >--/17/13 | ▲ <b>21/19/16</b> | ---      | --- |

Customer Id: AMELOC  
 Sample No.: KCP49267  
 Lab Number: 05648939  
 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. |

## HISTORICAL DIAGNOSIS

### 04 Oct 2021 Diag: Doug Bogart

#### VIS DEBRIS



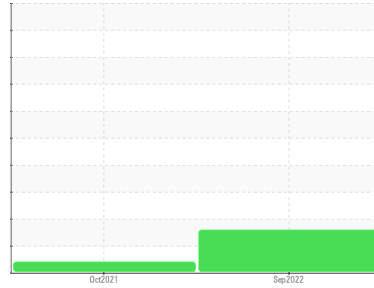
No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. 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



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER BSD 60 7266230 (S/N 1607)**

Component  
**Compressor**

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

**DIAGNOSIS**

▲ **Recommendation**

Oil and 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 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>KCP49267</b>    | KCP39353    | ---      |
| Sample Date        | Client Info |             |            | <b>09 Sep 2022</b> | 04 Oct 2021 | ---      |
| Machine Age        | hrs         | Client Info |            | <b>7544</b>        | 3745        | ---      |
| Oil Age            | hrs         | Client Info |            | <b>3184</b>        | 3745        | ---      |
| Oil Changed        | Client Info |             |            | <b>Changed</b>     | Changed     | ---      |
| Sample Status      |             |             |            | <b>ABNORMAL</b>    | ABNORMAL    | ---      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >50        | <b>&lt;1</b> | <1       | ---      |
| Chromium    | ppm | ASTM D5185m | >10        | <b>&lt;1</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>     | <1       | ---      |
| Lead        | ppm | ASTM D5185m | >10        | <b>4</b>     | <1       | ---      |
| Copper      | ppm | ASTM D5185m | >50        | <b>2</b>     | 1        | ---      |
| Tin         | ppm | ASTM D5185m | >10        | <b>&lt;1</b> | <1       | ---      |
| Antimony    | ppm | ASTM D5185m |            | <b>---</b>   | 0        | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | ---      |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |

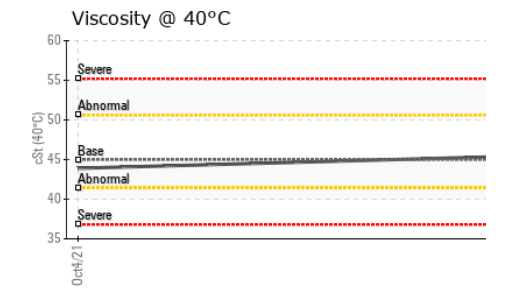
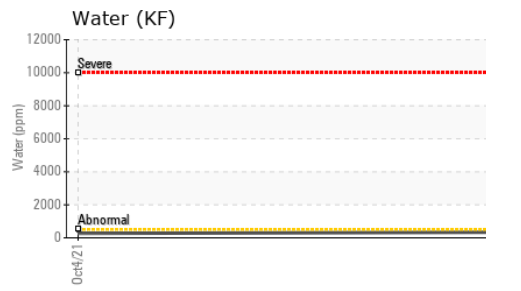
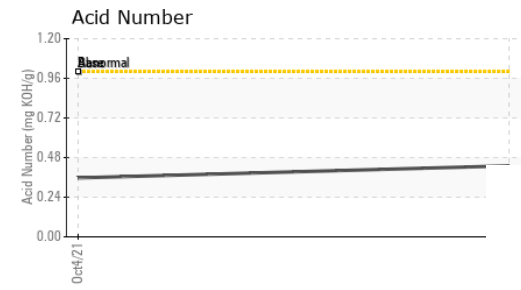
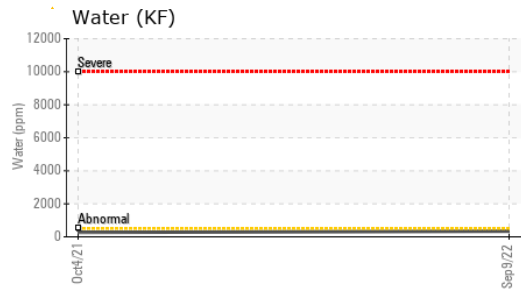
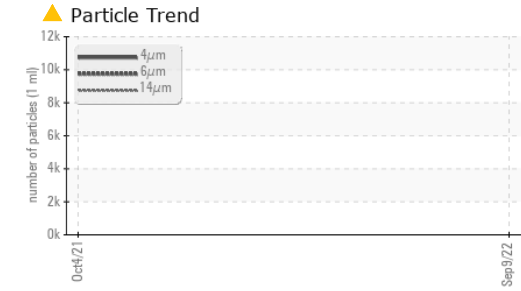
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m | 0          | <b>0</b>     | <1       | ---      |
| Barium     | ppm | ASTM D5185m | 90         | <b>0</b>     | 4        | ---      |
| Molybdenum | ppm | ASTM D5185m | 0          | <b>0</b>     | 0        | ---      |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | ---      |
| Magnesium  | ppm | ASTM D5185m | 100        | <b>56</b>    | 72       | ---      |
| Calcium    | ppm | ASTM D5185m | 0          | <b>&lt;1</b> | 0        | ---      |
| Phosphorus | ppm | ASTM D5185m | 0          | <b>9</b>     | 4        | ---      |
| Zinc       | ppm | ASTM D5185m | 0          | <b>2</b>     | 0        | ---      |
| Sulfur     | ppm | ASTM D5185m | 23500      | <b>14783</b> | 15797    | ---      |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>1</b>     | <1       | ---      |
| Sodium       | ppm | ASTM D5185m |            | <b>10</b>    | 13       | ---      |
| Potassium    | ppm | ASTM D5185m | >20        | <b>10</b>    | 6        | ---      |
| Water        | %   | ASTM D6304  | >0.05      | <b>0.034</b> | 0.026    | ---      |
| ppm Water    | ppm | ASTM D6304  | >500       | <b>340.8</b> | 267.4    | ---      |

| FLUID CLEANLINESS |  | method       | limit/base | current           | history1 | history2 |
|-------------------|--|--------------|------------|-------------------|----------|----------|
| Particles >4µm    |  | ASTM D7647   |            | <b>11252</b>      | ---      | ---      |
| Particles >6µm    |  | ASTM D7647   | >1300      | ▲ <b>3925</b>     | ---      | ---      |
| Particles >14µm   |  | ASTM D7647   | >80        | ▲ <b>347</b>      | ---      | ---      |
| Particles >21µm   |  | ASTM D7647   | >20        | ▲ <b>48</b>       | ---      | ---      |
| Particles >38µm   |  | ASTM D7647   | >4         | <b>1</b>          | ---      | ---      |
| Particles >71µm   |  | ASTM D7647   | >3         | <b>0</b>          | ---      | ---      |
| Oil Cleanliness   |  | ISO 4406 (c) | >--/17/13  | ▲ <b>21/19/16</b> | ---      | ---      |

| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 1.0        | <b>0.43</b> | 0.357    | ---      |

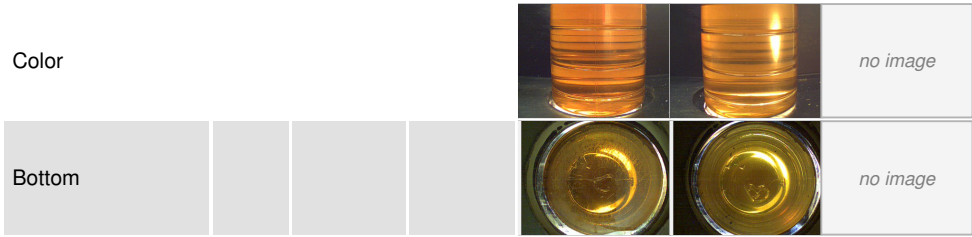
# OIL ANALYSIS REPORT



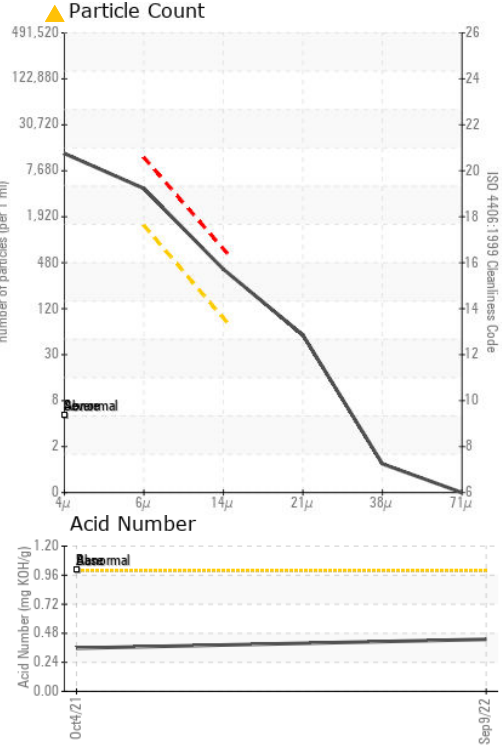
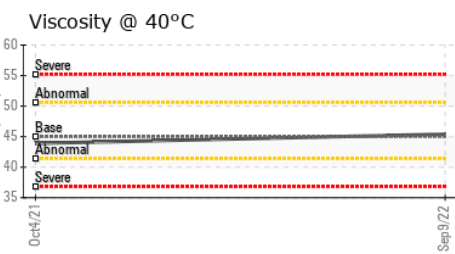
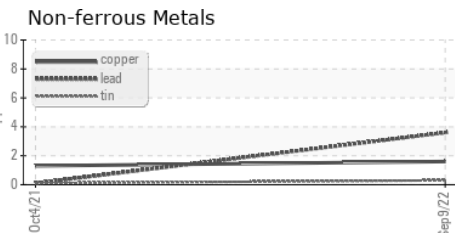
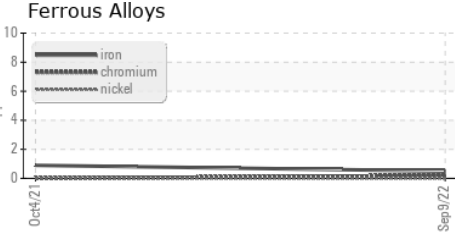
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | ---      |
| Silt             | scalar | *Visual    | NONE    | NONE     | ---      |
| Debris           | scalar | *Visual    | NONE    | 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      | 43.9     | ---      |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP49267 **Received** : 22 Sep 2022  
**Lab Number** : 05648939 **Diagnosed** : 26 Sep 2022  
**Unique Number** : 10143478 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**AMERISOURCE BERGEN**  
 6301 LA SALLE DR  
 LOCKBOURNE, OH  
 US 43137  
 Contact: M. BAUGHN  
 mbaughn@amerisourcebergen.com

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: