

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id 2827134 (S/N 1437) Component

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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

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.

| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|------------------|-----------|--------------|------------|-------------|-------------|----------|
| Sample Number | | Client Info | | KC06062737 | KC05949165 | |
| Sample Date | | Client Info | | 18 Dec 2023 | 25 Aug 2023 | |
| Machine Age | hrs | Client Info | | 38140 | 37902 | |
| Oil Age | hrs | Client Info | | 0 | 0 | |
| Oil Changed | | Client Info | | N/A | N/A | |
| Sample Status | | | | ABNORMAL | ABNORMAL | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | 0 | 2 | |
| Chromium | ppm | ASTM D5185m | >10 | 0 | 0 | |
| Nickel | ppm | ASTM D5185m | >3 | 0 | 0 | |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | |
| Aluminum | ppm | ASTM D5185m | >10 | <1 | 0 | |
| Lead | ppm | ASTM D5185m | >10 | 0 | 0 | |
| Copper | | ASTM D5185m | | 6 | <1 | |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | |
| Vanadium | ppm | | >10 | 0 | 0 | |
| | ppm | ASTM D5185m | | 0 | 0 | |
| Cadmium | ppm | ASTM D5185m | | U | U | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 0 | 0 | |
| Barium | ppm | ASTM D5185m | 90 | 0 | 0 | |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | |
| Manganese | ppm | ASTM D5185m | | <1 | 0 | |
| Magnesium | ppm | ASTM D5185m | 90 | 36 | 0 | |
| Calcium | ppm | ASTM D5185m | 2 | 1 | 0 | |
| Phosphorus | ppm | ASTM D5185m | | 6 | 93 | |
| Zinc | ppm | ASTM D5185m | | 64 | 0 | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 0 | <1 | |
| Sodium | ppm | ASTM D5185m | | 15 | <1 | |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | |
| Water | % | ASTM D6304 | >0.05 | 0.024 | 0.021 | |
| ppm Water | ppm | ASTM D6304 | >500 | 248 | 213.7 | |
| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | | 3498 | | |
| Particles >6µm | | ASTM D7647 | >1300 | 1219 | | |
| Particles >14µm | | ASTM D7647 | >80 | 178 | | |
| Particles >21µm | | ASTM D7647 | >20 | <u> </u> | | |
| Particles >38µm | | ASTM D7647 | >4 | 3 | | |
| Particles >71µm | | ASTM D7647 | >3 | 0 | | |
| Oil Cleanliness | | ISO 4406 (c) | >/17/13 | <u> </u> | | |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.28 | 0.093 | |
| | niy NO⊓/ÿ | 70 HVI D0040 | 0.4 | 0.20 | 0.033 | |



6000 Water (

4000

200

52

50

48

40

38

36

Abnormal 0 ua25//

Abnormal

Viscosity @ 40°C

Built for a lifetime

OIL ANALYSIS REPORT

method

*Visual

*Visual

limit/base

NONE

NONE

current

NONE

NONE

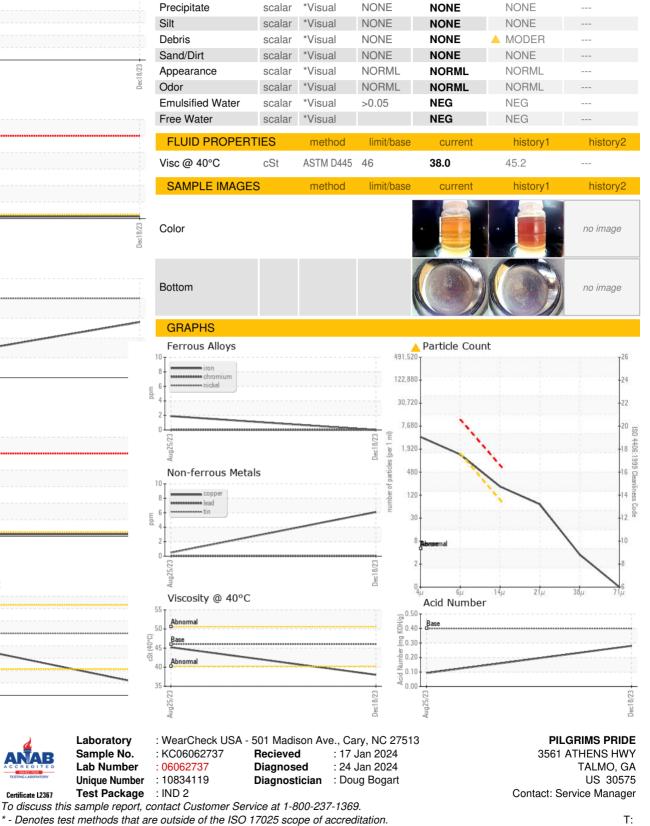
history1

NONE

NONE

history2

| Built for a lifetime." | | |
|---|------------------|--------|
| A Particle Trend | VISUAL | |
| 4k - 4µm | White Metal | scalar |
| 2 3k | Yellow Metal | scalar |
| E 2k | Precipitate | scalar |
| ^[1] / ₂ 3k ^[1] / ₂ ^{[1} | Silt | scalar |
| | Debris | scalar |
| Ok | Sand/Dirt | scalar |
| Aug25/23 Dec18/23 | Appearance | scalar |
| Aug | Odor | scalar |
| Water (KF) | Emulsified Water | scalar |
| 12000 | Free Water | scalar |
| 10000 - Severe | FLUID PROPERT | IES |
| 〒 8000 - 合 数 約000 - 数 4000 - | Visc @ 40°C | cSt |
| 4000 - | SAMPLE IMAGES | |
| 2000 - Abnormal | Color | |
| Acid Number | Bottom | |
| | GRAPHS | |
| | Ferrous Alloys | |
| € 0.10 | 10 8 | |
| 0.00 | chromium | |
| Aug 25/23 | 4 | |
| | | |
| 4 | 2 | |
| Water (KF) | 2 | |
| | 4 4 ug 25/23 | |



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

F:

Certificate L2367