

## **PROBLEM SUMMARY**

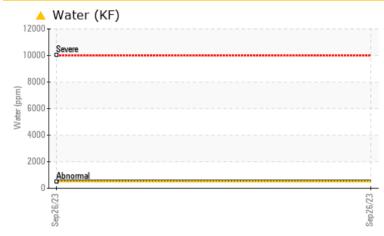
# Sample Rating Trend WATER

#### Machine Id 8920230 (S/N 12372) Component

Compressor



#### COMPONENT CONDITION SUMMARY



#### RECOMMENDATION

The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in 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       | <br> |
|------------------|--------|------------|-------|----------------|------|
| Water            | %      | ASTM D6304 | >0.05 | <b>A</b> 0.057 | <br> |
| ppm Water        | ppm    | ASTM D6304 | >500  | <b>6</b> 570   | <br> |
| Silt             | scalar | *Visual    | NONE  | A MODER        | <br> |
| Debris           | scalar | *Visual    | NONE  | 🔺 MODER        | <br> |
| Emulsified Water | scalar | *Visual    | >0.05 | <b>6.2%</b>    | <br> |
| Free Water       | scalar | *Visual    |       | <b>10.0</b>    | <br> |

Customer Id: COBMARGEO Sample No.: KCPA006195 Lab Number: 05997415 Test Package: IND 2



To manage this report scan the QR code

*To discuss the diagnosis or test data:* Don Baldridge +1 <u>don.b505@comcast.net</u>

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

| RECOMMENDE | D 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**



#### Machine Id 8920230 (S/N 12372) Component

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

#### DIAGNOSIS

#### A Recommendation

The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in 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 moderate amount of visible silt present in the sample. Moderate concentration of visible dirt/debris present in the oil. There is a trace of moisture present in the oil. Excessive free water present.

#### Fluid Condition

The AN level is acceptable for this fluid.

|   |  |  |  | Sep2023  |                              |                                  |
|---|--|--|--|--|------------------------------|----------------------------------|
| SAMPLE INFORM   | <b>IATION</b>  | method   | limit/base   | current  | history1                     | history2                         |
| Sample Number   |  | Client Info  |  | KCPA006195   |                              |                                  |
| Sample Date   |  | Client Info  |  | 26 Sep 2023  |                              |                                  |
| Machine Age   | hrs  | Client Info  |  | 257  |                              |                                  |
| 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  | 3  |                              |                                  |
| Chromium  | ppm  | ASTM D5185m  | >10  | <1   |                              |                                  |
| Nickel  | ppm  | ASTM D5185m  | >3   | 0  |                              |                                  |
| Titanium  | ppm  | ASTM D5185m  | >3   | 0  |                              |                                  |
| Silver  | ppm  | ASTM D5185m  | >2   | 0  |                              |                                  |
| Aluminum  | ppm  | ASTM D5185m  | >10  | <1   |                              |                                  |
| Lead  | ppm  | ASTM D5185m  | >10  | 0  |                              |                                  |
| Copper  | ppm  | ASTM D5185m  | >50  | 8  |                              |                                  |
| 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   |  |  |  |                              |                                  |
| Boron   |  | ASTM D5185m  | 0  | 0  |                              |                                  |
| Boron<br>Barium   | ppm  | ASTM D5185m<br>ASTM D5185m   | 0<br>90  | 0<br><1  |                              |                                  |
| Boron<br>Barium<br>Molybdenum   | ppm<br>ppm   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | 0<br>90  | 0<br><1<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   | 0<br>90<br>0   | 0<br><1<br>0<br>0  |                              |                                  |
| 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  | 0<br>90<br>0<br>100  | 0<br><1<br>0<br>0<br><1  |                              |                                  |
| 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   | 0<br>90<br>0<br>100<br>0   | 0<br><1<br>0<br><1<br><1<br><1   | <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   | 0<br>90<br>0<br>100<br>0<br>0  | 0<br><1<br>0<br><1<br><1<br><1<br>0  | <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<br>ppm               | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | 0<br>90<br>0<br>100<br>0<br>0<br>0   | 0<br><1<br>0<br><1<br><1<br><1<br>0<br>41  | <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<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   | 0<br>90<br>0<br>100<br>0<br>0<br>0<br>23500                                      | 0<br><1<br>0<br><1<br><1<br><1<br>0<br>41<br>22663                                 |                              |                                  |
| 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  | 0<br>90<br>0<br>100<br>0<br>0<br>23500   | 0<br><1<br>0<br><1<br><1<br><1<br>0<br>41<br>22663<br>current                      | <br><br><br><br><br>history1 | <br><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<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                             | 0<br>90<br>0<br>100<br>0<br>0<br>23500   | 0<br><1<br>0<br><1<br><1<br><1<br>0<br>41<br>22663<br>current<br><1                | <br><br><br><br>history1     | <br><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                             | 0<br>90<br>0<br>100<br>0<br>0<br>23500<br>limit/base<br>>25                      | 0<br><1<br>0<br><1<br><1<br><1<br>0<br>41<br>22663<br>current<br><1<br>0           | <br><br><br><br><br>history1 | <br><br><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 | 0<br>90<br>0<br>100<br>0<br>0<br>23500<br>limit/base<br>>25                      | 0<br><1<br>0<br><1<br><1<br><1<br>0<br>41<br>22663<br>current<br><1<br>0<br>2      | <br><br><br><br><br>history1 | <br><br><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 | 0<br>90<br>0<br>100<br>0<br>0<br>0<br>23500<br>limit/base<br>>25<br>>20<br>>0.05 | 0<br><1<br>0<br><1<br><1<br>0<br>41<br>22663<br>current<br><1<br>0<br>2<br>▲ 0.057 | <br><br><br><br><br>history1 | <br><br><br><br><br>history2     |



