

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id

8367464 (S/N 1252)

Component Compressor Fluid KAESER SIGMA (OEM) M-460 (--- QTS)

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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.

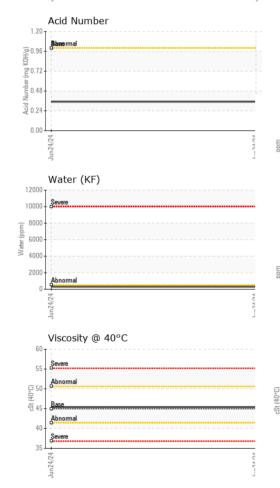
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|------------------|----------|--------------|------------|--------------------------|----------|----------|
| Sample Number | | Client Info | | KCPA017358 | | |
| Sample Date | | Client Info | | 24 Jun 2024 | | |
| Machine Age | hrs | Client Info | | 14552 | | |
| Oil Age | hrs | Client Info | | 4193 | | |
| Oil Changed | | Client Info | | Changed | | |
| Sample Status | | | | ATTENTION | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | <1 | | |
| Chromium | ppm | ASTM D5185m | >10 | 0 | | |
| 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 | 14 | | |
| Tin | ppm | ASTM D5185m | >10 | 0 | | |
| Vanadium | ppm | ASTM D5185m | | 0 | | |
| Cadmium | ppm | ASTM D5185m | | 0 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 0 | 0 | | |
| Barium | ppm | ASTM D5185m | 90 | 0 | | |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | | |
| Manganese | ppm | ASTM D5185m | | 0 | | |
| Magnesium | ppm | ASTM D5185m | 100 | 71 | | |
| Calcium | ppm | ASTM D5185m | 0 | 0 | | |
| Phosphorus | ppm | ASTM D5185m | 0 | 0 | | |
| Zinc | ppm | ASTM D5185m | 0 | 91 | | |
| Sulfur | ppm | ASTM D5185m | 23500 | 22237 | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 1 | | |
| Sodium | ppm | ASTM D5185m | | 14 | | |
| Potassium | ppm | ASTM D5185m | >20 | 9 | | |
| Water | % | ASTM D6304 | >0.05 | 0.029 | | |
| ppm Water | ppm | ASTM D6304 | >500 | 299 | | |
| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | | 4426 | | |
| Particles >6µm | | ASTM D7647 | >1300 | <mark> </mark> 1422 | | |
| Particles >14µm | | ASTM D7647 | >80 | <mark> </mark> 102 | | |
| Particles >21µm | | ASTM D7647 | >20 | <mark> </mark> 27 | | |
| Particles >38µm | | ASTM D7647 | >4 | 2 | | |
| Particles >71µm | | ASTM D7647 | >3 | 1 | | |
| Oil Cleanliness | | ISO 4406 (c) | >/17/13 | <mark> </mark> 19/18/14 | | |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | 0.35 | | |



Built for a lifetime."

Particle Trend Ē -14µm r of particles (1 r SS 38 0 10/4/74 Water (KF)





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| VISUAL | | method | limit/base | current | history1 | history2 |
|-----------------------|--------|------------------------|---|--------------------|--------------|-----------------------|
| /hite Metal | scalar | *Visual | NONE | NONE | | |
| ellow Metal | scalar | *Visual | NONE | NONE | | |
| recipitate | scalar | *Visual | NONE | NONE | | |
| lt | scalar | *Visual | NONE | NONE | | |
| ebris | scalar | *Visual | NONE | NONE | | |
| and/Dirt | scalar | *Visual | NONE | NONE | | |
| ppearance | scalar | *Visual | NORML | NORML | | |
| dor | scalar | *Visual | NORML | NORML | | |
| mulsified Water | scalar | *Visual | >0.05 | NEG | | |
| ree Water | scalar | *Visual | | NEG | | |
| | | and he al | line it //s a s a | | late to mid | la i a ta mu O |
| FLUID PROPER | | method | limit/base | current | history1 | history2 |
| isc @ 40°C | cSt | ASTM D445 | 45 | 45.4 | | |
| SAMPLE IMAGE | S | method | limit/base | current | history1 | history2 |
| | | | | | | |
| olor | | | | | no image | no image |
| | | | | | mage | intage |
| | | | | | | |
| | | | | | | |
| ottom | | | | 62 | no image | no image |
| | | | | | | |
| GRAPHS | | | | | | |
| Ferrous Alloys | | | | Particle Count | | |
| | | | 491,520 | T | 1 1 | T ²⁶ |
| iron chromium | | | 122,880 | | | -24 |
| nickel | | | 122,000 | | | 124 |
| 1 | | | 30,720 | | | -22 |
| | | | 7,680 | • | | -20 |
| 24 | | ********************* | | | | 20 |
| Jun 24/24 | | | Jun24/24 \$ (per 1 ml | | | -18 |
| ⊸ Non-ferrous Meta | de | | 42/42/12 1200 1200 1200 1200 1200 1200 1200 | | N 100 | -18 -16 -14 |
| | | | of par | | | 10 |
| copper | | | ja 120 | + | | -14 |
| tin | | | 2 30 | | | +12 |
| | | | | | | |
| | | | 8 | Bioreve mal | | 10 |
| 24 | | ********************** | 542 | - | | |
| Jun24/24 | | | Jun24/24 | | | |
| | | | - Q | μ 6μ | 14µ 21µ | 38µ 71µ |
| Viscosity @ 40°C | | | | Acid Number | | |
| Severe | | | (B ^{1.20} | Basermal | | |
| Abnormal | | | 20.96 20.75 | I | | |
| Base | | | 5 U.72 | | | |
| Abnormal | | | (B1.20 HOX 0.96 Line 1.20 HOX 0.96 Line 1.20 HOX 0.96 Line 1.20 Line 1.20 Li | | | |
| Severe | | | | | | |
| Jun 24/24 | | | Jun24/24 | Jun 24/24 | | <i>bCbCm</i> |
| Jun | | | Juni | Jun | | |
| | | | | | | |
| arCheck USA - 50 | | | | | ENTOURAGE | |
| PA017358 | Recei | | 3 Jul 2024 | | | |
| 238391 127225 | Teste | - | ' Jul 2024 Jul 2024 - Don | Baldridae | WEST | WINDSOR, N US 0855 |
| | | | | | | |

- Test Package : IND 2 (Additional Tests: KF, PrtCount) Certificate 12367 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)

Laboratory Sample No. Lab Number **Unique Number**

Т:

F:

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