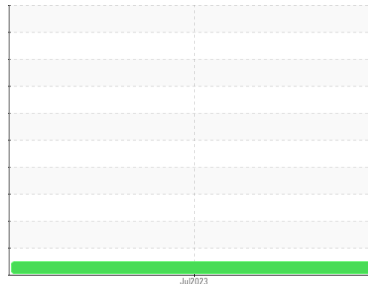




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**1005**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. 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 suitable for further service.

## SAMPLE INFORMATION

| method        | limit/base      | current            | history1 | history2 |
|---------------|-----------------|--------------------|----------|----------|
| Sample Number | Client Info     | <b>KCPA003062</b>  | ---      | ---      |
| Sample Date   | Client Info     | <b>25 Jul 2023</b> | ---      | ---      |
| Machine Age   | hrs Client Info | <b>39676</b>       | ---      | ---      |
| Oil Age       | hrs Client Info | <b>0</b>           | ---      | ---      |
| Oil Changed   | Client Info     | <b>N/A</b>         | ---      | ---      |
| Sample Status |                 | <b>NORMAL</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>&lt;1</b> | ---      | ---      |
| Lead ppm ASTM D5185m     | >10        | <b>0</b>     | ---      | ---      |
| Copper ppm ASTM D5185m   | >50        | <b>14</b>    | ---      | ---      |
| Tin ppm ASTM D5185m      | >10        | <b>0</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      | 0          | <b>0</b>     | ---      | ---      |
| Barium ppm ASTM D5185m     | 90         | <b>0</b>     | ---      | ---      |
| Molybdenum ppm ASTM D5185m | 0          | <b>0</b>     | ---      | ---      |
| Manganese ppm ASTM D5185m  |            | <b>&lt;1</b> | ---      | ---      |
| Magnesium ppm ASTM D5185m  | 100        | <b>27</b>    | ---      | ---      |
| Calcium ppm ASTM D5185m    | 0          | <b>0</b>     | ---      | ---      |
| Phosphorus ppm ASTM D5185m | 0          | <b>0</b>     | ---      | ---      |
| Zinc ppm ASTM D5185m       | 0          | <b>0</b>     | ---      | ---      |
| Sulfur ppm ASTM D5185m     | 23500      | <b>14112</b> | ---      | ---      |

## CONTAMINANTS

| method                    | limit/base | current      | history1 | history2 |
|---------------------------|------------|--------------|----------|----------|
| Silicon ppm ASTM D5185m   | >25        | <b>&lt;1</b> | ---      | ---      |
| Sodium ppm ASTM D5185m    |            | <b>10</b>    | ---      | ---      |
| Potassium ppm ASTM D5185m | >20        | <b>&lt;1</b> | ---      | ---      |
| Water % ASTM D6304        | >0.05      | <b>0.013</b> | ---      | ---      |
| ppm Water ppm ASTM D6304  | >500       | <b>135.6</b> | ---      | ---      |

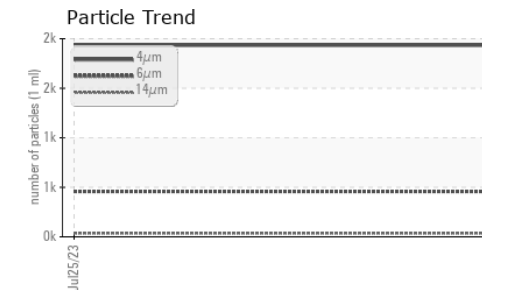
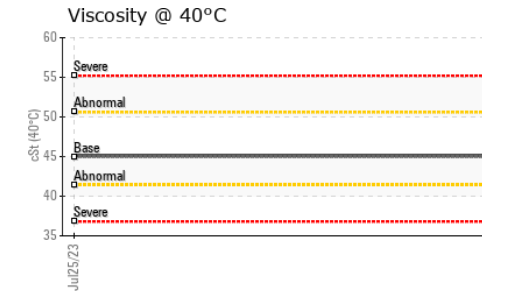
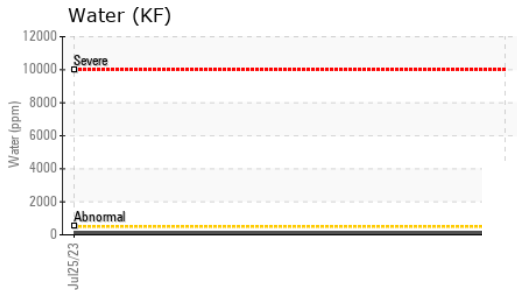
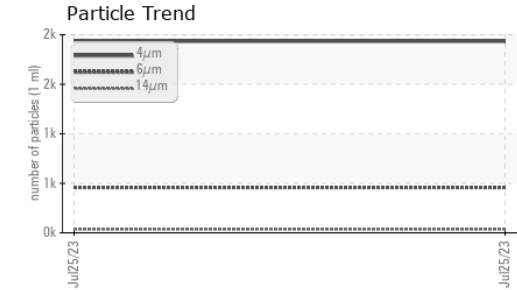
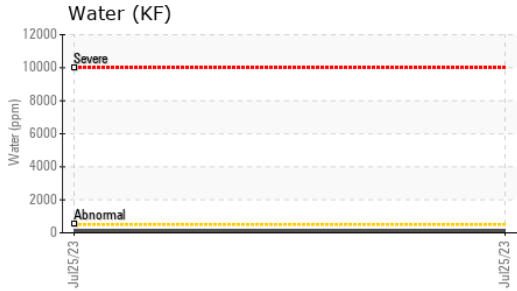
## FLUID CLEANLINESS

| method                       | limit/base | current         | history1 | history2 |
|------------------------------|------------|-----------------|----------|----------|
| Particles >4µm ASTM D7647    |            | <b>1934</b>     | ---      | ---      |
| Particles >6µm ASTM D7647    | >1300      | <b>458</b>      | ---      | ---      |
| Particles >14µm ASTM D7647   | >80        | <b>36</b>       | ---      | ---      |
| Particles >21µm ASTM D7647   | >20        | <b>11</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>18/16/12</b> | ---      | ---      |

## FLUID DEGRADATION

| method                               | limit/base | current     | history1 | history2 |
|--------------------------------------|------------|-------------|----------|----------|
| Acid Number (AN) mg KOH/g ASTM D8045 | 1.0        | <b>0.31</b> | ---      | ---      |

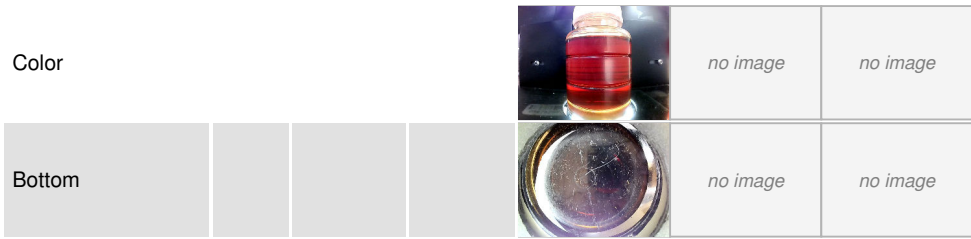
# OIL ANALYSIS REPORT



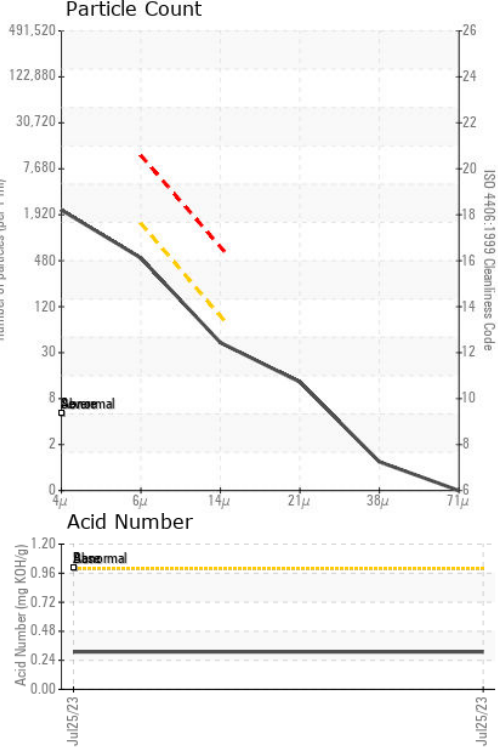
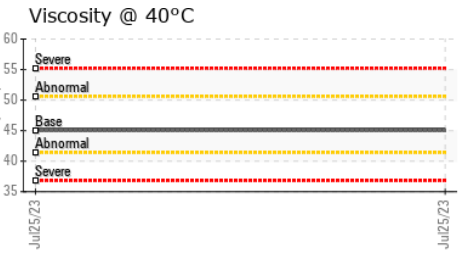
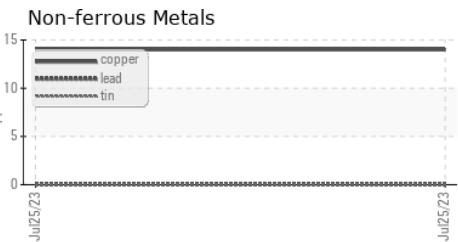
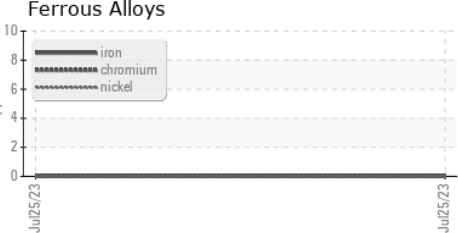
| VISUAL           | method | limit/base | current | history1     | history2 |
|------------------|--------|------------|---------|--------------|----------|
| White Metal      | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      |
| Yellow Metal     | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      |
| 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>   | ---      |

| FLUID PROPERTIES | method | limit/base | current | history1    | history2 |
|------------------|--------|------------|---------|-------------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 45      | <b>45.1</b> | ---      |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA003062 **Received** : 16 Oct 2023  
**Lab Number** : 05979635 **Diagnosed** : 18 Oct 2023  
**Unique Number** : 10696930 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**ACCU-TECH INC**  
 4816 JOSLYN RD  
 LAKE ORION, MI  
 US 48359  
 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)

T:  
F: