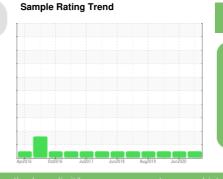


# **OIL ANALYSIS REPORT**





NORMAL

# KAESER SFC 40S 5507410 (S/N 1023)

Compressor

KAESER SIGMA (OEM) S-460 (--- GAL)

### DIAGNOSIS

### Recommendation

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

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.

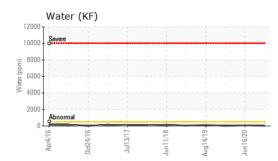
| SAMPLE INFORM    | MATION               | method                      | limit/base | current     | history1          | history2      |
|------------------|----------------------|-----------------------------|------------|-------------|-------------------|---------------|
| Sample Number    |                      | Client Info                 |            | KCPA009976  | KC79000           | KC74014       |
| Sample Date      |                      | Client Info                 |            | 08 Nov 2023 | 16 Jun 2020       | 07 Jan 2020   |
| Machine Age      | hrs                  | Client Info                 |            | 52334       | 27680             | 24797         |
| Oil Age          | hrs                  | Client Info                 |            | 0           | 3000              | 6000          |
| Oil Changed      |                      | Client Info                 |            | N/A         | Not Changd        | Changed       |
| Sample Status    |                      |                             |            | NORMAL      | NORMAL            | NORMAL        |
| WEAR METALS      |                      | method                      | limit/base | current     | history1          | history2      |
| Iron             | ppm                  | ASTM D5185m                 | >50        | 0           | <1                | 0             |
| Chromium         | ppm                  | ASTM D5185m                 |            | 0           | 0                 | 0             |
| Nickel           |                      | ASTM D5185m                 | >3         | 0           | <1                | 0             |
| Titanium         | ppm                  | ASTM D5185m                 |            | 0           | 0                 | 0             |
| Silver           | ppm                  | ASTM D5185m                 | >3<br>>2   | 0           | <1                | <1            |
|                  | ppm                  |                             |            |             |                   |               |
| Aluminum         | ppm                  | ASTM D5185m                 |            | 0           | 0                 | 0             |
| Lead             | ppm                  | ASTM D5185m                 | >10        | 0           | 0                 | 0             |
| Copper           | ppm                  | ASTM D5185m                 |            | 5           | 10                | 7             |
| Tin              | ppm                  | ASTM D5185m                 | >10        | 0           | <1                | 0             |
| Antimony         | ppm                  | ASTM D5185m                 |            |             | 0                 | <1            |
| 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           | 2                 | 0             |
| Barium           | ppm                  | ASTM D5185m                 | 90         | 0           | 0                 | <1            |
| Volybdenum       | ppm                  | ASTM D5185m                 |            | 0           | 0                 | 0             |
| Manganese        | ppm                  | ASTM D5185m                 |            | 0           | 0                 | 0             |
| Magnesium        | ppm                  | ASTM D5185m                 | 90         | 0           | 1                 | 0             |
| Calcium          | ppm                  | ASTM D5185m                 | 2          | 0           | <1                | 0             |
| Phosphorus       | ppm                  | ASTM D5185m                 |            | <1          | 0                 | <1            |
| Zinc             | ppm                  | ASTM D5185m                 |            | 0           | 0                 | 0             |
| Sulfur           | ppm                  | ASTM D5185m                 |            | 13418       | 14017             | 14857         |
| CONTAMINANTS     |                      | method                      | limit/base | current     | history1          | history2      |
| Silicon          | ppm                  | ASTM D5185m                 | >25        | 1           | 1                 | <1            |
| Sodium           | ppm                  | ASTM D5185m                 | 220        | 2           | <1                | 0             |
| Potassium        |                      | ASTM D5185m                 | >20        | 0           | <1                | <1            |
| Water            | ppm<br>%             | ASTM D5185III<br>ASTM D6304 |            | 0.003       |                   |               |
| ppm Water        | <sup>7₀</sup><br>ppm | ASTM D6304<br>ASTM D6304    |            | 31          | 0.007<br>76.6     | 0.002<br>23.6 |
|                  |                      |                             |            |             |                   |               |
| FLUID CLEANLIN   | NESS                 | method                      | limit/base | current     | history1          | history2      |
| Particles >4µm   |                      | ASTM D7647                  | ×1200      | 1799        | 4670              | 385<br>105    |
| Particles >6µm   |                      | ASTM D7647                  |            | 426         | 512               |               |
| Particles >14µm  |                      | ASTM D7647                  | >80        | 16          | 18                | 11            |
| Particles >21µm  |                      | ASTM D7647                  |            | 7           | 5                 | 5             |
| Particles >38µm  |                      | ASTM D7647                  | >4         | 1           | 0                 | 3             |
| Particles >71µm  |                      | ASTM D7647                  |            | 0           | 0                 | 0             |
| Oil Cleanliness  |                      | ISO 4406 (c)                | >17/13     | 16/11       | 16/11             | 14/11         |
| FLUID DEGRADA    | ATION                | method                      | limit/base | current     | history1          | history2      |
| Acid Number (AN) | mg KOH/g             | ASTM D8045                  | 0.4        | 0.35        | 0.370             | 0.357         |
| :37·12) Bev: 1   |                      |                             |            | Conta       | act/Location: ? ? |               |

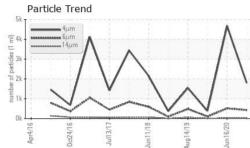
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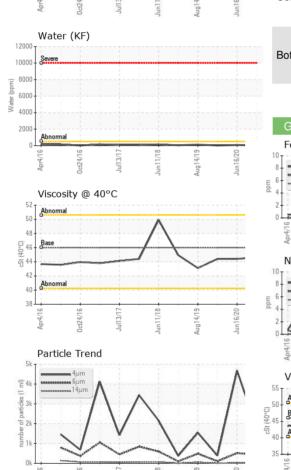
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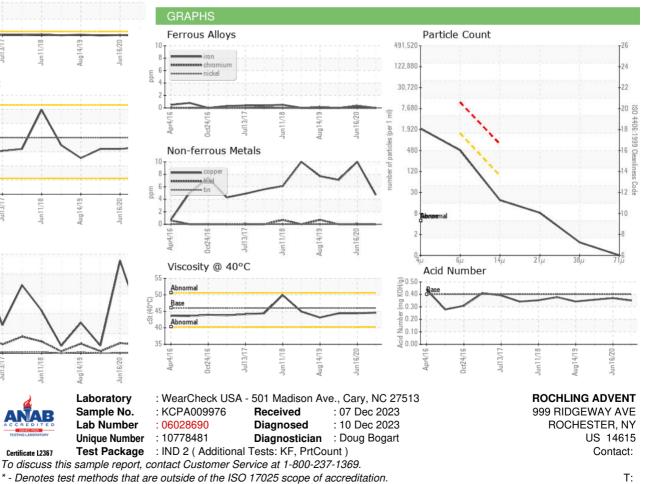
**OIL ANALYSIS REPORT** 







| VISUAL           |        | method    | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual   | NONE       | NONE    | LIGHT    | NONE     |
| Debris           | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Sand/Dirt        | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Appearance       | scalar | *Visual   | NORML      | NORML   | NORML    | NORML    |
| Odor             | scalar | *Visual   | NORML      | NORML   | NORML    | NORML    |
| Emulsified Water | scalar | *Visual   | >0.05      | NEG     | NEG      | NEG      |
| Free Water       | scalar | *Visual   |            | NEG     | NEG      | NEG      |
| FLUID PROPERT    | IES    | method    | limit/base | current | history1 | history2 |
| Visc @ 40°C      | cSt    | ASTM D445 | 46         | 44.6    | 44.4     | 44.4     |
| SAMPLE IMAGES    | 3      | method    | limit/base | current | history1 | history2 |
| Color            |        |           |            |         |          |          |
| Bottom           |        |           |            |         |          |          |



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: ? ? - ROC999ROC

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