



# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**5021800 (S/N 1016)**  
 Component  
**Compressor**  
 Fluid  
**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.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info |             | <b>KC06150366</b>  | ---      | ---      |
| Sample Date   | Client Info |             | <b>03 Apr 2024</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info | <b>59168</b>       | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>0</b>           | ---      | ---      |
| Oil Changed   | Client Info |             | <b>N/A</b>         | ---      | ---      |
| Sample Status |             |             | <b>ABNORMAL</b>    | ---      | ---      |

## WEAR METALS

|          | method | limit/base      | current      | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >50 | <b>0</b>     | ---      | ---      |
| Chromium | ppm    | ASTM D5185m >10 | <b>0</b>     | ---      | ---      |
| Nickel   | ppm    | ASTM D5185m >3  | <b>0</b>     | ---      | ---      |
| Titanium | ppm    | ASTM D5185m >3  | <b>0</b>     | ---      | ---      |
| Silver   | ppm    | ASTM D5185m >2  | <b>0</b>     | ---      | ---      |
| Aluminum | ppm    | ASTM D5185m >10 | <b>0</b>     | ---      | ---      |
| Lead     | ppm    | ASTM D5185m >10 | <b>0</b>     | ---      | ---      |
| Copper   | ppm    | ASTM D5185m >50 | <b>10</b>    | ---      | ---      |
| Tin      | ppm    | ASTM D5185m >10 | <b>&lt;1</b> | ---      | ---      |
| Vanadium | ppm    | ASTM D5185m     | <b>0</b>     | ---      | ---      |
| Cadmium  | ppm    | ASTM D5185m     | <b>0</b>     | ---      | ---      |

## ADDITIVES

|            | method | limit/base     | current  | history1 | history2 |
|------------|--------|----------------|----------|----------|----------|
| Boron      | ppm    | ASTM D5185m    | <b>0</b> | ---      | ---      |
| Barium     | ppm    | ASTM D5185m 90 | <b>0</b> | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185m    | <b>0</b> | ---      | ---      |
| Manganese  | ppm    | ASTM D5185m    | <b>0</b> | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185m 90 | <b>0</b> | ---      | ---      |
| Calcium    | ppm    | ASTM D5185m 2  | <b>0</b> | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185m    | <b>0</b> | ---      | ---      |
| Zinc       | ppm    | ASTM D5185m    | <b>0</b> | ---      | ---      |

## CONTAMINANTS

|           | method | limit/base       | current      | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >25  | <b>&lt;1</b> | ---      | ---      |
| Sodium    | ppm    | ASTM D5185m      | <b>2</b>     | ---      | ---      |
| Potassium | ppm    | ASTM D5185m >20  | <b>0</b>     | ---      | ---      |
| Water     | %      | ASTM D6304 >0.05 | <b>0.006</b> | ---      | ---      |
| ppm Water | ppm    | ASTM D6304 >500  | <b>66</b>    | ---      | ---      |

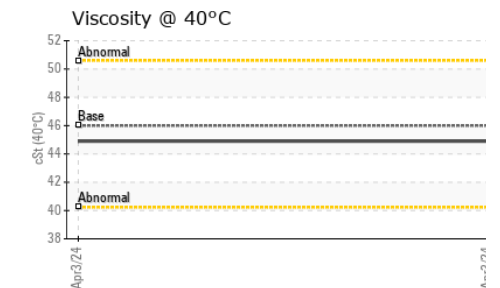
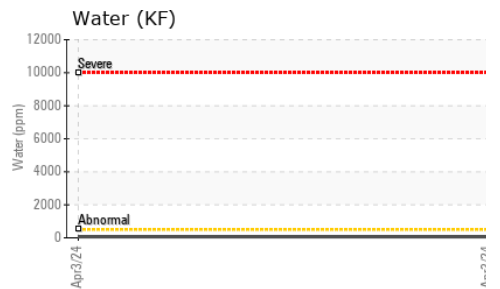
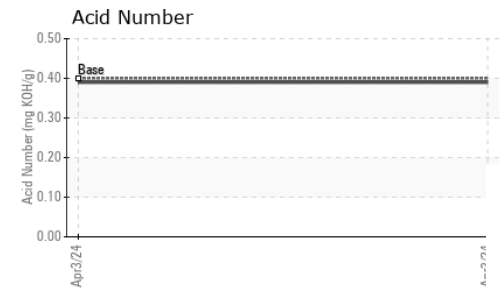
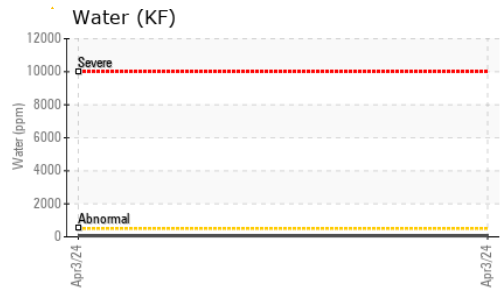
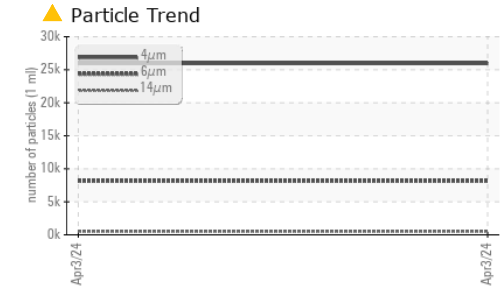
## FLUID CLEANLINESS

|                 | method                 | limit/base | current           | history1 | history2 |
|-----------------|------------------------|------------|-------------------|----------|----------|
| Particles >4µm  | ASTM D7647             |            | <b>25950</b>      | ---      | ---      |
| Particles >6µm  | ASTM D7647 >1300       |            | <b>▲ 8158</b>     | ---      | ---      |
| Particles >14µm | ASTM D7647 >80         |            | <b>▲ 514</b>      | ---      | ---      |
| Particles >21µm | ASTM D7647 >20         |            | <b>▲ 107</b>      | ---      | ---      |
| Particles >38µm | ASTM D7647 >4          |            | <b>1</b>          | ---      | ---      |
| Particles >71µm | ASTM D7647 >3          |            | <b>0</b>          | ---      | ---      |
| Oil Cleanliness | ISO 4406 (c) >--/17/13 |            | <b>▲ 22/20/16</b> | ---      | ---      |

## FLUID DEGRADATION

|                  | method   | limit/base     | current     | history1 | history2 |
|------------------|----------|----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.4 | <b>0.39</b> | ---      | ---      |

# OIL ANALYSIS REPORT



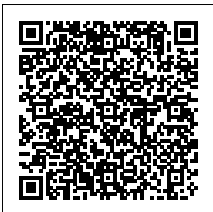
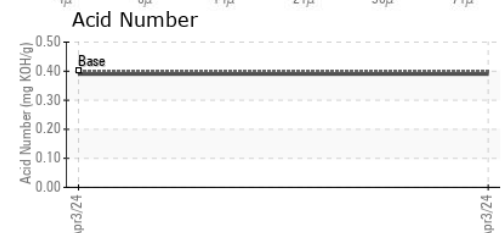
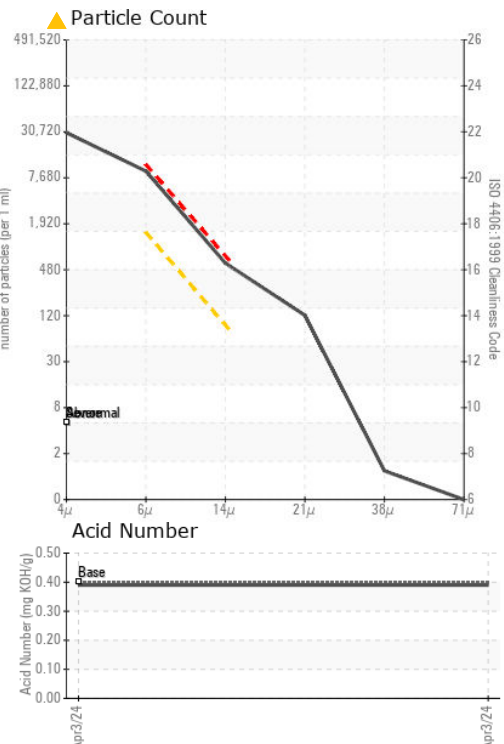
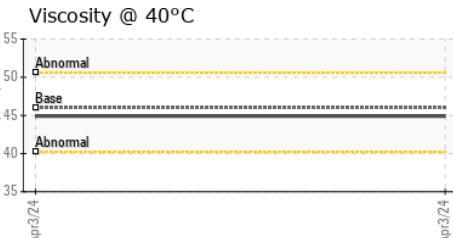
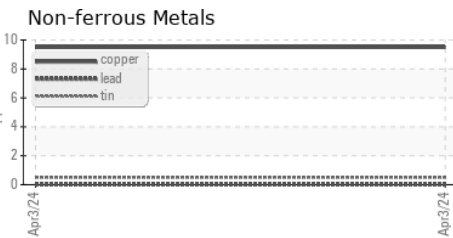
| PARAMETER        | VISUAL | method  | limit/base | current      | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal      | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Yellow Metal     | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Precipitate      | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Silt             | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Debris           | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Sand/Dirt        | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Appearance       | scalar | *Visual | NORML      | <b>NORML</b> | ---      | ---      |
| Odor             | scalar | *Visual | NORML      | <b>NORML</b> | ---      | ---      |
| Emulsified Water | scalar | *Visual | >0.05      | <b>NEG</b>   | ---      | ---      |
| Free Water       | scalar | *Visual |            | <b>NEG</b>   | ---      | ---      |

| PARAMETER        | method | limit/base   | current     | history1 | history2 |
|------------------|--------|--------------|-------------|----------|----------|
| FLUID PROPERTIES |        |              |             |          |          |
| Visc @ 40°C      | cSt    | ASTM D445 46 | <b>44.9</b> | ---      | ---      |

| PARAMETER     | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
| SAMPLE IMAGES |        |            |         |          |          |

| PARAMETER | method | limit/base | current | history1 | history2 |
|-----------|--------|------------|---------|----------|----------|
| Color     |        |            |         | no image | no image |
| Bottom    |        |            |         | no image | no image |

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC06150366  
**Lab Number** : 06150366  
**Unique Number** : 10980444  
**Test Package** : IND 2  
**Received** : 16 Apr 2024  
**Tested** : 17 Apr 2024  
**Diagnosed** : 17 Apr 2024 - Doug Bogart

**K & B MACHINE**  
 208 REBECCA'S POND RD  
 SCHRIEVER, LA  
 US 70395  
 Contact: Service Manager

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.

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