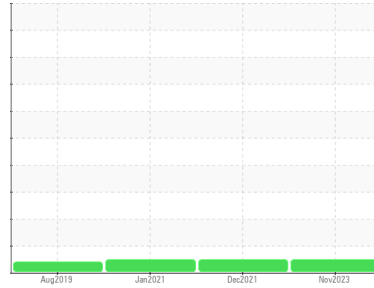




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**KAESER SX 7.5 6567492 (S/N 1080)**

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>KCPA010320</b>  | KCP39406    | KC91270     |
| Sample Date        | Client Info |             |            | <b>30 Nov 2023</b> | 07 Dec 2021 | 22 Jan 2021 |
| Machine Age        | hrs         | Client Info |            | <b>19731</b>       | 11419       | 8091        |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | 7065        | 3737        |
| Oil Changed        |             | Client Info |            | <b>N/A</b>         | Changed     | Not Chngd   |
| Sample Status      |             |             |            | <b>NORMAL</b>      | NORMAL      | NORMAL      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >50        | <b>0</b>     | 0        | 0        |
| 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>&lt;1</b> | <1       | 1        |
| Aluminum    | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | 0        |
| Lead        | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | <1       |
| Copper      | ppm | ASTM D5185m | >50        | <b>20</b>    | 26       | 14       |
| Tin         | ppm | ASTM D5185m | >10        | <b>0</b>     | <1       | 0        |
| Antimony    | ppm | ASTM D5185m |            | <b>---</b>   | 0        | 0        |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |

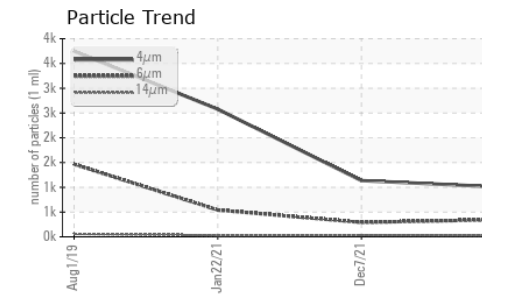
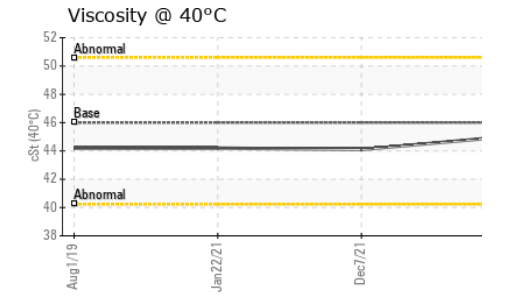
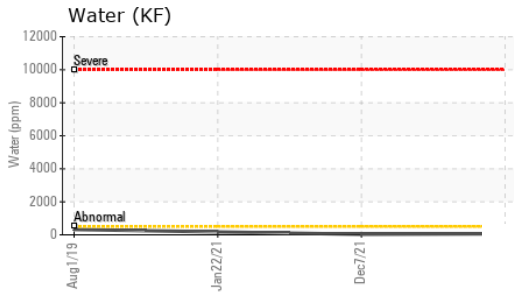
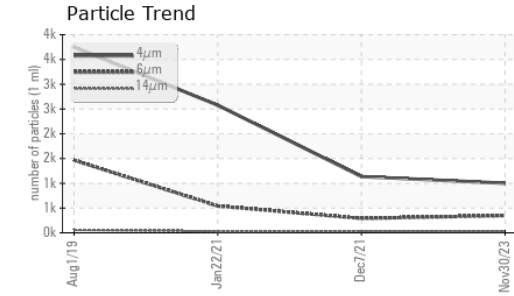
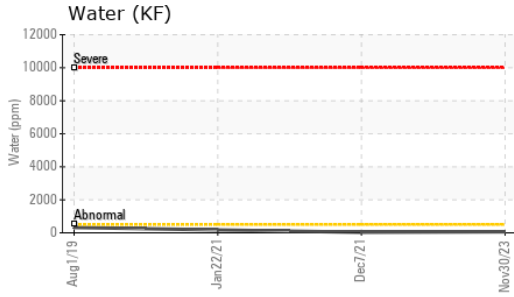
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>     | 21       | 0        |
| Barium     | ppm | ASTM D5185m | 90         | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | <1       |
| Magnesium  | ppm | ASTM D5185m | 90         | <b>9</b>     | 1        | 16       |
| Calcium    | ppm | ASTM D5185m | 2          | <b>&lt;1</b> | 0        | 0        |
| Phosphorus | ppm | ASTM D5185m |            | <b>&lt;1</b> | 3        | 14       |
| Zinc       | ppm | ASTM D5185m |            | <b>13</b>    | 18       | 24       |
| Sulfur     | ppm | ASTM D5185m |            | <b>17237</b> | 16806    | 18085    |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>&lt;1</b> | <1       | 0        |
| Sodium       | ppm | ASTM D5185m |            | <b>6</b>     | <1       | 5        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | <1       | 1        |
| Water        | %   | ASTM D6304  | >0.05      | <b>0.006</b> | 0.003    | 0.017    |
| ppm Water    | ppm | ASTM D6304  | >500       | <b>61</b>    | 30.7     | 175.1    |

| FLUID CLEANLINESS |  | method       | limit/base | current         | history1 | history2 |
|-------------------|--|--------------|------------|-----------------|----------|----------|
| Particles >4µm    |  | ASTM D7647   |            | <b>1001</b>     | 1135     | 2577     |
| Particles >6µm    |  | ASTM D7647   | >1300      | <b>348</b>      | 290      | 541      |
| Particles >14µm   |  | ASTM D7647   | >80        | <b>28</b>       | 33       | 28       |
| Particles >21µm   |  | ASTM D7647   | >20        | <b>7</b>        | 10       | 12       |
| Particles >38µm   |  | ASTM D7647   | >4         | <b>1</b>        | 0        | 2        |
| Particles >71µm   |  | ASTM D7647   | >3         | <b>0</b>        | 0        | 0        |
| Oil Cleanliness   |  | ISO 4406 (c) | >--/17/13  | <b>17/16/12</b> | 15/12    | 16/12    |

| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 0.4        | <b>0.24</b> | 0.218    | 0.215    |

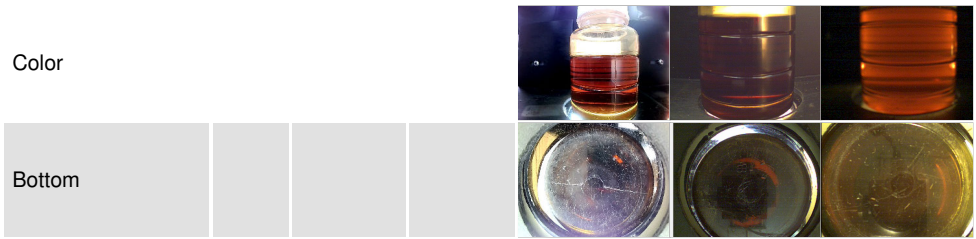
# OIL ANALYSIS REPORT



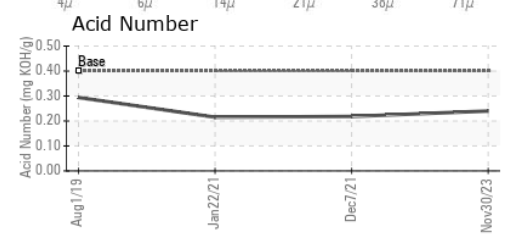
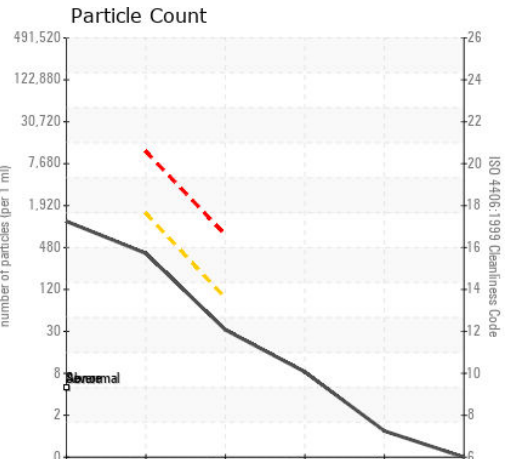
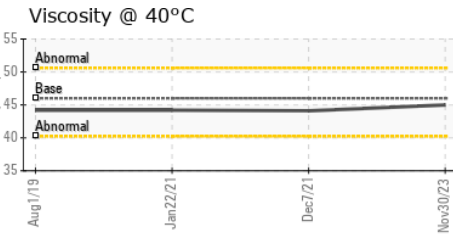
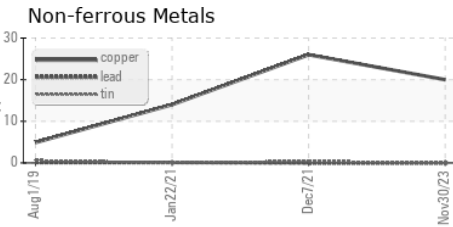
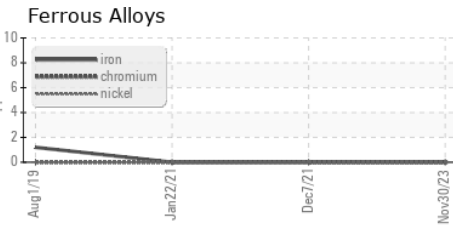
| VISUAL           | method | limit/base | current | history1     | history2 |
|------------------|--------|------------|---------|--------------|----------|
| White Metal      | scalar | *Visual    | NONE    | <b>LIGHT</b> | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     |
| Silt             | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     |
| Debris           | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     |
| Sand/Dirt        | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     |
| Appearance       | scalar | *Visual    | NORML   | <b>NORML</b> | NORML    |
| Odor             | scalar | *Visual    | NORML   | <b>NORML</b> | 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>45.0</b> | 44.1     | 44.2     |

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



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA010320 **Received** : 07 Dec 2023  
**Lab Number** : 06028683 **Diagnosed** : 10 Dec 2023  
**Unique Number** : 10778474 **Diagnostician** : Doug Bogart

**AIKEN COUNTY WW**  
 70 PSA RD  
 AIKEN, SC  
 US 29842

**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

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)

Contact: P. FOURNIER  
 pfournier@aikencountysc.gov  
 T:  
 F: