

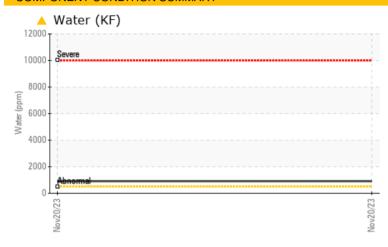
## **PROBLEM SUMMARY**

# Sample Rating Trend WATER

# KAESER 8755008

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

#### COMPONENT CONDITION SUMMARY



#### RECOMMENDATION

The filter change at the time of sampling has been noted. We were unable to perform a particle count on this sample. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

| PROBLEMATIC TEST RESULTS |     |            |       |              |  |  |  |
|--------------------------|-----|------------|-------|--------------|--|--|--|
| Sample Status            |     |            |       | ABNORMAL     |  |  |  |
| Water                    | %   | ASTM D6304 | >0.05 | <b>0.091</b> |  |  |  |
| ppm Water                | ppm | ASTM D6304 | >500  | <b>A</b> 910 |  |  |  |

Customer Id: PHOSAL Sample No.: KCPA010022 Lab Number: 06017349 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 <u>jhester@wearcheckusa.com</u>

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

| RECOMMEND | DED ACTIONS |      |         |   |
|-----------|-------------|------|---------|---|
| Action    | Status      | Date | Done By | Description   |
| Alert     |             |      | ?       | We were unable to perform a particle count due to a high concentration of particles present in this sample. |

HISTORICAL DIAGNOSIS



### **OIL ANALYSIS REPORT**





# KAESER 8755008

#### Component Compressor Fluid KAESER SIGMA (OEM) S-460 (--- GAL)

#### DIAGNOSIS

#### Recommendation

The filter change at the time of sampling has been noted. We were unable to perform a particle count on this sample. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

#### Wear

All component wear rates are normal.

#### Contamination

There is a light concentration of water present in the oil.

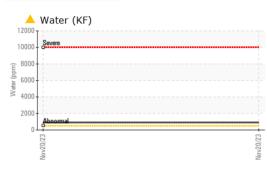
#### Fluid Condition

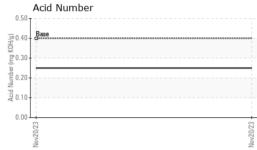
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

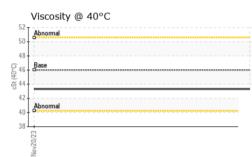
| SAMPLE INFORM   | ATION  | method  | limit/base   | current  | history1                     | history2                 |
|---|--|---|--|--|------------------------------|--------------------------|
| Sample Number   |  | Client Info   |  | KCPA010022   |                              |                          |
| Sample Date   |  | Client Info   |  | 20 Nov 2023  |                              |                          |
| Machine Age   | hrs  | Client Info   |  | 758  |                              |                          |
| Oil Age   | hrs  | Client Info   |  | 0  |                              |                          |
| Oil Changed   |  | Client Info   |  | N/A  |                              |                          |
| Sample Status   |  |   |  | ABNORMAL   |                              |                          |
| WEAR METALS   |  | method  | limit/base   | current  | history1                     | history2                 |
| Iron  | ppm  | ASTM D5185m   | >50  | 0  |                              |                          |
| 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  | 0  |                              |                          |
| Lead  | ppm  | ASTM D5185m   | >10  | <1   |                              |                          |
| Copper  | ppm  | ASTM D5185m   | >50  | 2  |                              |                          |
| Tin   | ppm  | ASTM D5185m   | >10  | 0  |                              |                          |
| Vanadium  | ppm  | ASTM D5185m   |  | 0  |                              |                          |
| Cadmium   | ppm  | ASTM D5185m   |  | 0  |                              |                          |
|   |  |   |  |  |                              |                          |
| ADDITIVES   |  | method  | limit/base   | current  | history1                     | history2                 |
| ADDITIVES<br>Boron  | ppm  | method<br>ASTM D5185m   | limit/base   | current<br>0   | history1                     | history2                 |
|   | ppm<br>ppm   |   | limit/base<br>90   |  |                              |                          |
| Boron   |  | ASTM D5185m   |  | 0  |                              |                          |
| Boron<br>Barium   | ppm  | ASTM D5185m<br>ASTM D5185m  |  | 0<br>0   |                              |                          |
| Boron<br>Barium<br>Molybdenum   | ppm<br>ppm   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   |  | 0<br>0<br>0  |                              |                          |
| Boron<br>Barium<br>Molybdenum<br>Manganese  | ppm<br>ppm<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | 90<br>90   | 0<br>0<br>0<br><1  |                              | <br>                     |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium   | ppm<br>ppm<br>ppm<br>ppm   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | 90<br>90   | 0<br>0<br>0<br><1<br>25  |                              |                          |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium  | ppm<br>ppm<br>ppm<br>ppm<br>ppm                                    | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | 90<br>90   | 0<br>0<br><1<br>25<br>0  | <br><br><br>                 | <br><br>                 |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm                             | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | 90<br>90   | 0<br>0<br><1<br>25<br>0<br>0   | <br><br><br>                 | <br><br>                 |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm                      | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | 90<br>90   | 0<br>0<br><1<br>25<br>0<br>0<br>25   | <br><br><br><br>             | <br><br><br><br>         |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm                      | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | 90<br>90<br>2  | 0<br>0<br><1<br>25<br>0<br>0<br>25<br>18677  |                              |                          |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm                      | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | 90<br>90<br>2<br>limit/base                                    | 0<br>0<br>2<br>3<br>4<br>25<br>0<br>0<br>0<br>25<br>18677<br>2<br>0<br>0<br>25                     | <br><br><br><br><br>history1 | <br><br><br><br>history2 |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon                                 | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm               | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br><b>method</b><br>ASTM D5185m                             | 90<br>90<br>2<br>limit/base                                    | 0<br>0<br>2<br>3<br>4<br>25<br>0<br>0<br>0<br>25<br>18677<br>25<br>18677<br>25                     | <br><br><br><br><br>history1 | <br><br><br><br>history2 |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium                       | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm               | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br><b>method</b><br>ASTM D5185m<br>ASTM D5185m                             | 90<br>90<br>2<br>limit/base<br>>25                             | 0<br>0<br>2<br>4<br>25<br>0<br>0<br>0<br>25<br>18677<br>25<br>18677<br>2<br>25<br>18677<br>2<br>27 | <br><br><br><br><br>history1 | <br><br><br><br>history2 |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium          | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | ASTM D5185m<br>ASTM D5185m                | 90<br>90<br>2<br>limit/base<br>>25<br>>20                      | 0<br>0<br>25<br>0<br>25<br>18677<br>current<br><1<br>7<br>5  | <br><br><br><br><br>history1 | <br><br><br><br>history2 |
| Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Water | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | ASTM D5185m<br>ASTM D5185m | 90<br>90<br>2<br>2<br><u>limit/base</u><br>>25<br>>20<br>>0.05 | 0<br>0<br>0<br><1<br>25<br>0<br>0<br>25<br>18677<br>current<br><1<br>7<br>5<br>5<br>0.091          | history1                     | history2                 |



## **OIL ANALYSIS REPORT**







| Vhite Metal                             |        | method    | limit/base   | current     | history1 | history2   |
|---|--------|-----------|--|-------------|----------|------------|
| VILLE MELAI                             | scalar | *Visual   | NONE   | MODER       |          |            |
| ellow 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        |          |            |
| ppearance                               | scalar | *Visual   | NORML  | NORML       |          |            |
| Ddor                                    | scalar | *Visual   | NORML  | NORML       |          |            |
| Emulsified Water                        | scalar | *Visual   | >0.05  | 0.2%        |          |            |
| ree Water                               | scalar | *Visual   |  | NEG         |          |            |
| FLUID PROPERT                           |        | method    | limit/base   | current     | history1 | history2   |
| /isc @ 40°C                             | cSt    | ASTM D445 |  | 43.3        |          | 1115t01 y2 |
|   |        |           |  |             |          |            |
| SAMPLE IMAGES                           | ;<br>; | method    | limit/base   | current     | history1 | history2   |
| Color                                   |        |           |  | •           | no image | no image   |
| Bottom                                  |        |           |  |             | no image | no image   |
| Nov20/23                                |        |           | Nov20/23   |             |          |            |
| Non-ferrous Metals                      | 5      |           | 1/23   |             |          |            |
| ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |        |           | /20  |             |          |            |
| Viscosity @ 40°C                        |        |           | 52/02/00<br>= 0.500  | Acid Number |          |            |
|   |        |           |  |             |          |            |
| Viscosity @ 40°C                        |        |           |  |             |          |            |
| Viscosity @ 40°C                        |        |           |  |             |          |            |
| Viscosity @ 40°C                        |        |           | (8),0.50<br>HOX 0.40<br>Bu 0.30<br>eq 0.20<br>P 0.10   |             |          |            |
| Viscosity @ 40°C                        |        |           | (BHQ) 0.50<br>(BHQ) 0.40<br>(BHQ) 0.30<br>(BHQ) 0.20<br>(BHQ) 0.10<br>(BHQ) 0.10<br>(BHQ) 0.00 | Base        |          | 33         |
| Viscosity @ 40°C                        |        |           | (8),0.50<br>HOX 0.40<br>Bu 0.30<br>eq 0.20<br>P 0.10   |             |          | Mov20223   |

To discuss this sample report, c \* - 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)

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Certificate L2367

Laboratory

Sample No. Lab Number **Unique Number Test Package**