# **OIL ANALYSIS REPORT**

method

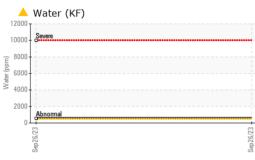
limit/base

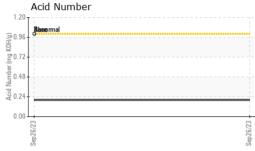
current

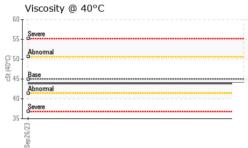
history1

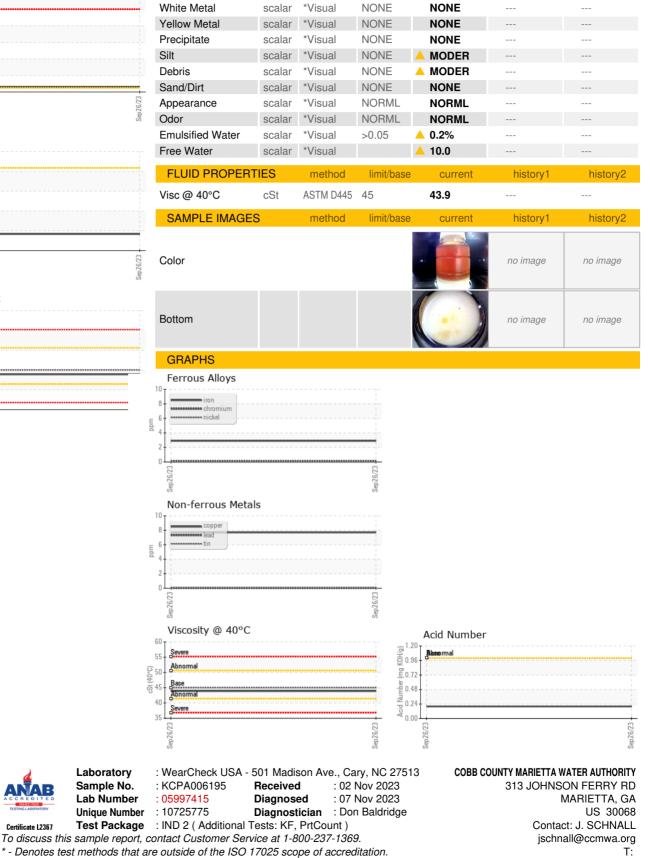
history2

VISUAL









\* - 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)

Certificate L2367

Laboratory

Sample No.

F: