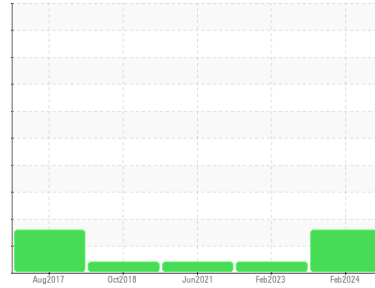




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER AS 25T 4933779 (S/N 1360)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Oil and 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>KCPA014264</b>  | KCP55208    | KCP33891    |
| Sample Date        | Client Info |             |            | <b>16 Feb 2024</b> | 15 Feb 2023 | 10 Jun 2021 |
| Machine Age        | hrs         | Client Info |            | <b>30448</b>       | 27588       | 26029       |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | 0           | 0           |
| Oil Changed        | Client Info |             |            | <b>Changed</b>     | Changed     | Changed     |
| Sample Status      |             |             |            | <b>ABNORMAL</b>    | ABNORMAL    | ABNORMAL    |

| WEAR METALS |     | method      | limit/base | current    | history1 | history2 |
|-------------|-----|-------------|------------|------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >50        | <b>0</b>   | <1       | <1       |
| Chromium    | ppm | ASTM D5185m | >10        | <b>0</b>   | 0        | 0        |
| Nickel      | ppm | ASTM D5185m | >3         | <b>0</b>   | <1       | <1       |
| Titanium    | ppm | ASTM D5185m | >3         | <b>0</b>   | 0        | 0        |
| Silver      | ppm | ASTM D5185m | >2         | <b>0</b>   | 0        | <1       |
| Aluminum    | ppm | ASTM D5185m | >10        | <b>0</b>   | <1       | 0        |
| Lead        | ppm | ASTM D5185m | >10        | <b>0</b>   | <1       | <1       |
| Copper      | ppm | ASTM D5185m | >50        | <b>3</b>   | 8        | 38       |
| Tin         | ppm | ASTM D5185m | >10        | <b>0</b>   | 0        | <1       |
| Antimony    | ppm | ASTM D5185m |            | <b>---</b> | ---      | 0        |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>   | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>   | 0        | 0        |

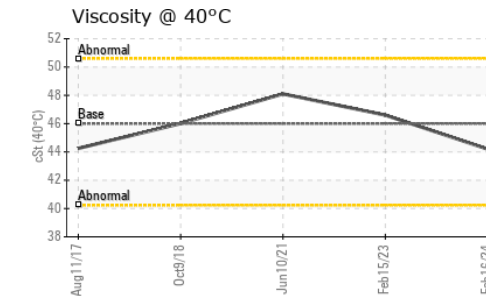
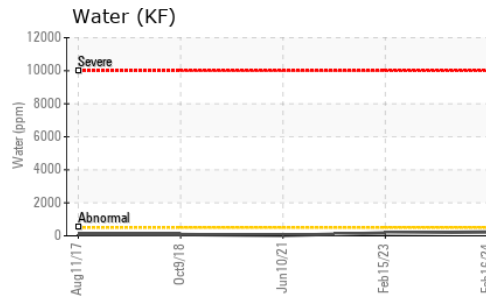
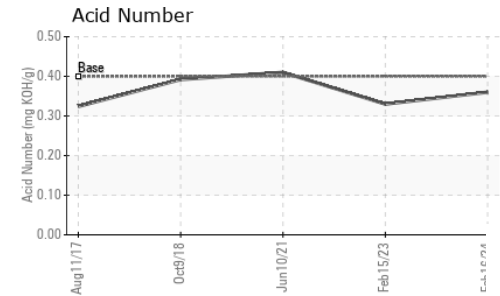
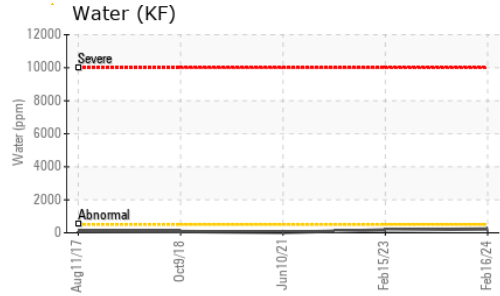
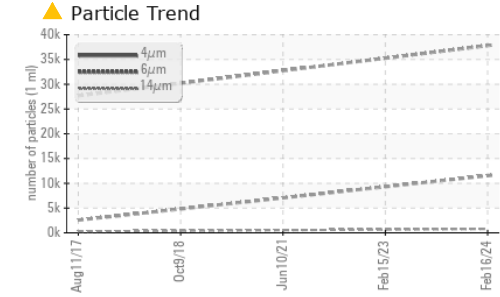
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 28       |
| Barium     | ppm | ASTM D5185m | 90         | <b>4</b>     | 4        | 0        |
| Molybdenum | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Manganese  | ppm | ASTM D5185m |            | <b>0</b>     | <1       | 0        |
| Magnesium  | ppm | ASTM D5185m | 90         | <b>48</b>    | 37       | <1       |
| Calcium    | ppm | ASTM D5185m | 2          | <b>&lt;1</b> | <1       | 0        |
| Phosphorus | ppm | ASTM D5185m |            | <b>1</b>     | <1       | 15       |
| Zinc       | ppm | ASTM D5185m |            | <b>14</b>    | 31       | 0        |
| Sulfur     | ppm | ASTM D5185m |            | <b>22677</b> | 20741    | 16680    |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>0</b>     | <1       | 2        |
| Sodium       | ppm | ASTM D5185m |            | <b>11</b>    | 13       | <1       |
| Potassium    | ppm | ASTM D5185m | >20        | <b>10</b>    | 2        | <1       |
| Water        | %   | ASTM D6304  | >0.05      | <b>0.023</b> | 0.017    | 0.002    |
| ppm Water    | ppm | ASTM D6304  | >500       | <b>231</b>   | 174.7    | 20.8     |

| FLUID CLEANLINESS |  | method       | limit/base | current           | history1 | history2 |
|-------------------|--|--------------|------------|-------------------|----------|----------|
| Particles >4µm    |  | ASTM D7647   |            | <b>37799</b>      | ---      | ---      |
| Particles >6µm    |  | ASTM D7647   | >1300      | <b>▲ 11541</b>    | ---      | ---      |
| Particles >14µm   |  | ASTM D7647   | >80        | <b>▲ 779</b>      | ---      | ---      |
| Particles >21µm   |  | ASTM D7647   | >20        | <b>▲ 162</b>      | ---      | ---      |
| Particles >38µm   |  | ASTM D7647   | >4         | <b>4</b>          | ---      | ---      |
| Particles >71µm   |  | ASTM D7647   | >3         | <b>0</b>          | ---      | ---      |
| Oil Cleanliness   |  | ISO 4406 (c) | >--/17/13  | <b>▲ 22/21/17</b> | ---      | ---      |

| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 0.4        | <b>0.36</b> | 0.33     | 0.410    |

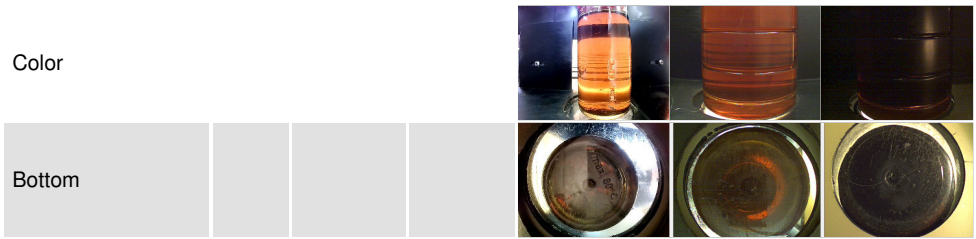
# OIL ANALYSIS REPORT



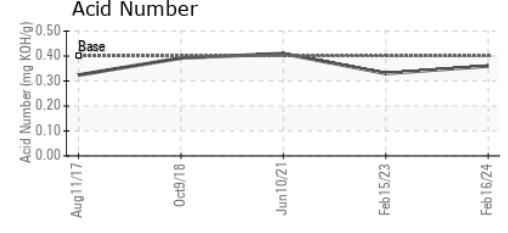
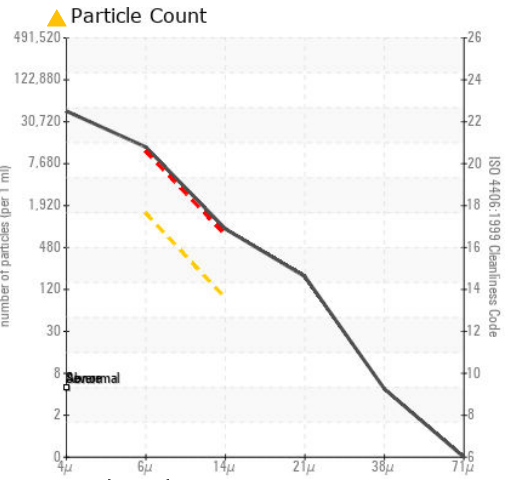
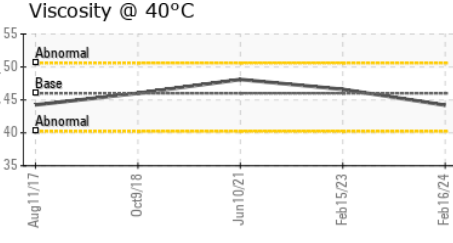
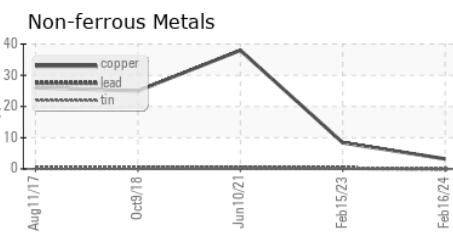
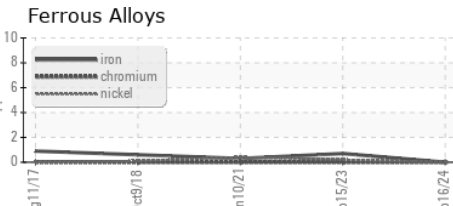
| VISUAL           | method | limit/base | current | history1     | history2 |
|------------------|--------|------------|---------|--------------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE         | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE         | 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>44.2</b> | 46.6     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA014264  
**Lab Number** : 06160956  
**Unique Number** : 10996379  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )  
**Received** : 25 Apr 2024  
**Tested** : 26 Apr 2024  
**Diagnosed** : 29 Apr 2024 - Don Baldrige

**CARMAX 07154**  
 13300 NORTH I-35  
 AUSTIN, TX  
 US 78753  
 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)