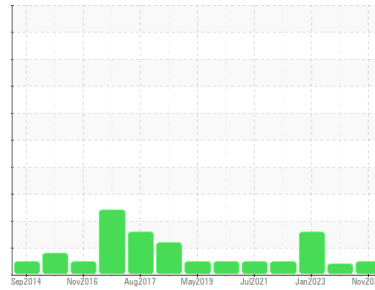


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**KAESER SFC 75S 4727695 (S/N 2395)**

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 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>KCPA011289</b>  | KCPA004011  | KCP52263    |
| Sample Date   | Client Info | <b>13 Nov 2023</b> | 17 Jul 2023 | 10 Jan 2023 |
| Machine Age   | hrs         | <b>65153</b>       | 65074       | 64514       |
| Oil Age       | hrs         | <b>0</b>           | 0           | 4649        |
| Oil Changed   | Client Info | <b>N/A</b>         | N/A         | Not Changd  |
| Sample Status |             | <b>NORMAL</b>      | ABNORMAL    | ABNORMAL    |

**WEAR METALS**

| method   | limit/base | current         | history1     | history2 |   |
|----------|------------|-----------------|--------------|----------|---|
| Iron     | ppm        | ASTM D5185m >50 | <b>0</b>     | <1       | 2 |
| Chromium | ppm        | ASTM D5185m >10 | <b>0</b>     | 0        | 0 |
| Nickel   | ppm        | ASTM D5185m >3  | <b>0</b>     | 0        | 0 |
| Titanium | ppm        | ASTM D5185m >3  | <b>0</b>     | 0        | 0 |
| Silver   | ppm        | ASTM D5185m >2  | <b>0</b>     | 0        | 0 |
| Aluminum | ppm        | ASTM D5185m >10 | <b>&lt;1</b> | 1        | 0 |
| Lead     | ppm        | ASTM D5185m >10 | <b>0</b>     | 0        | 0 |
| Copper   | ppm        | ASTM D5185m >50 | <b>&lt;1</b> | 3        | 8 |
| Tin      | ppm        | ASTM D5185m >10 | <b>0</b>     | 0        | 0 |
| Vanadium | ppm        | ASTM D5185m     | <b>&lt;1</b> | <1       | 0 |
| Cadmium  | ppm        | ASTM D5185m     | <b>0</b>     | 0        | 0 |

**ADDITIVES**

| method     | limit/base | current        | history1     | history2 |       |
|------------|------------|----------------|--------------|----------|-------|
| Boron      | ppm        | ASTM D5185m    | <b>0</b>     | 0        | 0     |
| Barium     | ppm        | ASTM D5185m 90 | <b>33</b>    | 33       | 2     |
| Molybdenum | ppm        | ASTM D5185m    | <b>0</b>     | 0        | 0     |
| Manganese  | ppm        | ASTM D5185m    | <b>1</b>     | 2        | <1    |
| Magnesium  | ppm        | ASTM D5185m 90 | <b>64</b>    | 52       | 7     |
| Calcium    | ppm        | ASTM D5185m 2  | <b>0</b>     | <1       | 0     |
| Phosphorus | ppm        | ASTM D5185m    | <b>0</b>     | 0        | 2     |
| Zinc       | ppm        | ASTM D5185m    | <b>0</b>     | 0        | 2     |
| Sulfur     | ppm        | ASTM D5185m    | <b>17600</b> | 20523    | 15037 |

**CONTAMINANTS**

| method    | limit/base | current          | history1     | history2 |       |
|-----------|------------|------------------|--------------|----------|-------|
| Silicon   | ppm        | ASTM D5185m >25  | <b>0</b>     | 0        | <1    |
| Sodium    | ppm        | ASTM D5185m      | <b>6</b>     | 16       | 0     |
| Potassium | ppm        | ASTM D5185m >20  | <b>&lt;1</b> | 4        | <1    |
| Water     | %          | ASTM D6304 >0.05 | <b>0.018</b> | 0.034    | 0.006 |
| ppm Water | ppm        | ASTM D6304 >500  | <b>189.3</b> | 345.7    | 65.9  |

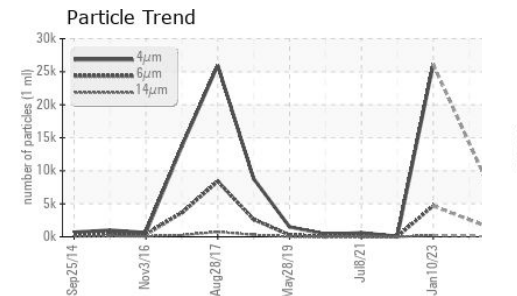
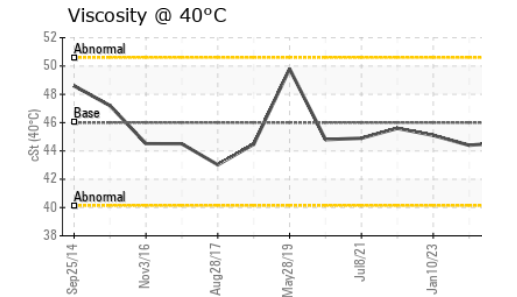
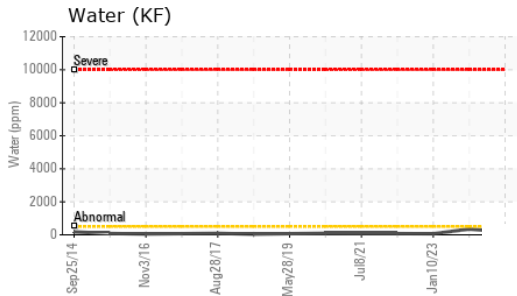
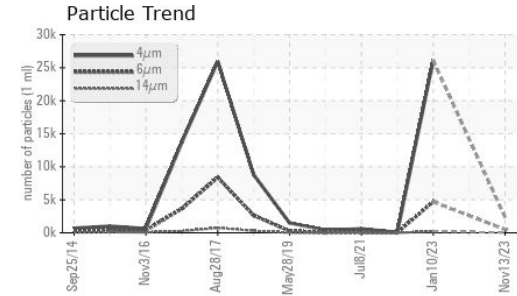
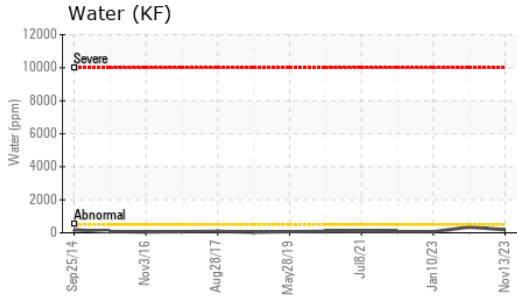
**FLUID CLEANLINESS**

| method          | limit/base             | current         | history1 | history2   |
|-----------------|------------------------|-----------------|----------|------------|
| Particles >4µm  | ASTM D7647             | <b>2372</b>     | ---      | 26085      |
| Particles >6µm  | ASTM D7647 >1300       | <b>508</b>      | ---      | ▲ 4686     |
| Particles >14µm | ASTM D7647 >80         | <b>22</b>       | ---      | ▲ 197      |
| Particles >21µm | ASTM D7647 >20         | <b>5</b>        | ---      | ▲ 50       |
| Particles >38µm | ASTM D7647 >4          | <b>0</b>        | ---      | 2          |
| Particles >71µm | ASTM D7647 >3          | <b>0</b>        | ---      | 0          |
| Oil Cleanliness | ISO 4406 (c) >--/17/13 | <b>18/16/12</b> | ---      | ▲ 22/19/15 |

**FLUID DEGRADATION**

| method           | limit/base | current        | history1    | history2 |      |
|------------------|------------|----------------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g   | ASTM D8045 0.4 | <b>0.39</b> | 0.41     | 0.32 |

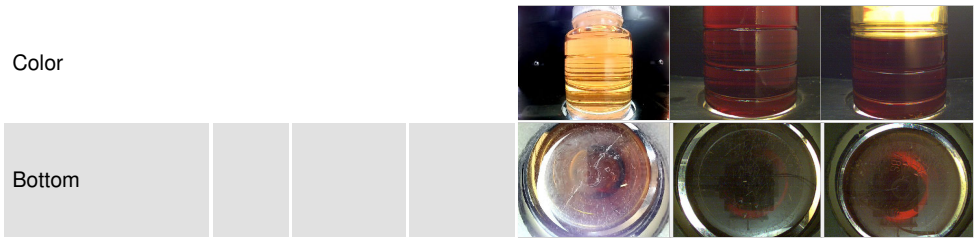
# OIL ANALYSIS REPORT



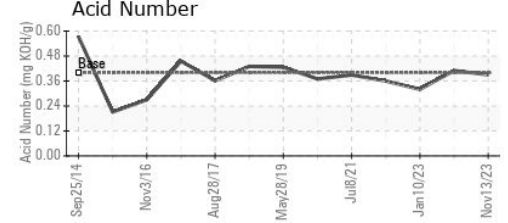
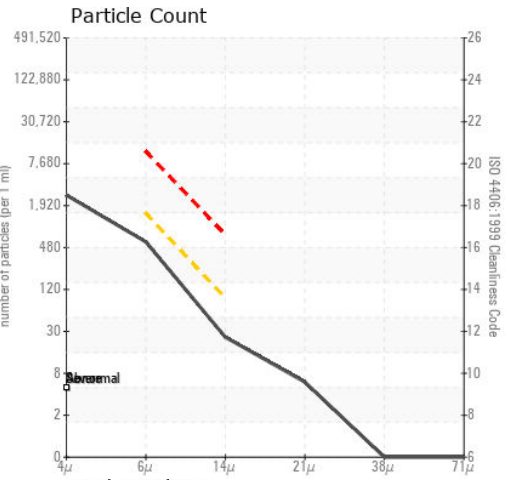
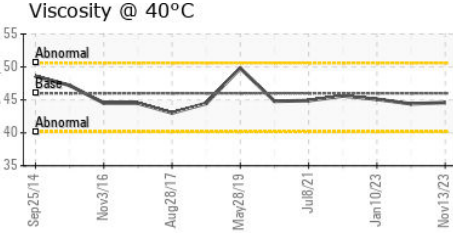
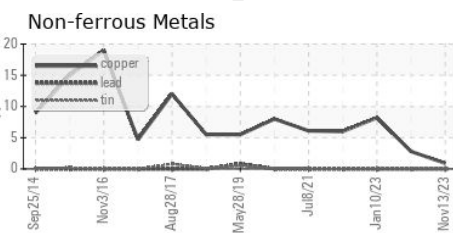
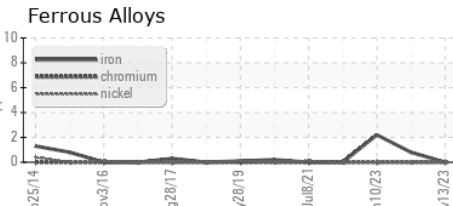
| VISUAL           | method | limit/base | current | history1     | history2 |
|------------------|--------|------------|---------|--------------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE         | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE      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

| FLUID PROPERTIES | method | limit/base   | current     | history1 | history2 |
|------------------|--------|--------------|-------------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445 46 | <b>44.6</b> | 44.4     | 45.1     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA011289 **Received** : 20 Nov 2023  
**Lab Number** : 06012430 **Diagnosed** : 21 Nov 2023  
**Unique Number** : 10751574 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**DANA CORP**  
 12720 WESTPORT RD  
 LOUISVILLE, KY  
 US 40245  
 Contact: MICHEAL BERRY  
 micheal.berry@dana.com

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)