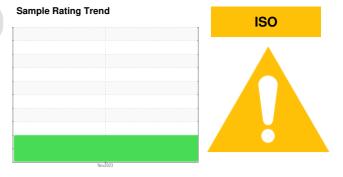


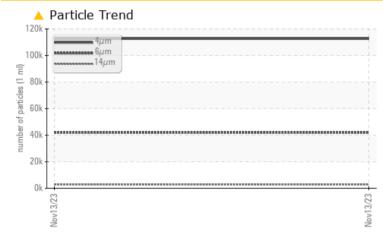
PROBLEM SUMMARY



Machine Id 5303552 (S/N 1059) Component

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

| THOBELM/THO TE | OTTILOOLIO | | |
|-----------------|-----------------|---------------------|------|
| Sample Status | | ABNORMAL | |
| Particles >6µm | ASTM D7647 >1 | 1300 🔺 41960 | |
| Particles >14µm | ASTM D7647 >8 | 30 A 2862 | |
| Particles >21µm | ASTM D7647 >2 | 20 A 563 | |
| Particles >38µm | ASTM D7647 >4 | 4 🔺 10 | |
| Oil Cleanliness | ISO 4406 (c) >- | -/17/13 🔺 24/23/19 | |

Customer Id: SSFPLA Sample No.: KCPA009265 Lab Number: 06013287 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 jhester@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u> There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT



ISO

Machine Id 5303552 (S/N 1059) Component

Compressor

Fluid KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

A 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

There is a high amount of particulates present in the oil.

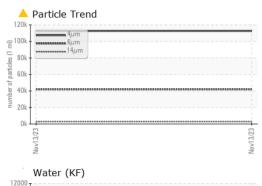
Fluid Condition

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

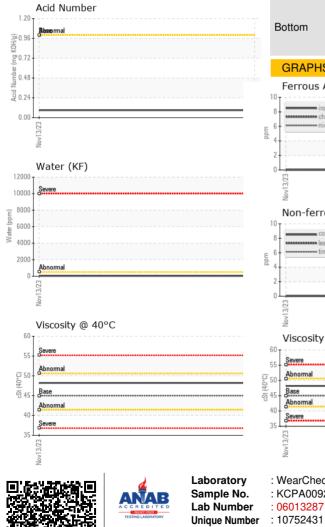
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|--|--------|--------------------------|---------------|-----------------|----------|----------|
| Sample Number | | Client Info | | KCPA009265 | | |
| Sample Date | | Client Info | | 13 Nov 2023 | | |
| Machine Age | hrs | Client Info | | 44677 | | |
| Dil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | N/A | | |
| Sample Status | | | | ABNORMAL | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | 0 | | |
| 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 | | 0 | | |
| Lead | ppm | ASTM D5185m | >10 | 0 | | |
| | | ASTM D5185m | | 0 | | |
| Copper Tin | ppm | ASTM D5185m | >50 >10 | ں <1 | | |
| | ppm | | >10 | | | |
| 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 | 2 | | |
| Calcium | ppm | ASTM D5185m | 0 | 1 | | |
| Phosphorus | ppm | ASTM D5185m | 0 | 476 | | |
| Zinc | ppm | ASTM D5185m | | 27 | | |
| Sulfur | ppm | ASTM D5185m | 23500 | 585 | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | | <1 | | |
| Sodium | ppm | ASTM D5185m | 220 | <1 | | |
| Potassium | ppm | ASTM D5185m | >20 | 0 | | |
| Water | % | ASTM D5185III | - =0 | 0.003 | | |
| ppm Water | ppm | ASTM D0304 ASTM D6304 | >500 | 37.7 | | |
| | | | | 51.1 | | |
| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | | 112606 | | |
| Particles >6µm | | ASTM D7647 | | <u> </u> | | |
| Particles >14µm | | ASTM D7647 | >80 | <u> </u> | | |
| | | ASTM D7647 | >20 | <u> </u> | | |
| Particles >21µm | | ASTM D7647 | >4 | <u> </u> | | |
| Particles >21µm | | AGTIVI D7047 | | | | |
| Particles >14μm Particles >21μm Particles >38μm Particles >71μm | | ASTM D7647 | >3 | 1 | | |
| Particles >21µm Particles >38µm | | | >3 >/17/13 | 1 ▲ 24/23/19 | | |
| Particles >21µm Particles >38µm Particles >71µm | | ASTM D7647 | | | | |



OIL ANALYSIS REPORT







| 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 | LIGHT | | |
| and/Dirt | scalar | *Visual | NONE | NONE | | |
| opearance | scalar | *Visual | NORML | NORML | | |
| dor | scalar | *Visual | NORML | NORML | | |
| nulsified Water | scalar | *Visual | >0.05 | NEG | | |
| ee Water | scalar | *Visual | | NEG | | |
| FLUID PROPERT | TIES | method | limit/base | current | history1 | history2 |
| sc @ 40°C | cSt | ASTM D445 | 45 | 48.2 | | |
| SAMPLE IMAGES | S | method | limit/base | current | history1 | history2 |
| olor | | | | | no image | no image |
| ottom | | | | | no image | no image |
| GRAPHS | | | | | | |
| Ferrous Alloys | | | | Particle Count | : | 1.0 |
| iron | | | 491,520 | I | | 1 ²⁶ |
| chromium | | | 122,880 | | | -24 |
| | | | 30,720 | | | |
| | | | | | | -22 |
| | | | | | | |
| | | | 7,680 | | \ | -20 |
| 3,23 | | | | | | -20 |
| | | | | | | +20 +18 |
| | s | | | | | -20 -18 -16 |
| | s | | | | | -20 -18 -16 -14 |
| Non-ferrous Metal | s | | Nov13/23 | | | -18 -16 -14 |
| Non-ferrous Metal | S | | | | | -18 -16 -14 |
| Non-ferrous Metal | S | | CZCELNON 1,920 1,920 1,920 480 120 120 30 | | | -18 -16 -14 |
| Non-ferrous Metal | S | | ECCE LAND 480 120 120 120 30 8 | Bibresemal | | -18 -16 -14 -12 |
| Copper lead | S | | ECCE LAND 480 120 120 120 30 8 | | | -18 -16 -14 -12 |
| Non-ferrous Metal | S | | CZ/ELV CZ/ELV CZ/ELV CZ/ELV CZ/ELV CZ/ELV | Biorese mal | 140 210 | -18 16 -14 -12 -10 -8 -8 -8 |
| Non-ferrous Metal | S | | FEZEELAND 1.920 480 120 30 30 8 8 627E1volv 0 480 480 | Biorese mal | 14μ 21μ | -18 -16 -14 -12 |
| Viscosity @ 40°C | S | | FEZEELAND 1.920 480 120 30 30 8 8 627E1volv 0 480 480 | Rbræmal u 6ju | 14μ 21μ | -18 16 -14 -12 -10 -8 -8 -8 |
| Viscosity @ 40°C | S | | FEZEELAND 1.920 480 120 30 30 8 8 627E1volv 0 480 480 | βόσσe mal μ 6μ Acid Number | 14μ 21μ | -18 16 -14 -12 -10 -8 -8 -8 |
| Non-ferrous Metal | S | | FEZ/ELANON 1.920 480 120 30 30 8 2 62/ELANON 0 480 480 | βόσσe mal μ 6μ Acid Number | 14μ 21μ | -18 16 -14 -12 -10 -8 -8 -8 |
| Non-ferrous Metal | S | | FEZ/ELANON 1.920 480 120 30 30 8 2 62/ELANON 0 480 480 | βόσσe mal μ 6μ Acid Number | 14μ 21μ | -18 16 -14 -12 -10 -8 -8 -8 |
| Non-ferrous Metal | S | | (Im 1.920 (EZEELANDY 480 120 30 30 8 60/10,0.96 0,0.96 90,0.96 0,0.96 90,0.97 0,0.46 90,0.24 0.24 | βόσσe mal μ 6μ Acid Number | 14μ 21μ | -18 16 -14 -12 -10 -8 -8 -8 |
| Viscosity @ 40°C | S | | CZCELNON CZCELN | Boresemal Acid Number | 14μ 21μ | -18 16 -14 -12 10 -8 -8 -71μ |
| Non-ferrous Metal | S | | (Im 1.920 (EZEELANDY 480 120 30 30 8 60/10,0.96 0,0.96 90,0.96 0,0.96 90,0.97 0,0.46 90,0.24 0.24 | βόσσe mal μ 6μ Acid Number | 14μ 21μ | -18 16 -14 -12 -10 -8 -8 -8 |



Test Package : IND 2 (Additional Tests: KF, PrtCount) Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. BRIAN.HERKALO@SSFPRODUCTION.COM * - 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)

Diagnosed

: 29 Nov 2023

Diagnostician : Jonathan Hester

: 06013287

US 12901

Т:

F:

PLATTSBURGH, NY

Contact: BRIAN HERKALO