### 100699.11 (S/N 1021) <br> Compressor <br> 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 INFORM | ATION | method | limitbase | current |  | history1 |  | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sample Number |  | Client Info |  | KCPA015714 | --- |  | --- |  |
| Sample Date |  | Client Info |  | 13 Mar 2024 | --- |  | --- |  |
| Machine Age | hrs | Client Info |  | 320 | --- |  | --- |  |
| Oil Age | hrs | Client Info |  | 320 | --- |  | --- |  |
| Oil Changed |  | Client Info |  | Changed | --- |  | --- |  |
| Sample Status |  |  |  | ATTENTION | --- |  | --- |  |
| WEAR METALS |  | method | limitbase | current |  | history 1 |  | history2 |
| Iron | ppm | ASTM D5185m | >50 | 6 | --- | -- | --- | -- |
| Chromium | ppm | ASTM D5185m | $>10$ | <1 | --- |  | --- |  |
| Nickel | ppm | ASTM D5185m | >3 | 0 | --- | - | --- |  |
| Titanium | ppm | ASTM D5185m | >3 | 0 | --- |  | --- |  |
| Silver | ppm | ASTM D5185m | >2 | 0 | --- | - | --- |  |
| Aluminum | ppm | ASTM D5185m | >10 | <1 | --- |  | --- |  |
| Lead | ppm | ASTM D5185m | >10 | 0 | --- | - | --- | - |
| Copper | ppm | ASTM D5185m | $>50$ | 5 | --- |  | --- |  |
| Tin | ppm | ASTM D5185m | >10 | 0 | --- | - | --- | - |
| Vanadium | ppm | ASTM D5185m |  | 0 | --- | - | --- |  |
| Cadmium | ppm | ASTM D5185m |  | 0 | --- | -- | --- |  |
| ADDITIVES |  | method | limitbase | current |  | history1 |  | history2 |
| Boron | ppm | ASTM D5185m | 0 | 0 | --- | - | --- | -- |
| Barium | ppm | ASTM D5185m | 90 | 0 | --- | - | --- |  |
| Molybdenum | ppm | ASTM D5185m | 0 | 3 | --- | - | --- | -- |
| Manganese | ppm | ASTM D5185m |  | <1 | --- | - | --- |  |
| Magnesium | ppm | ASTM D5185m | 100 | 39 | --- | - | --- | - |
| Calcium | ppm | ASTM D5185m | 0 | 1 | --- | - | --- |  |
| Phosphorus | ppm | ASTM D5185m | 0 | 4 | --- | - | --- | -- |
| Zinc | ppm | ASTM D5185m | 0 | 7 | --- |  | --- |  |
| Sulfur | ppm | ASTM D5185m | 23500 | 21010 | --- |  | --- |  |
| CONTAMINANTS |  | method | limitbase | current |  | history1 |  | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 0 | --- |  | --- |  |
| Sodium | ppm | ASTM D5185m |  | 12 | --- |  | --- |  |
| Potassium | ppm | ASTM D5185m | >20 | 0 | --- |  | --- |  |
| Water | \% | ASTM D6304 | $>0.05$ | 0.013 | --- | - | --- | - |
| ppm Water | ppm | ASTM D6304 | >500 | 133 | --- |  | --- |  |
| FLUID CLEANLIN | ESS | method | limitbase | current |  | history1 |  | history2 |
| Particles $>4 \mu \mathrm{~m}$ |  | ASTM D7647 |  | 9909 | --- |  | --- |  |
| Particles $>6 \mu \mathrm{~m}$ |  | ASTM D7647 | >1300 | 2283 | --- | - | --- | - |
| Particles $>14 \mu \mathrm{~m}$ |  | ASTM D7647 | >80 | - 130 | --- | - | --- | - |
| Particles $>21 \mu \mathrm{~m}$ |  | ASTM D7647 | >20 | 40 | --- | - | --- | - |
| Particles $>38 \mu \mathrm{~m}$ |  | ASTM D7647 | >4 | 3 | --- | - | --- | -- |
| Particles $>71 \mu \mathrm{~m}$ |  | ASTM D7647 | $>3$ | 0 | --- | - | --- | - |
| Oil Cleanliness |  | ISO 4406 (c) | >17/13 | 18/14 | --- |  | --- |  |
| FLUID DEGRADA | TION | method | limitbase | current |  | history1 |  | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | 0.39 | --- |  | --- |  |

## OIL ANALYSIS REPORT

Built for a lifetime:






| VISUAL |  | method | limitbase | current | history1 | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Precipitate | scalar | *Visual | NONE | NONE | --- | --- |
| Silt | scalar | *Visual | NONE | NONE | --- | --- |
| Debris | scalar | *Visual | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | --- | --- |
| Appearance | scalar | *Visual | NORML | NORML | --- | --- |
| Odor | scalar | *Visual | NORML | NORML | --- | --- |
| Emulsified Water | scalar | *Visual | >0.05 | NEG | --- | --- |
| Free Water | scalar | *Visual |  | NEG | --- | --- |
| FLUID PROPERTIES |  | method | limitbase | current | history1 | history2 |
| Visc @ $40^{\circ} \mathrm{C}$ | cSt | ASTM D445 | 45 | 44.1 | --- | --- |
| SAMPLE IMAGES |  | method | limitbase | current | history1 | history2 |




Viscosity @ $40^{\circ} \mathrm{C}$


Laboratory
Sample No. Lab Number Unique Number
WearCheck USA - 501 Madison Ave., Cary, NC 27513
STRADALE MOTORS
Received : 19 Mar 2024
5500 N NC HWY 150
LEXINGTON, NC
US 27295
RUNNEKED@AOL COM
*- Denotes test methods that are outside of the ISO 17025 scope of accreditation.

