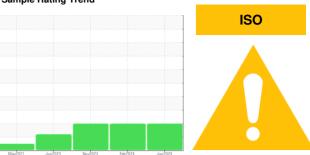


# **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# 6612979 (S/N 1196)

Component Compressor

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 high amount of particulates present in the oil.

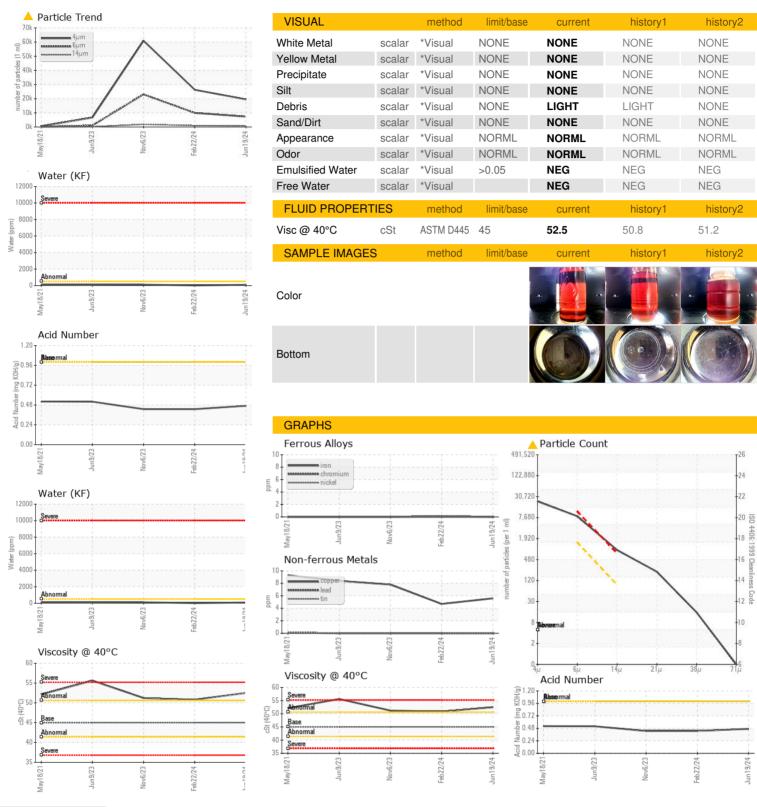
#### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

|                  |          | May2021      | Jun2023    | Nov2023 Feb2024   | Jun2024         |                                     |
|------------------|----------|--------------|------------|-------------------|-----------------|-------------------------------------|
| SAMPLE INFORM    | MATION   | method       | limit/base | current           | history1        | history2                            |
| Sample Number    |          | Client Info  |            | KCPA018207        | KCPA015879      | KCPA003771                          |
| Sample Date      |          | Client Info  |            | 19 Jun 2024       | 22 Feb 2024     | 06 Nov 2023                         |
| Machine Age      | hrs      | Client Info  |            | 46661             | 43830           | 41247                               |
| Oil Age          | hrs      | Client Info  |            | 2831              | 0               | 0                                   |
| Oil Changed      |          | Client Info  |            | Changed           | Changed         | N/A                                 |
| Sample Status    |          |              |            | ABNORMAL          | ABNORMAL        | ABNORMAL                            |
| WEAR METALS      |          | method       | limit/base | current           | history1        | history2                            |
| Iron             | ppm      | ASTM D5185m  | >50        | 0                 | 0               | 0                                   |
| Chromium         | ppm      | ASTM D5185m  | >10        | 0                 | <1              | 0                                   |
| Nickel           | ppm      | ASTM D5185m  | >3         | 0                 | 0               | 0                                   |
| Titanium         | ppm      | ASTM D5185m  | >3         | 0                 | 0               | 0                                   |
| Silver           | ppm      | ASTM D5185m  | >2         | 0                 | 0               | 0                                   |
| Aluminum         | ppm      | ASTM D5185m  | >10        | 0                 | 2               | 0                                   |
| Lead             | ppm      | ASTM D5185m  | >10        | 0                 | 0               | 0                                   |
| Copper           | ppm      | ASTM D5185m  | >50        | 6                 | 5               | 8                                   |
| Tin              | ppm      | ASTM D5185m  | >10        | 0                 | 0               | 0                                   |
| Vanadium         | ppm      | ASTM D5185m  |            | 0                 | 0               | 0                                   |
| Cadmium          | ppm      | ASTM D5185m  |            | 0                 | 0               | 0                                   |
| ADDITIVES        |          | method       | limit/base | current           | history1        | history2                            |
| Boron            | ppm      | ASTM D5185m  | 0          | 0                 | 0               | 0                                   |
| Barium           | ppm      | ASTM D5185m  | 90         | 0                 | 11              | 8                                   |
| Molybdenum       | ppm      | ASTM D5185m  | 0          | 0                 | 0               | 0                                   |
| Manganese        | ppm      | ASTM D5185m  |            | <1                | 0               | 0                                   |
| Magnesium        | ppm      | ASTM D5185m  | 100        | 0                 | 6               | 10                                  |
| Calcium          | ppm      | ASTM D5185m  | 0          | 0                 | 0               | 1                                   |
| Phosphorus       | ppm      | ASTM D5185m  | 0          | 0                 | 23              | 1                                   |
| Zinc             | ppm      | ASTM D5185m  | 0          | 0                 | 0               | 0                                   |
| Sulfur           | ppm      | ASTM D5185m  | 23500      | 22328             | 18433           | 17511                               |
| CONTAMINANTS     |          | method       | limit/base | current           | history1        | history2                            |
|                  |          |              |            |                   |                 |                                     |
| Silicon          | ppm      | ASTM D5185m  | >25        | 15                | 2               | 2                                   |
| Sodium           | ppm      | ASTM D5185m  |            | 1                 | 0               | <1                                  |
| Potassium        | ppm      |              | >20        | <1                | 1               | 0                                   |
| Water            | %        | ASTM D6304   | >0.05      | 0.008             | 0.002           | 0.011                               |
| ppm Water        | ppm      | ASTM D6304   | >500       | 89                | 24              | 114.2                               |
| FLUID CLEANLIN   | IESS     | method       | limit/base | current           | history1        | history2                            |
| Particles >4µm   |          | ASTM D7647   |            | 19512             | 26253           | 60913                               |
| Particles >6µm   |          | ASTM D7647   | >1300      | <u> </u>          | <u></u> 9937    | <u>^</u> 23030                      |
| Particles >14μm  |          | ASTM D7647   | >80        | <b>^</b> 790      | <u></u> 976     | <u> </u>                            |
| Particles >21μm  |          | ASTM D7647   | >20        | <u> </u>          | <u>^</u> 253    | <u></u> 555                         |
| Particles >38μm  |          | ASTM D7647   | >4         | <u> </u>          | <u>16</u>       | <u> </u>                            |
| Particles >71µm  |          | ASTM D7647   | >3         | 0                 | 1               | 2                                   |
| Oil Cleanliness  |          | ISO 4406 (c) | >/17/13    | <u>^</u> 21/20/17 | <u>22/20/17</u> | <u>\$\text{23}\\ 23\\ 22\\ 18\$</u> |
| FLUID DEGRADA    | TION     | method       | limit/base | current           | history1        | history2                            |
| Acid Number (AN) | mg KOH/g | ASTM D8045   | 1.0        | 0.47              | 0.43            | 0.43                                |



## OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

: KCPA018207 Lab Number : 06221231 Unique Number: 11099428

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 26 Jun 2024 **Tested** : 27 Jun 2024

Diagnosed

: 27 Jun 2024 - Don Baldridge 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)

**APPLIED THIN FILM** 3439 EDISON WAY

FREMONT, CA US 94538

Contact: NATHAN THOMAS nathan.thomas@vishav.com

T: F: