

## **PROBLEM SUMMARY**

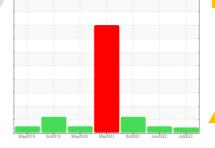
Sample Rating Trend

VIS DEBRIS

Machine Id KAESER CSD 125 6667209 (S/N 1241)

Compressor

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





**COMPONENT CONDITION SUMMARY** 

No relevant graphs to display

### RECOMMENDATION

We recommend you service the filters on this component. 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 T | EST RE | SULTS   |      |          |        |          |
|---------------|--------|---------|------|----------|--------|----------|
| Sample Status |        |         |      | ABNORMAL | NORMAL | ABNORMAL |
| Debris        | scalar | *Visual | NONE | MODER    | NONE   | NONE     |

Customer Id: OKLTUL Sample No.: KCPA004461 Lab Number: 05925449 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

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

### **RECOMMENDED ACTIONS**

| Action        | Status | Date | Done By | Description   |
|---------------|--------|------|---------|---|
| Change Filter |        |      | ?       | We recommend you service the filters on this component.   |
| Alert         |        |      | ?       | We were unable to perform a particle count due to a high concentration of particles present in this sample. |

### HISTORICAL DIAGNOSIS

### 06 Jun 2022 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.



### 08 Oct 2021 Diag: Don Baldridge

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 acceptable for the time in service.



### 11 Mar 2021 Diag: Doug Bogart

### **VISUAL METAL**



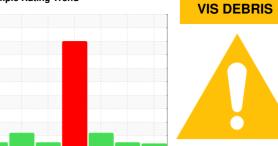
We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample. Please note that this is a corrected copy for diagnostic comment updates. Moderate concentration of visible metal present. All component wear rates are normal. High wear metal levels reflect the reported failure. Suspect sudden failure. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid.





## **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# KAESER CSD 125 6667209 (S/N 1241)

Component

Compressor

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. 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**

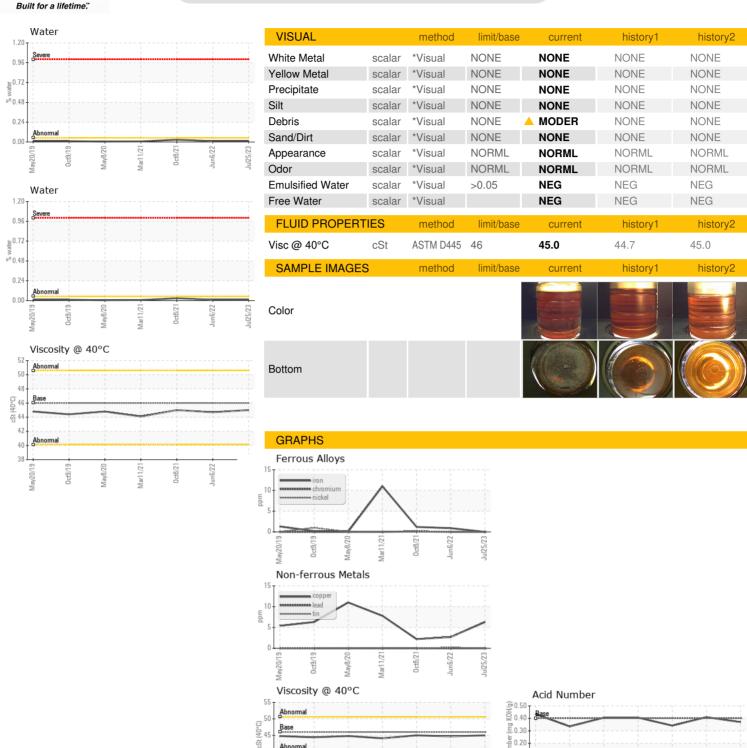
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

|                 |        | May2019      | Oct2019 May2020 | Mar2021 Oct2021 Jun2022 | Jui2023     |                |
|-----------------|--------|--------------|-----------------|-------------------------|-------------|----------------|
| SAMPLE INFORM   | MATION | method       | limit/base      | current                 | history1    | history2       |
| Sample Number   |        | Client Info  |                 | KCPA004461              | KCP40428    | KCP36180       |
| Sample Date     |        | Client Info  |                 | 25 Jul 2023             | 06 Jun 2022 | 08 Oct 2021    |
| Machine Age     | hrs    | Client Info  |                 | 33765                   | 25293       | 20271          |
| Oil Age         | hrs    | Client Info  |                 | 0                       | 6426        | 1510           |
| Oil Changed     |        | Client Info  |                 | N/A                     | Changed     | Changed        |
| Sample Status   |        |              |                 | ABNORMAL                | NORMAL      | ABNORMAL       |
| WEAR METALS     |        | method       | limit/base      | current                 | history1    | history2       |
| Iron            | ppm    | ASTM D5185m  | >50             | 0                       | <1          | 1              |
| Chromium        | ppm    | ASTM D5185m  | >10             | 0                       | 0           | <1             |
| Nickel          | ppm    | ASTM D5185m  | >3              | 0                       | 0           | 0              |
| Titanium        | ppm    | ASTM D5185m  | >3              | 0                       | 0           | 0              |
| Silver          | ppm    | ASTM D5185m  | >2              | 0                       | 0           | 0              |
| Aluminum        | ppm    | ASTM D5185m  | >10             | <1                      | <1          | 3              |
| Lead            | ppm    | ASTM D5185m  | >10             | 0                       | 0           | 0              |
| Copper          | ppm    | ASTM D5185m  | >50             | 6                       | 3           | 2              |
| Tin             | ppm    | ASTM D5185m  | >10             | 0                       | <1          | 0              |
| Antimony        | ppm    | ASTM D5185m  |                 |                         |             | <1             |
| Vanadium        | ppm    | ASTM D5185m  |                 | 0                       | 0           | 0              |
| Cadmium         | ppm    | ASTM D5185m  |                 | 0                       | 0           | 0              |
| ADDITIVES       |        | method       | limit/base      | current                 | history1    | history2       |
| Boron           | ppm    | ASTM D5185m  |                 | 0                       | 2           | <1             |
| Barium          | ppm    | ASTM D5185m  | 90              | 0                       | <1          | <1             |
| Molybdenum      | ppm    | ASTM D5185m  |                 | 0                       | 0           | 0              |
| Manganese       | ppm    | ASTM D5185m  |                 | 0                       | 0           | <1             |
| Magnesium       | ppm    | ASTM D5185m  | 90              | 8                       | 23          | 47             |
| Calcium         | ppm    | ASTM D5185m  | 2               | 0                       | 0           | 0              |
| Phosphorus      | ppm    | ASTM D5185m  |                 | 3                       | 5           | 3              |
| Zinc            | ppm    | ASTM D5185m  |                 | 4                       | 18          | 9              |
| Sulfur          | ppm    | ASTM D5185m  |                 | 21066                   | 20801       | 16570          |
| CONTAMINANTS    | 3      | method       | limit/base      | current                 | history1    | history2       |
| Silicon         | ppm    | ASTM D5185m  | >25             | <1                      | <1          | 0              |
| Sodium          | ppm    | ASTM D5185m  |                 | 4                       | 6           | 14             |
| Potassium       | ppm    | ASTM D5185m  | >20             | 2                       | 2           | 6              |
| Water           | %      | ASTM D6304   |                 | 0.008                   | 0.010       | 0.028          |
| ppm Water       | ppm    | ASTM D6304   | >500            | 85.9                    | 107.3       | 287.9          |
| FLUID CLEANLIN  | IESS   | method       | limit/base      | current                 | history1    | history2       |
| Particles >4μm  |        | ASTM D7647   |                 |                         | 1311        | 48110          |
| Particles >6µm  |        | ASTM D7647   | >1300           |                         | 299         | <u>▲</u> 15308 |
| Particles >14μm |        | ASTM D7647   | >80             |                         | 19          | <u> </u>       |
| Particles >21µm |        | ASTM D7647   | >20             |                         | 4           | <b>2</b> 09    |
| Particles >38µm |        | ASTM D7647   | >4              |                         | 0           | 4              |
| Particles >71μm |        | ASTM D7647   | >3              |                         | 0           | 0              |
| Oil Cleanliness |        | ISO 4406 (c) | >/17/13         |                         | 18/15/11    | <u>^</u> 21/17 |
| FLUID DEGRADA   | ATION  | method       | limit/base      | current                 | history1    | history2       |
|                 |        |              |                 |                         |             |                |

0.37



### **OIL ANALYSIS REPORT**







Certificate L2367

Laboratory Sample No. **Lab Number Unique Number** 

: 05925449

: KCPA004461 : 10605396

0ct9/19

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Diagnosed

Mar11/21

: 15 Aug 2023

: 17 Aug 2023 Diagnostician : Jonathan Hester

₹ 0.10 0.00 G

0ct9/19

Test Package : IND 2 ( Additional Tests: KF, PrtCount )

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) **OKLAHOMA FORGE** 

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T: F:

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