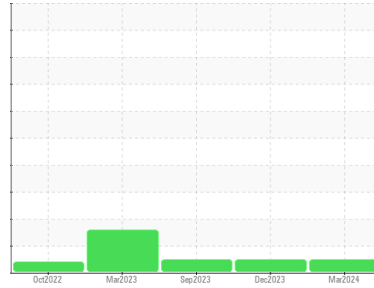




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**KAESER AS 30T 4459306 (S/N 1046)**

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

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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>KCPA013772</b>  | KCPA011444  | KCPA000746  |
| Sample Date        | Client Info |             |            | <b>15 Mar 2024</b> | 20 Dec 2023 | 11 Sep 2023 |
| Machine Age        | hrs         | Client Info |            | <b>12523</b>       | 12358       | 12169       |
| Oil Age            | hrs         | Client Info |            | <b>200</b>         | 0           | 0           |
| Oil Changed        | Client Info |             |            | <b>Not Changed</b> | N/A         | N/A         |
| 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>0</b>     | 0        | 0        |
| Aluminum    | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | 0        |
| Lead        | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | 0        |
| Copper      | ppm | ASTM D5185m | >50        | <b>&lt;1</b> | 4        | 8        |
| Tin         | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | 0        |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | <1       |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | <1       |

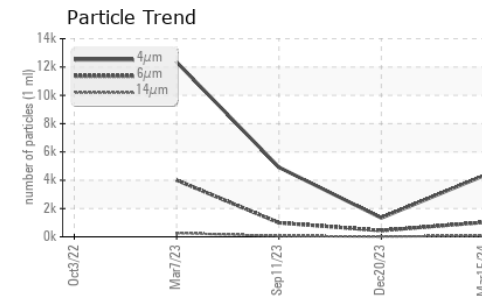
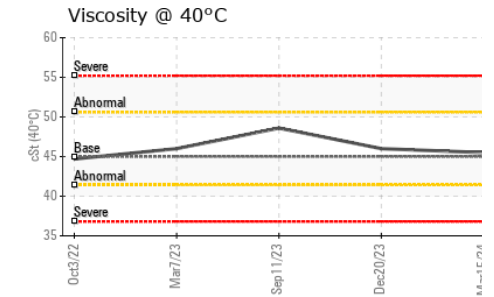
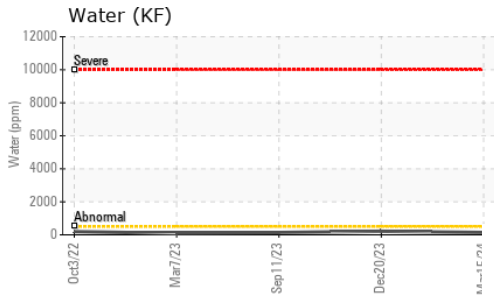
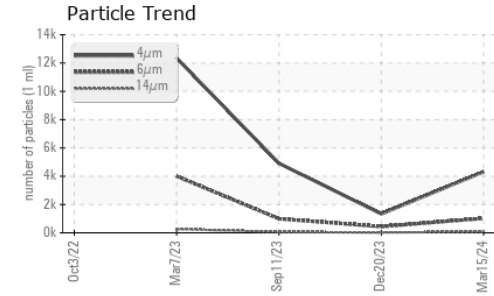
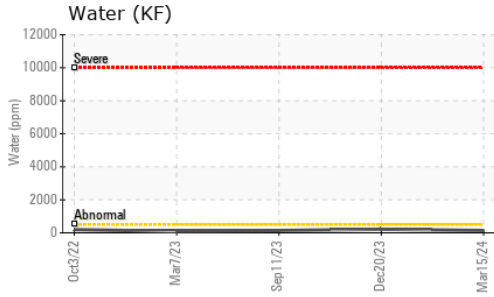
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m | 0          | <b>0</b>     | 0        | 0        |
| Barium     | ppm | ASTM D5185m | 90         | <b>82</b>    | 69       | 60       |
| Molybdenum | ppm | ASTM D5185m | 0          | <b>0</b>     | 0        | 0        |
| Manganese  | ppm | ASTM D5185m |            | <b>0</b>     | 0        | <1       |
| Magnesium  | ppm | ASTM D5185m | 100        | <b>83</b>    | 74       | 76       |
| Calcium    | ppm | ASTM D5185m | 0          | <b>3</b>     | 0        | 2        |
| Phosphorus | ppm | ASTM D5185m | 0          | <b>0</b>     | 0        | 2        |
| Zinc       | ppm | ASTM D5185m | 0          | <b>0</b>     | 3        | 4        |
| Sulfur     | ppm | ASTM D5185m | 23500      | <b>22058</b> | 18203    | 21642    |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>&lt;1</b> | <1       | <1       |
| Sodium       | ppm | ASTM D5185m |            | <b>12</b>    | 10       | 20       |
| Potassium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | <1       | 5        |
| Water        | %   | ASTM D6304  | >0.05      | <b>0.014</b> | 0.021    | 0.013    |
| ppm Water    | ppm | ASTM D6304  | >500       | <b>141</b>   | 216      | 139.8    |

| FLUID CLEANLINESS |  | method       | limit/base | current         | history1 | history2 |
|-------------------|--|--------------|------------|-----------------|----------|----------|
| Particles >4µm    |  | ASTM D7647   |            | <b>4318</b>     | 1334     | 4915     |
| Particles >6µm    |  | ASTM D7647   | >1300      | <b>1024</b>     | 442      | 993      |
| Particles >14µm   |  | ASTM D7647   | >80        | <b>70</b>       | 20       | 60       |
| Particles >21µm   |  | ASTM D7647   | >20        | <b>18</b>       | 5        | 20       |
| Particles >38µm   |  | ASTM D7647   | >4         | <b>0</b>        | 0        | 1        |
| Particles >71µm   |  | ASTM D7647   | >3         | <b>0</b>        | 0        | 1        |
| Oil Cleanliness   |  | ISO 4406 (c) | >--/17/13  | <b>19/17/13</b> | 18/16/11 | 19/17/13 |

| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 1.0        | <b>0.37</b> | 0.33     | 0.35     |

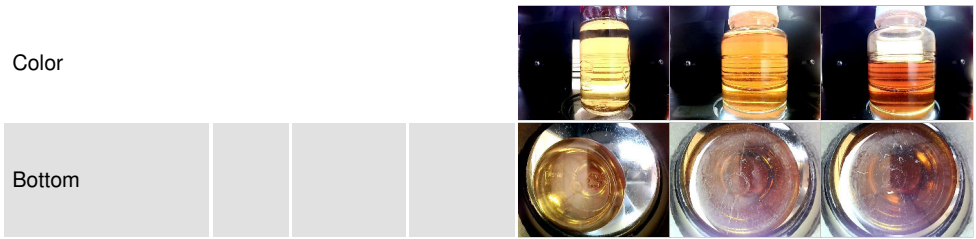
# OIL ANALYSIS REPORT



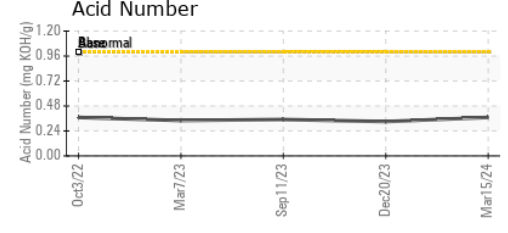
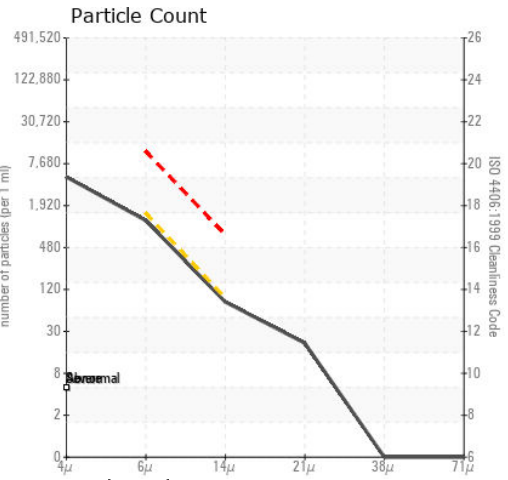
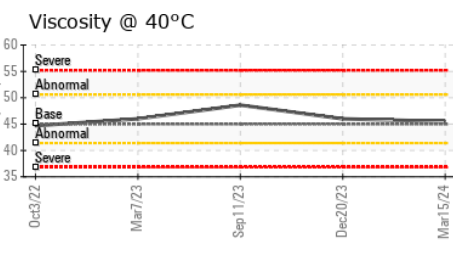
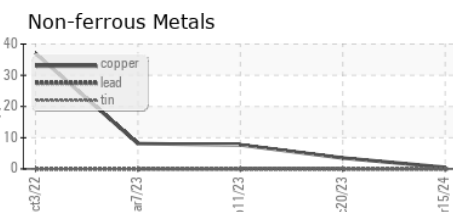
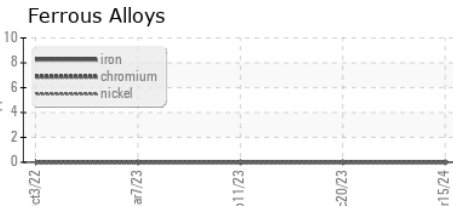
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | NONE    | NONE     | LIGHT    |
| 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   | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base   | current | history1 | history2 |
|------------------|--------|--------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445 45 | 45.5    | 46.0     | 48.6     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA013772 **Received** : 21 Mar 2024  
**Lab Number** : 06125730 **Tested** : 22 Mar 2024  
**Unique Number** : 10939881 **Diagnosed** : 25 Mar 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**PERFORMANCE HEALTH**  
W68N158 EVERGREEN BLVD  
CEDARBURG, WI  
US 53012  
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: