

# **PROBLEM SUMMARY**

Sample Rating Trend

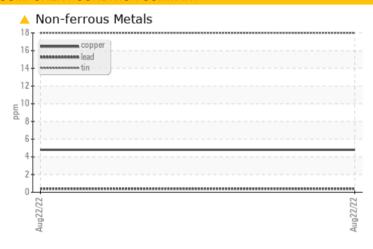
**WEAR** 

# KAESER DSD150T 3450379 - RENTAL (S/N 1004)

Compressor

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

### **COMPONENT CONDITION SUMMARY**



### 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 **ABNORMAL** Tin ppm ASTM D5185m >10 **18**

Customer Id: KAEMEM Sample No.: KCP50535 Lab Number: 05638593 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 |        |      |         |   |  |  |
|---------------------|--------|------|---------|---|--|--|
| 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



# **OIL ANALYSIS REPORT**

Sample Rating Trend

WEAR

Machine Id

# KAESER DSD150T 3450379 - RENTAL (S/N 1004)

Component

Compressor

KAESER SIGMA (OEM) S-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

The tin level is abnormal. All other component wear rates are normal.

### Contamination

The amount and size of particulates present in the system are acceptable.

### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

|                            |        |              |            | Aug 2022    |           |           |
|----------------------------|--------|--------------|------------|-------------|-----------|-----------|
| SAMPLE INFORM              | MATION | method       | limit/base | current     | history 1 | history 2 |
| Sample Number              |        |              |            | KCP50535    |           |           |
| Sample Date                |        |              |            | 22 Aug 2022 |           |           |
| Machine Age                | hrs    |              |            | 8874        |           |           |
| Oil Age hrs                |        |              |            | 0           |           |           |
| Oil Changed                |        |              |            | Changed     |           |           |
| Sample Status              |        |              |            | ABNORMAL    |           |           |
| WEAR METALS                |        | method       | limit/base | current     | history 1 | history 2 |
| Iron                       | ppm    | ASTM D5185m  | >50        | <1          |           |           |
| Chromium                   | ppm    | ASTM D5185m  | >10        | 0           |           |           |
| Nickel                     | ppm    | ASTM D5185m  | >3         | 0           |           |           |
| Titanium                   | ppm    | ASTM D5185m  | >3         | 0           |           |           |
| Silver                     | ppm    | ASTM D5185m  | >2         | 0           |           |           |
| Aluminum                   | ppm    | ASTM D5185m  | >10        | 2           |           |           |
| Lead                       | ppm    | ASTM D5185m  | >10        | <1          |           |           |
| Copper                     | ppm    | ASTM D5185m  |            | 5           |           |           |
| Tin                        | ppm    | ASTM D5185m  | >10        | <u> </u>    |           |           |
| Vanadium                   | ppm    | ASTM D5185m  |            | <1          |           |           |
| Cadmium                    | ppm    | ASTM D5185m  |            | <1          |           |           |
| ADDITIVES                  |        | method       | limit/base | current     | history 1 | history 2 |
| Boron                      | ppm    | ASTM D5185m  |            | 0           |           |           |
| Barium                     | ppm    | ASTM D5185m  | 90         | <1          |           |           |
| Molybdenum                 | ppm    | ASTM D5185m  |            | 0           |           |           |
| Manganese                  | ppm    | ASTM D5185m  |            | 1           |           |           |
| Magnesium                  | ppm    | ASTM D5185m  | 90         | 55          |           |           |
| Calcium                    | ppm    | ASTM D5185m  |            | 0           |           |           |
| Phosphorus                 | ppm    | ASTM D5185m  | _          | 8           |           |           |
| Zinc                       | ppm    | ASTM D5185m  |            | 36          |           |           |
| Sulfur                     | ppm    | ASTM D5185m  |            | 18411       |           |           |
| CONTAMINANTS               | 3      | method       | limit/base | current     | history 1 | history 2 |
| Silicon                    | ppm    | ASTM D5185m  | >25        | 1           |           |           |
| Sodium                     | ppm    | ASTM D5185m  |            | 14          |           |           |
| Potassium                  | ppm    | ASTM D5185m  | >20        | 4           |           |           |
| Water                      | %      | ASTM D6304   | >0.05      | 0.012       |           |           |
| ppm Water                  | ppm    | ASTM D6304   | >500       | 127.9       |           |           |
| FLUID CLEANLIN             | IESS   | method       | limit/base | current     | history 1 | history 2 |
| Particles >4µm             |        | ASTM D7647   |            | 366         |           |           |
| Particles >6µm             |        | ASTM D7647   | >1300      | 119         |           |           |
| Particles >14µm            |        | ASTM D7647   | >80        | 10          |           |           |
| Particles >21µm            |        | ASTM D7647   | >20        | 2           |           |           |
| Particles >38µm            |        | ASTM D7647   | >4         | 0           |           |           |
| Particles >71µm            |        | ASTM D7647   |            | 0           |           |           |
| Oil Cleanliness            |        | ISO 4406 (c) | >/17/13    | 16/14/10    |           |           |
| FLUID DEGRADA              | ATION  | method       | limit/base | current     | history 1 | history 2 |
| A -! -! Nicosala - o (ANI) | 1/011/ | ACTM DODAE   | 0.4        | 0.40        |           |           |

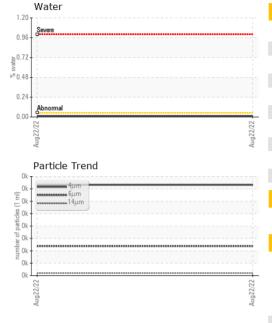
Acid Number (AN)

mg KOH/g ASTM D8045 0.4

0.42

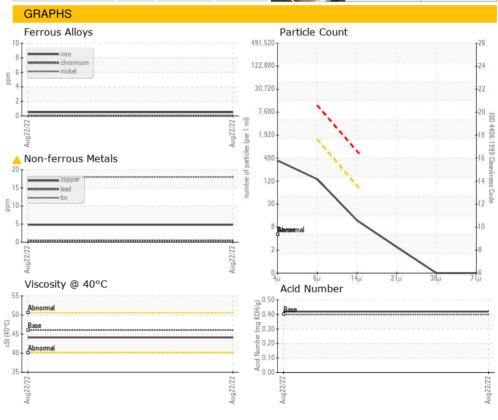


### **OIL ANALYSIS REPORT**



| VISUAL                  |        | method    | limit/base | current | history 1 | history 2 |
|-------------------------|--------|-----------|------------|---------|-----------|-----------|
| 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    |           |           |
| Sand/Dirt               | scalar | *Visual   | NONE       | NONE    |           |           |
| Appearance              | scalar | *Visual   | NORML      | NORML   |           |           |
| Odor                    | scalar | *Visual   | NORML      | NORML   |           |           |
| <b>Emulsified Water</b> | scalar | *Visual   | >0.05      | NEG     |           |           |
| Free Water              | scalar | *Visual   |            | NEG     |           |           |
| FLUID PROPERTIES        |        | method    | limit/base | current | history 1 | history 2 |
| Visc @ 40°C             | cSt    | ASTM D445 | 46         | 44.1    |           |           |
|                         |        |           |            |         |           |           |

| SAMPLE IMAGES | method | limit/base | current | history 1 | history 2 |
|---------------|--------|------------|---------|-----------|-----------|
| Color         |        |            |         | no image  | no image  |
| Bottom        |        |            |         | no image  | no image  |
| GRAPHS        |        |            |         |           |           |



: 12 Sep 2022

: 14 Sep 2022





Laboratory Sample No.

Lab Number

Unique Number : 10128123

: KCP50535 : 05638593

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

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.

KAESER COMPRESSORS

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