

## **PROBLEM SUMMARY**

Sample Rating Trend

ISO

Machine Id

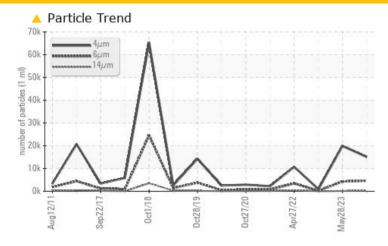
# KAESER SK 15 3831715 (S/N 1313)

Component

Compressor

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

### **COMPONENT CONDITION SUMMARY**



### 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            |              |         | ABNORMAL        | ABNORMAL     | NORMAL   |  |  |  |  |
| Particles >6µm           | ASTM D7647   | >1300   | <b>4646</b>     | <b>4288</b>  | 203      |  |  |  |  |
| Particles >14µm          | ASTM D7647   | >80     | <b>322</b>      | <b>▲</b> 131 | 11       |  |  |  |  |
| Particles >21µm          | ASTM D7647   | >20     | <b>A</b> 78     | <u>^</u> 22  | 4        |  |  |  |  |
| Oil Cleanliness          | ISO 4406 (c) | >/17/13 | <b>21/19/16</b> | 21/19/14     | 17/15/11 |  |  |  |  |

Customer Id: ADVDAL Sample No.: KCPA009408 Lab Number: 06009665 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

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

### **RECOMMENDED ACTIONS**

There are no recommended actions for this sample.

### HISTORICAL DIAGNOSIS

### 28 May 2023 Diag: Jonathan Hester

ISO



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. 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.



### 07 Nov 2022 Diag: Don Baldridge

NORMAL



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. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



### 27 Apr 2022 Diag: Don Baldridge

150



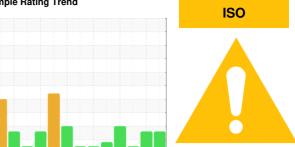
No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service





## **OIL ANALYSIS REPORT**

Sample Rating Trend



## KAESER SK 15 3831715 (S/N 1313)

Compressor

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

### **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 high amount of particulates present in the oil.

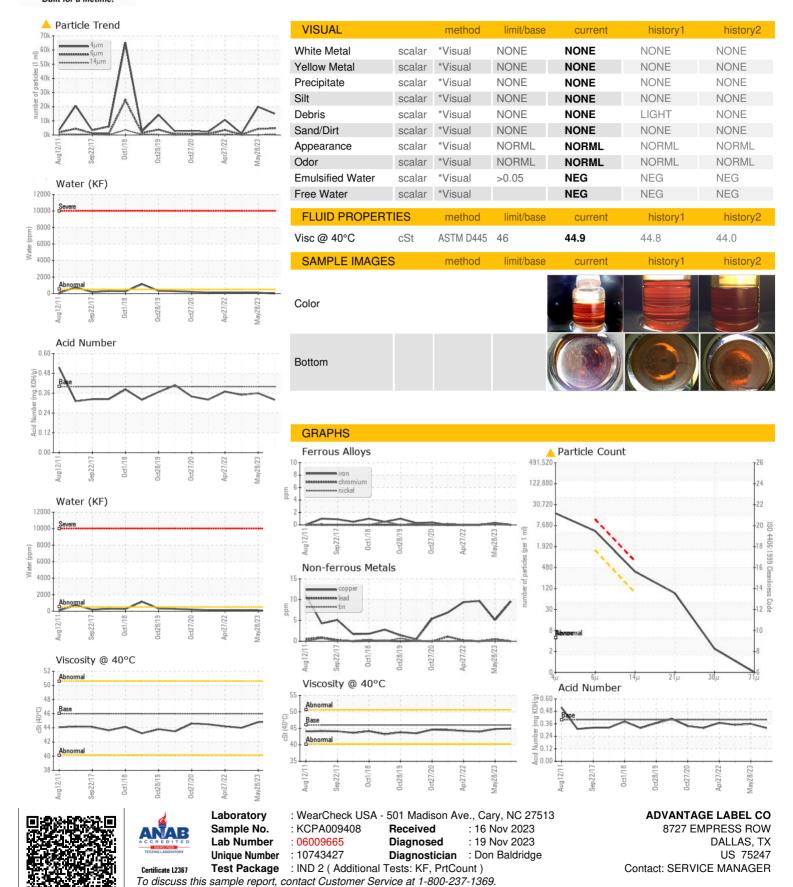
### **Fluid Condition**

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

|                  |          | Aug2011 Se   | p2017 Oct2018 Oct | 2019 Oct2020 Apr2022 M | May2023                           |             |
|------------------|----------|--------------|-------------------|------------------------|-----------------------------------|-------------|
| SAMPLE INFORM    | MATION   | method       | limit/base        | current                | history1                          | history2    |
| Sample Number    |          | Client Info  |                   | KCPA009408             | KCPA001829                        | KCP47929    |
| Sample Date      |          | Client Info  |                   | 03 Nov 2023            | 28 May 2023                       | 07 Nov 2022 |
| Machine Age      | hrs      | Client Info  |                   | 51922                  | 48665                             | 46007       |
| Oil Age          | hrs      | Client Info  |                   | 0                      | 0                                 | 3000        |
| Oil Changed      |          | Client Info  |                   | N/A                    | N/A                               | Changed     |
| Sample Status    |          |              |                   | ABNORMAL               | ABNORMAL                          | NORMAL      |
| WEAR METALS      |          | method       | limit/base        | current                | history1                          | history2    |
| Iron             | ppm      | ASTM D5185m  | >50               | 0                      | <1                                | 0           |
| Chromium         | ppm      | ASTM D5185m  | >10               | 0                      | <1                                | 0           |
| Nickel           | ppm      | ASTM D5185m  | >3                | 0                      | <1                                | 0           |
| Titanium         | ppm      | ASTM D5185m  | >3                | 0                      | <1                                | 0           |
| Silver           | ppm      | ASTM D5185m  | >2                | 0                      | <1                                | 0           |
| Aluminum         | ppm      | ASTM D5185m  | >10               | <1                     | 1                                 | 0           |
| Lead             | ppm      | ASTM D5185m  | >10               | 0                      | <1                                | 0           |
| Copper           | ppm      | ASTM D5185m  |                   | 10                     | 5                                 | 10          |
| Tin              | ppm      | ASTM D5185m  | >10               | 0                      | <1                                | 0           |
| Vanadium         | ppm      | ASTM D5185m  |                   | 0                      | <1                                | 0           |
| Cadmium          | ppm      | ASTM D5185m  |                   | 0                      | <1                                | 0           |
| ADDITIVES        |          | method       | limit/base        | current                | history1                          | history2    |
| Boron            | ppm      | ASTM D5185m  |                   | 0                      | 0                                 | 0           |
| Barium           | ppm      | ASTM D5185m  | 90                | 15                     | 0                                 | 0           |
| Molybdenum       | ppm      | ASTM D5185m  |                   | 0                      | <1                                | 0           |
| Manganese        | ppm      | ASTM D5185m  |                   | 0                      | <1                                | 0           |
| Magnesium        | ppm      | ASTM D5185m  | 90                | 8                      | 24                                | 0           |
| Calcium          | ppm      | ASTM D5185m  | 2                 | <1                     | 0                                 | 0           |
| Phosphorus       | ppm      | ASTM D5185m  |                   | 21                     | 2                                 | 0           |
| Zinc             | ppm      | ASTM D5185m  |                   | 0                      | 30                                | 1           |
| Sulfur           | ppm      | ASTM D5185m  |                   | 18339                  | 20084                             | 16742       |
| CONTAMINANTS     |          | method       | limit/base        | current                | history1                          | history2    |
| Silicon          | ppm      | ASTM D5185m  | >25               | <1                     | <1                                | 0           |
| Sodium           | ppm      | ASTM D5185m  |                   | 0                      | 4                                 | <1          |
| Potassium        | ppm      | ASTM D5185m  | >20               | <1                     | <1                                | 0           |
| Water            | %        | ASTM D6304   | >0.05             | 0.001                  | 0.011                             | 0.010       |
| ppm Water        | ppm      | ASTM D6304   | >500              | 8.3                    | 112.7                             | 108.9       |
| FLUID CLEANLIN   | IESS     | method       | limit/base        | current                | history1                          | history2    |
| Particles >4µm   |          | ASTM D7647   |                   | 15061                  | 19930                             | 949         |
| Particles >6µm   |          | ASTM D7647   | >1300             | <b>4646</b>            | <b>▲</b> 4288                     | 203         |
| Particles >14µm  |          | ASTM D7647   | >80               | <b>322</b>             | <u>131</u>                        | 11          |
| Particles >21µm  |          | ASTM D7647   | >20               | <b>^</b> 78            | <u>^</u> 22                       | 4           |
| Particles >38μm  |          | ASTM D7647   | >4                | 2                      | 1                                 | 0           |
| Particles >71μm  |          | ASTM D7647   | >3                | 0                      | 0                                 | 0           |
| Oil Cleanliness  |          | ISO 4406 (c) | >/17/13           | <u> </u>               | <u>\$\text{\Delta}\$ 21/19/14</u> | 17/15/11    |
| FLUID DEGRADA    | TION     | method       | limit/base        | current                | history1                          | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D8045   | 0.4               | 0.32                   | 0.36                              | 0.35        |



### **OIL ANALYSIS REPORT**



\* - 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: