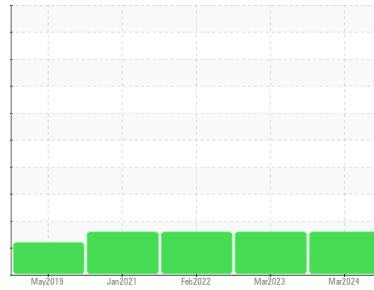




# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id  
**KAESER ASD 25 2329152 (S/N 1137)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-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 moderate 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>KCPA015074</b>  | KCP54530    | KCP38283    |
| Sample Date        | Client Info |             |            | <b>20 Mar 2024</b> | 02 Mar 2023 | 10 Feb 2022 |
| Machine Age        | hrs         | Client Info |            | <b>52427</b>       | 48930       | 41804       |
| Oil Age            | hrs         | Client Info |            | <b>3497</b>        | 3414        | 0           |
| Oil Changed        | Client Info |             |            | <b>Changed</b>     | Not Changd  | Changed     |
| Sample Status      |             |             |            | <b>ATTENTION</b>   | ABNORMAL    | ABNORMAL    |

| WEAR METALS |     | method      | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|---------|----------|----------|
| Iron        | ppm | ASTM D5185m | >50        | <1      | <1       | <1       |
| Chromium    | ppm | ASTM D5185m | >10        | <1      | 0        | 0        |
| Nickel      | ppm | ASTM D5185m | >3         | <1      | 0        | 0        |
| Titanium    | ppm | ASTM D5185m | >3         | <1      | 0        | 0        |
| Silver      | ppm | ASTM D5185m | >2         | 0       | <1       | 0        |
| Aluminum    | ppm | ASTM D5185m | >10        | 2       | <1       | 0        |
| Lead        | ppm | ASTM D5185m | >10        | <1      | 0        | 0        |
| Copper      | ppm | ASTM D5185m | >50        | 15      | 6        | 6        |
| Tin         | ppm | ASTM D5185m | >10        | 1       | 0        | 0        |
| Antimony    | ppm | ASTM D5185m |            | ---     | ---      | 0        |
| Vanadium    | ppm | ASTM D5185m |            | <1      | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <1      | 0        | 0        |

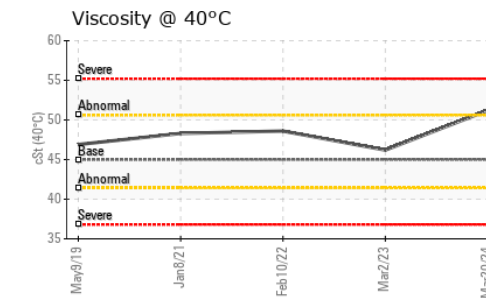
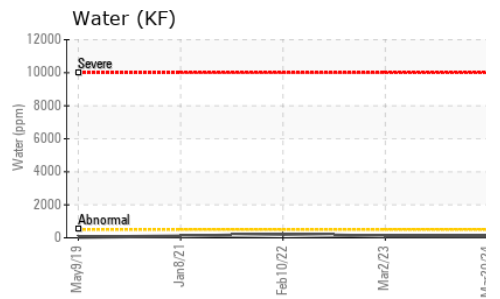
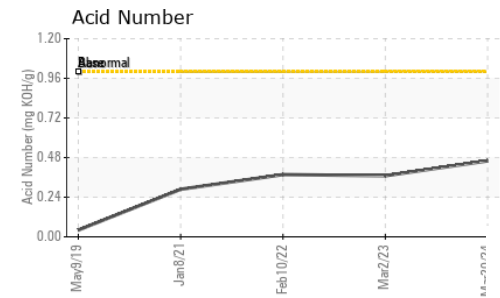
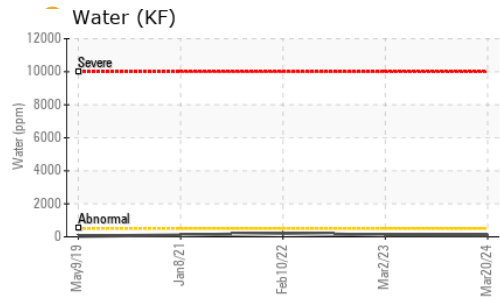
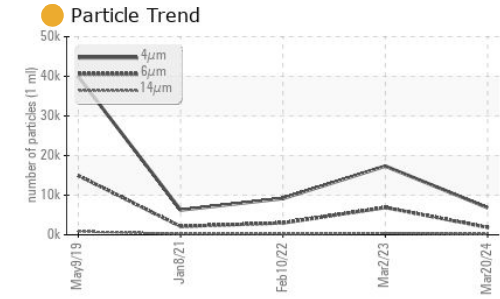
| ADDITIVES  |     | method      | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|---------|----------|----------|
| Boron      | ppm | ASTM D5185m | 0          | 0       | 0        | <1       |
| Barium     | ppm | ASTM D5185m | 90         | 0       | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m | 0          | <1      | 0        | 0        |
| Manganese  | ppm | ASTM D5185m |            | <1      | 0        | 0        |
| Magnesium  | ppm | ASTM D5185m | 100        | 1       | 39       | 44       |
| Calcium    | ppm | ASTM D5185m | 0          | 3       | <1       | 0        |
| Phosphorus | ppm | ASTM D5185m | 0          | 1       | 5        | 14       |
| Zinc       | ppm | ASTM D5185m | 0          | 0       | 23       | 23       |
| Sulfur     | ppm | ASTM D5185m | 23500      | 22268   | 20989    | 16227    |

| CONTAMINANTS |     | method      | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|---------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <1      | <1       | <1       |
| Sodium       | ppm | ASTM D5185m |            | 0       | 20       | 22       |
| Potassium    | ppm | ASTM D5185m | >20        | 1       | 6        | 7        |
| Water        | %   | ASTM D6304  | >0.05      | 0.008   | 0.010    | 0.021    |
| ppm Water    | ppm | ASTM D6304  | >500       | 88      | 104.5    | 213.0    |

| FLUID CLEANLINESS |  | method       | limit/base | current  | history1 | history2 |
|-------------------|--|--------------|------------|----------|----------|----------|
| Particles >4µm    |  | ASTM D7647   |            | 6842     | 17350    | 9172     |
| Particles >6µm    |  | ASTM D7647   | >1300      | 1872     | 6896     | 3006     |
| Particles >14µm   |  | ASTM D7647   | >80        | 154      | 428      | 233      |
| Particles >21µm   |  | ASTM D7647   | >20        | 41       | 61       | 58       |
| Particles >38µm   |  | ASTM D7647   | >4         | 0        | 0        | 10       |
| Particles >71µm   |  | ASTM D7647   | >3         | 0        | 0        | 2        |
| Oil Cleanliness   |  | ISO 4406 (c) | >--/17/13  | 20/18/14 | 21/20/16 | 19/15    |

| FLUID DEGRADATION |          | method     | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|---------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 1.0        | 0.46    | 0.37     | 0.377    |

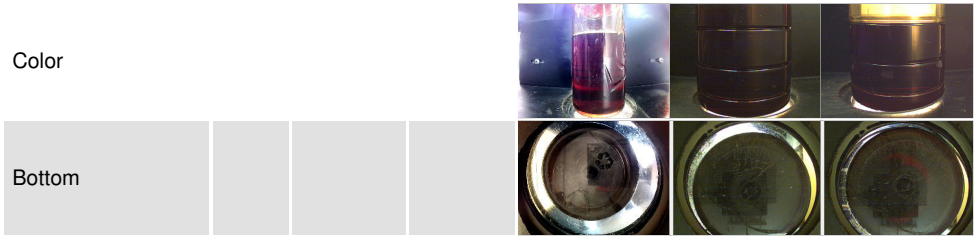
# OIL ANALYSIS REPORT



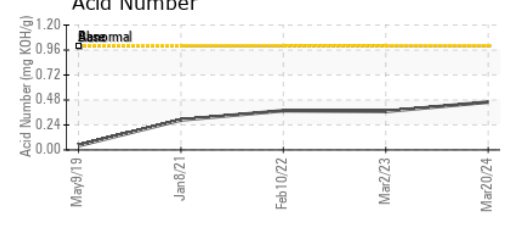
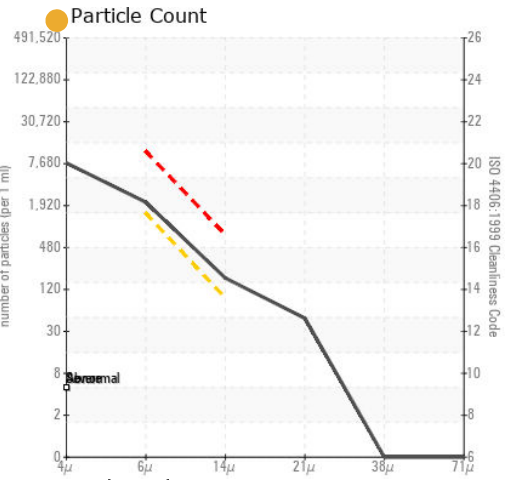
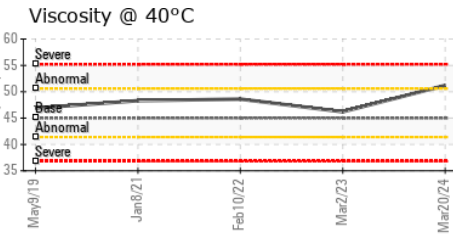
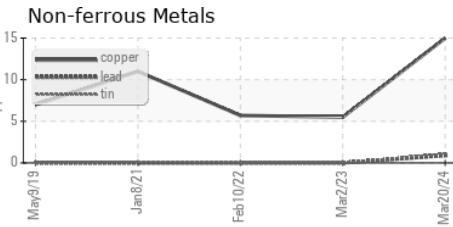
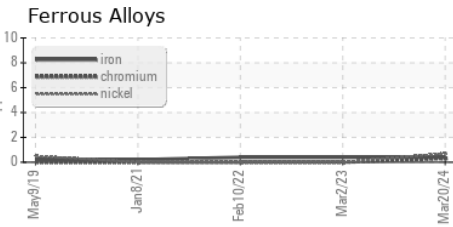
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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      | 51.2     | 46.2     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA015074  
**Lab Number** : 06135672  
**Unique Number** : 10955137  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )  
**Received** : 01 Apr 2024  
**Tested** : 03 Apr 2024  
**Diagnosed** : 04 Apr 2024 - Don Baldrige

**HUTTIG BUILDING PRODUCTS**  
 407 ALUMNI RD  
 NEWINGTON, CT  
 US 06111  
 Contact: D. DORFINGER  
 DDORFINGER@HUTTIG.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)