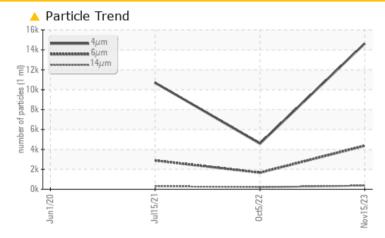




KAESER 6543087

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 | | | | | | | | |
|--------------------------|-----------------|-----------------------|--------------|---------------|--|--|--|--|
| Sample Status | | ABNORMAI | ABNORMAL | ABNORMAL | | | | |
| Particles >6µm | ASTM D7647 >13 | 600 🔺 4360 | 1 667 | A 2889 | | | | |
| Particles >14µm | ASTM D7647 >80 | A 365 | <u> </u> | A 298 | | | | |
| Particles >21µm | ASTM D7647 >20 | A 107 | <u> </u> | A 89 | | | | |
| Particles >38µm | ASTM D7647 >4 | <u> </u> | 3 | 4 | | | | |
| Oil Cleanliness | ISO 4406 (c) >/ | 17/13 21/19/16 | 19/18/15 | A 19/15 | | | | |

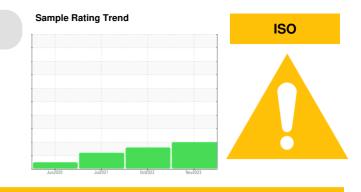
Customer Id: DOLLON Sample No.: KCPA006955 Lab Number: 06016408 Test Package: IND 2



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>



RECOMMENDED ACTIONS

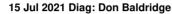
There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

05 Oct 2022 Diag: Doug Bogart



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.All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



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.All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

01 Jun 2020 Diag: Doug Bogart

NORMAL



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. We were unable to perform a particle count on this sample.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report

view report



OIL ANALYSIS REPORT

SAMPLE INFORMATION method

Sample Rating Trend ISO

current

history1

history2

KAESER 6543087

Compressor Fluid

KAESER SIGMA (OEM) M-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

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 | | KCPA006955 | KCP49239 | KCP42288 |
| Sample Date | | Client Info | | 15 Nov 2023 | 05 Oct 2022 | 15 Jul 2021 |
| Machine Age | hrs | Client Info | | 8167 | 6562 | 5185 |
| Oil Age | hrs | Client Info | | 0 | 1377 | 1810 |
| Oil Changed | | Client Info | | N/A | Changed | Changed |
| Sample Status | | | | ABNORMAL | ABNORMAL | ABNORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | <1 | 0 | <1 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >3 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | >3 | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >10 | 2 | 1 | 1 |
| Lead | ppm | ASTM D5185m | >10 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185m | | 3 | 2 | 3 |
| Tin | ppm | ASTM D5185m | >10 | 0 | <1 | 0 |
| Antimony | ppm | ASTM D5185m | - | | | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Cadmium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 0 | 0 | 0 | <1 |
| Barium | ppm | ASTM D5185m | 90 | 0 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185m | 0 | <1 | <1 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 100 | 50 | 53 | 36 |
| Calcium | ppm | ASTM D5185m | 0 | 1 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 0 | 0 | 11 | 9 |
| Zinc | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | 23500 | 19941 | 23535 | 18708 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | <1 | 2 | 1 |
| Sodium | ppm | ASTM D5185m | | 15 | 20 | 12 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 2 | 2 |
| Water | % | ASTM D6304 | >0.05 | 0.023 | 0.016 | 0.021 |
| ppm Water | ppm | ASTM D6304 | | 238 | 163.5 | 211.5 |
| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | | 14635 | 4583 | 10694 |
| Particles >6µm | | ASTM D7647 | >1300 | <u> </u> | 1 667 | <u> </u> |
| Particles >14µm | | ASTM D7647 | >80 | A 365 | 2 06 | 2 98 |
| Particles >21µm | | ASTM D7647 | >20 | <u> </u> | 4 2 | A 89 |
| Particles >38µm | | ASTM D7647 | >4 | <u> </u> | 3 | 4 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >/17/13 | A 21/19/16 | ▲ 19/18/15 | ▲ 19/15 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | 0.37 | 0.37 | 0.345 |
| 10.05 D | | | | a | <u> </u> | DOL: |

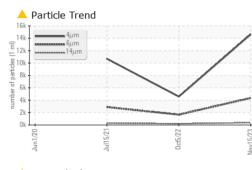
limit/base

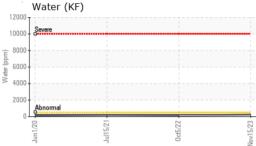
Report Id: DOLLON [WUSCAR] 06016408 (Generated: 11/29/2023 21:13:05) Rev: 1

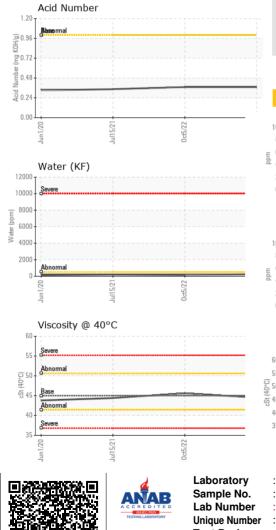
Contact/Location: Service Manager - DOLLON



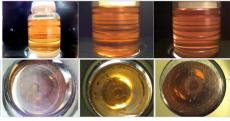
OIL ANALYSIS REPORT



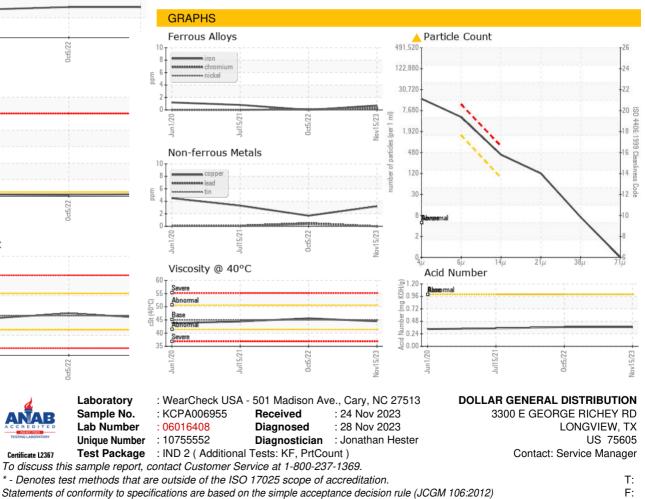




| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | 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 | 45 | 44.5 | 45.6 | 44.4 |
| SAMPLE IMAGES | 6 | method | limit/base | current | history1 | history2 |
| | | | | | | |
| Color | | | | .a • | | |



Bottom



Contact/Location: Service Manager - DOLLON