

PROBLEM SUMMARY

Sample Rating Trend

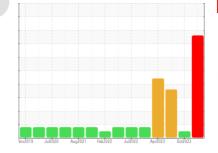
WATER

Area [2152]

KAESER 6094304- US WAFFLE (S/N 1771)

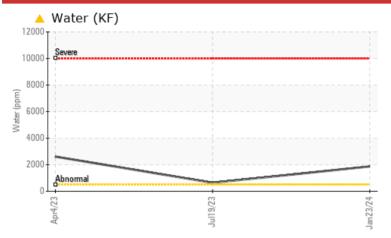
Compressor

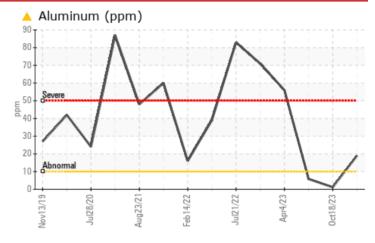
KAESER SIGMA (OEM) FG-460 (10 GAL)





COMPONENT CONDITION SUMMARY





RECOMMENDATION

We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

| PROBLEMATIC TEST RESULTS | | | | | | | | |
|--------------------------|--------|-------------|-------|----------------|--------|----------------|--|--|
| Sample Status | | | | SEVERE | NORMAL | ABNORMAL | | |
| Aluminum | ppm | ASTM D5185m | >10 | <u> </u> | 1 | 6 | | |
| Water | % | ASTM D6304 | >0.05 | △ 0.187 | | △ 0.064 | | |
| ppm Water | ppm | ASTM D6304 | >500 | 1870 | | 640 | | |
| Debris | scalar | *Visual | NONE | MODER | NONE | ▲ MODER | | |
| Emulsified Water | scalar | *Visual | >0.05 | 0.2% | NEG | 0.2% | | |
| Free Water | scalar | *Visual | | ▲ >10% | NEG | ▲ 1.0 | | |

Customer Id: PALFOU Sample No.: WC0887804 Lab Number: 06125029 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

| RECOMMENDED ACTIONS | | | | | | |
|---------------------|--------|------|---------|---|--|--|
| Action | Status | Date | Done By | Description | | |
| Change Fluid | | | ? | Oil and filter change at the time of sampling has been noted. | | |
| Change Filter | | | ? | Oil and filter change at the time of sampling has been noted. | | |
| Resample | | | ? | We recommend an early resample to monitor this condition. | | |
| Check Water Access | | | ? | We advise that you check for the source of water entry. | | |

HISTORICAL DIAGNOSIS

18 Oct 2023 Diag: Don Baldridge

NORMAL



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 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.



19 Jul 2023 Diag: Don Baldridge

WATER



We advise that you follow the water drain-off procedure for this component. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid.



04 Apr 2023 Diag: Jonathan Hester

WATER



We advise that you follow the water drain-off procedure for this component. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The aluminum level is abnormal. All other component wear rates are normal. Free water present. There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





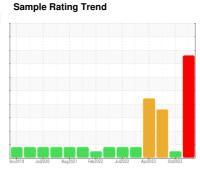
OIL ANALYSIS REPORT

Area [2152]

KAESER 6094304- US WAFFLE (S/N 1771)

Compressor

KAESER SIGMA (OEM) FG-460 (10 GAL)





DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

The aluminum level is abnormal.

▲ Contamination

Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil. Excessive free water present.

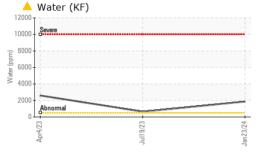
Fluid Condition

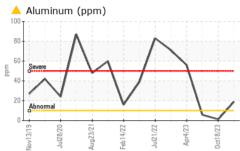
The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

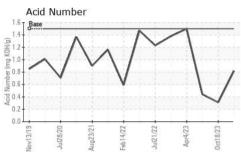
| | | W0V2013 J | uizozo Augzozi rec | EULE UNEUEL APIEUES | 00000 | |
|---------------------------------|------------------------|--|--------------------|------------------------|-------------|-------------------------------------|
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | WC0887804 | WC0845243 | WC0826059 |
| Sample Date | | Client Info | | 23 Jan 2024 | 18 Oct 2023 | 19 Jul 2023 |
| Machine Age | hrs | Client Info | | 31255 | 30383 | 29127 |
| Oil Age | hrs | Client Info | | 1000 | 2300 | 3979 |
| Oil Changed | | Client Info | | Changed | Changed | Not Changd |
| Sample Status | | | | SEVERE | NORMAL | ABNORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | 4 | 0 | <1 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | >3 | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | <u> </u> | 1 | 6 |
| Lead | ppm | ASTM D5185m | >10 | <1 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >50 | 1 | 4 | 2 |
| Tin | ppm | ASTM D5185m | >10 | <1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 2 | 0 | 11 |
| Molybdenum | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | | <1 | 0 | 2 |
| Calcium | ppm | ASTM D5185m | | 3 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 500 | 200 | 20 | 113 |
| Zinc | ppm | ASTM D5185m | | 30 | 4 | 50 |
| Sulfur | ppm | ASTM D5185m | | 1634 | 1224 | 1788 |
| CONTAMINANTS | 5 | method | limit/base | current | history1 | history2 |
| Silicon | nnm | ASTM D5185m | >25 | 4 | 3 | 0 |
| | ppm | AO IIVI DO TOSIII | | | | |
| Sodium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Sodium Potassium | | | >20 | 0 2 | <1 1 | 0 |
| Potassium | ppm | ASTM D5185m | | - | | |
| | ppm | ASTM D5185m ASTM D5185m | | 2 | 1 | 0 |
| Potassium Water | ppm ppm % ppm | ASTM D5185m ASTM D5185m ASTM D6304 | >0.05 | 2 <u>^</u> 0.187 | 1 | 0 0.064 |
| Potassium Water ppm Water | ppm ppm % ppm | ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 | >0.05 >500 | 2 ^ 0.187 ^ 1870 | 1 | 0 △ 0.064 △ 640 |

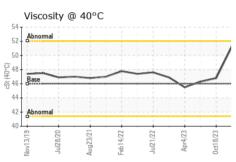


OIL ANALYSIS REPORT









| 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 | ▲ MODER | NONE | ▲ MODER |
| 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 | 0.2% | NEG | 0.2% |
| Free Water | scalar | *Visual | | ▲ >10% | NEG | <u> </u> |

| FLUID PROPERTIES | | metnoa | ilmit/base | current | nistory i | nistory2 | |
|------------------|-----|-----------|------------|---------|-----------|----------|--|
| Visc @ 40°C | cSt | ASTM D445 | 46 | 51.3 | 46.8 | 46.3 | |

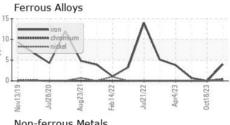
SAMPLE IMAGES

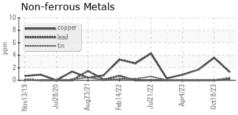
Color

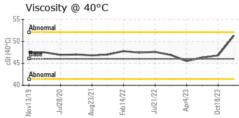


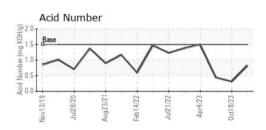


GRAPHS













Certificate L2367

Report Id: PALFOU [WUSCAR] 06125029 (Generated: 03/25/2024 12:58:19) Rev: 1

Laboratory Sample No. Lab Number : 06125029 Unique Number: 10939180

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0887804

Received **Tested** Diagnosed

: 21 Mar 2024

: 25 Mar 2024 : 25 Mar 2024 - Don Baldridge

302 HUGHES ST FOUNTAIN INN, SC

ELEVATED INDUSTRIAL SOLUTIONS - EIS

US 29644 Contact: DARRIN WARD

F: (864)862-7653

Test Package : IND 2 (Additional Tests: KF) 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)

dward@elevatedindustrial.com

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