

# **PROBLEM SUMMARY**

Sample Rating Trend



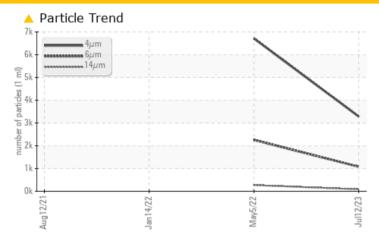
5006352 (S/N 1051)

Component

Compressor

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

### **COMPONENT CONDITION SUMMARY**



### RECOMMENDATION

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

| PROBLEMATIC TO  | EST RESULTS  |         |                 |              |          |
|-----------------|--------------|---------|-----------------|--------------|----------|
| Sample Status   |              |         | ATTENTION       | ABNORMAL     | ABNORMAL |
| Particles >14μm | ASTM D7647   | >80     | <b>^</b> 86     | <u>^</u> 270 |          |
| Oil Cleanliness | ISO 4406 (c) | >/17/13 | <b>19/17/14</b> | 20/18/15     |          |

Customer Id: LTPSAN Sample No.: KCPA004635 Lab Number: 05900736 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Angela Borella +1 800-237-1369 angela.borella@wearcheckusa.com

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

### 05 May 2022 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 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.



## 14 Jan 2022 Diag: Don Baldridge

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 acceptable for the time in service.



### 12 Aug 2021 Diag: Don Baldridge

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 acceptable for the time in service.





## **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

5006352 (S/N 1051)

Component

Compressor

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

## DIAGNOSIS

### Recommendation

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 silt (particulates < 14 microns in size) present in the oil.

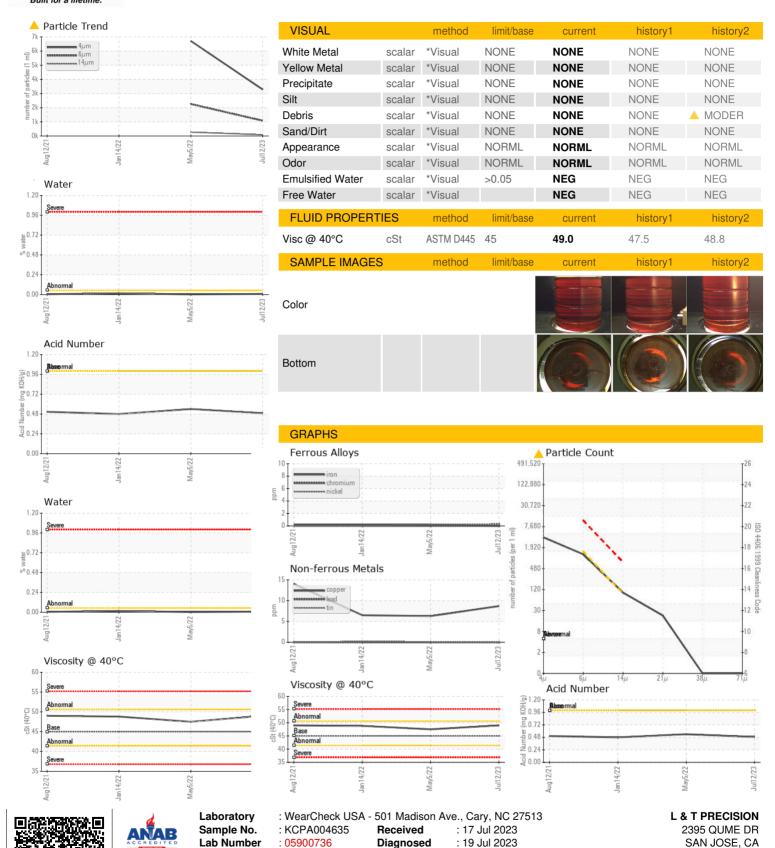
### **Fluid Condition**

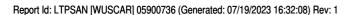
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

|                 |        | Aug202       | 1 Jan2022  | May2022 Ju  | 12023             |             |
|-----------------|--------|--------------|------------|-------------|-------------------|-------------|
| SAMPLE INFORM   | MATION | method       | limit/base | current     | history1          | history2    |
| Sample Number   |        | Client Info  |            | KCPA004635  | KCP45412          | KCP39009    |
| Sample Date     |        | Client Info  |            | 12 Jul 2023 | 05 May 2022       | 14 Jan 2022 |
| Machine Age     | hrs    | Client Info  |            | 50454       | 85263             | 37756       |
| Oil Age         | hrs    | Client Info  |            | 0           | 0                 | 3100        |
| Oil Changed     |        | Client Info  |            | N/A         | Changed           | Changed     |
| Sample Status   |        |              |            | ATTENTION   | ABNORMAL          | ABNORMAL    |
| WEAR METALS     |        | method       | limit/base | current     | history1          | history2    |
| Iron            | ppm    | ASTM D5185m  | >50        | 0           | <1                | <1          |
| Chromium        | ppm    | ASTM D5185m  | >10        | 0           | 0                 | 0           |
| Nickel          | ppm    | ASTM D5185m  | >3         | <1          | <1                | 0           |
| Titanium        | ppm    | ASTM D5185m  | >3         | 0           | 0                 | 0           |
| Silver          | ppm    | ASTM D5185m  | >2         | 0           | <1                | 0           |
| Aluminum        | ppm    | ASTM D5185m  | >10        | 0           | <1                | 0           |
| Lead            | ppm    | ASTM D5185m  | >10        | 0           | 0                 | 0           |
| Copper          | ppm    | ASTM D5185m  | >50        | 9           | 6                 | 6           |
| Tin             | ppm    | ASTM D5185m  | >10        | 0           | <1                | <1          |
| Antimony        | ppm    | ASTM D5185m  |            |             |                   | 0           |
| 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          | 0           | 0                 | 0           |
| Barium          | ppm    | ASTM D5185m  | 90         | 0           | 0                 | 0           |
| Molybdenum      | ppm    | ASTM D5185m  | 0          | 0           | 0                 | 0           |
| Manganese       | ppm    | ASTM D5185m  |            | 0           | 0                 | 0           |
| Magnesium       | ppm    | ASTM D5185m  | 100        | 0           | 0                 | <1          |
| Calcium         | ppm    | ASTM D5185m  | 0          | 0           | 0                 | 0           |
| Phosphorus      | ppm    | ASTM D5185m  | 0          | 0           | 7                 | 11          |
| Zinc            | ppm    | ASTM D5185m  | 0          | 0           | 8                 | 0           |
| Sulfur          | ppm    | ASTM D5185m  | 23500      | 18118       | 16444             | 18335       |
| CONTAMINANTS    | i      | method       | limit/base | current     | history1          | history2    |
| Silicon         | ppm    | ASTM D5185m  | >25        | 0           | 1                 | 1           |
| Sodium          | ppm    | ASTM D5185m  |            | 0           | <1                | <1          |
| Potassium       | ppm    | ASTM D5185m  | >20        | 1           | 0                 | 0           |
| Water           | %      | ASTM D6304   | >0.05      | 0.008       | 0.003             | 0.015       |
| ppm Water       | ppm    | ASTM D6304   | >500       | 81.0        | 37.4              | 151.6       |
| FLUID CLEANLIN  | IESS   | method       | limit/base | current     | history1          | history2    |
| Particles >4µm  |        | ASTM D7647   |            | 3285        | 6709              |             |
| Particles >6µm  |        | ASTM D7647   | >1300      | 1078        | <u>2258</u>       |             |
| Particles >14μm |        | ASTM D7647   | >80        | <u>▲</u> 86 | <u> </u>          |             |
| Particles >21µm |        | ASTM D7647   | >20        | 19          | <u>^</u> 71       |             |
| Particles >38µm |        | ASTM D7647   | >4         | 0           | 4                 |             |
| Particles >71µm |        | ASTM D7647   | >3         | 0           | 0                 |             |
| Oil Cleanliness |        | ISO 4406 (c) | >/17/13    | <u> </u>    | <u>^</u> 20/18/15 |             |
| FLUID DEGRADA   | TION   | method       | limit/base | current     | history1          | history2    |
|                 | 1/011/ | 10T11 D0015  | 4.0        |             | 0 = 4             |             |



## **OIL ANALYSIS REPORT**





Certificate L2367

**Unique Number** 

: 10562092

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.

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

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Diagnostician : Angela Borella

US 95131

T: F:

Contact: Service Manager