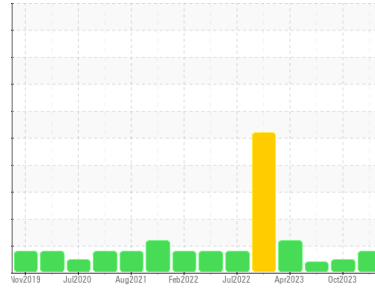




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area

[2152]

Machine Id

KAESER 6078981 - US WAFFLE (S/N 1768)

Component

Compressor

Fluid

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

DIAGNOSIS

▲ 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

The aluminum level is abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WC0887805 | WC0863533 | WC0826058 |
| Sample Date | Client Info | | 23 Jan 2024 | 18 Oct 2023 | 19 Jul 2023 |
| Machine Age | hrs | Client Info | 31039 | 30167 | 29127 |
| Oil Age | hrs | Client Info | 1000 | 2300 | 2409 |
| Oil Changed | Client Info | | Changed | Changed | Not Changed |
| Sample Status | | | ABNORMAL | NORMAL | ABNORMAL |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.05 | NEG | NEG | NEG |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >50 | 6 | 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 | ▲ 25 | <1 | 2 |
| Lead | ppm | ASTM D5185m >10 | 0 | 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 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | <1 | 0 | 3 |
| Calcium | ppm | ASTM D5185m | 3 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m 500 | 325 | 12 | 67 |
| Zinc | ppm | ASTM D5185m | 106 | 1 | 18 |
| Sulfur | ppm | ASTM D5185m | 1765 | 1146 | 1744 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|----------|----------|----------|
| Silicon | ppm | ASTM D5185m >25 | 4 | 4 | 0 |
| Sodium | ppm | ASTM D5185m | 0 | 1 | <1 |
| Potassium | ppm | ASTM D5185m >20 | 2 | 1 | 0 |

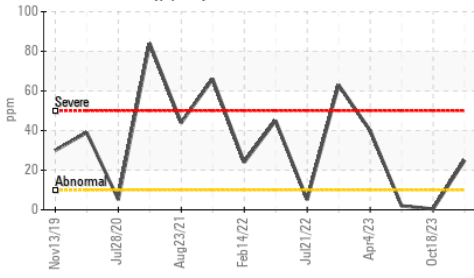
FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 1.5 | 1.20 | 0.32 | 0.38 |

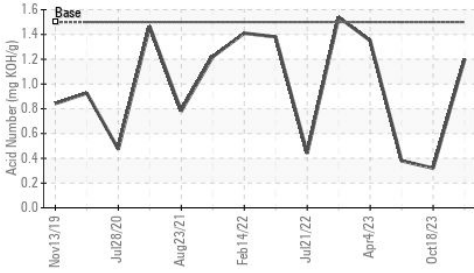


OIL ANALYSIS REPORT

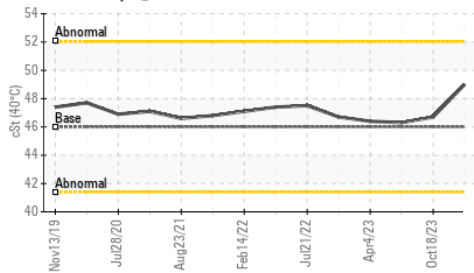
▲ Aluminum (ppm)



Acid Number



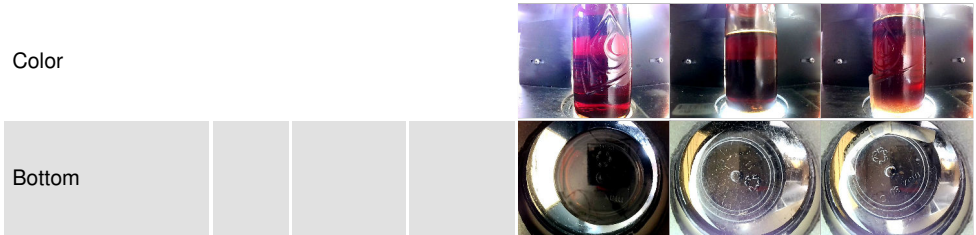
Viscosity @ 40°C



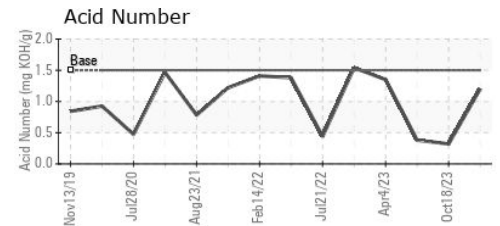
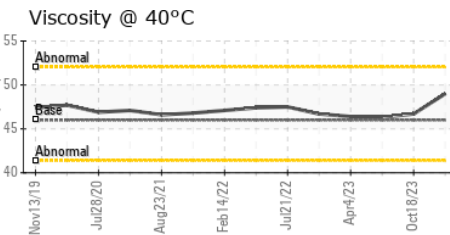
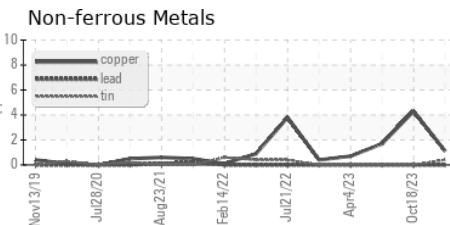
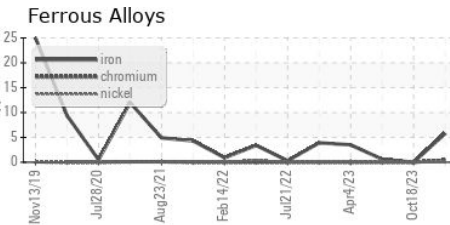
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | ▲ MODER |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.05 | NEG | 0.2% |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|--------------|-------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 46 | 49.0 | 46.7 | 46.3 |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0887805 **Received** : 21 Mar 2024
Lab Number : 06125030 **Tested** : 22 Mar 2024
Unique Number : 10939181 **Diagnosed** : 24 Mar 2024 - Don Baldrige
Test Package : IND 2

ELEVATED INDUSTRIAL SOLUTIONS - EIS
 302 HUGHES ST
 FOUNTAIN INN, SC
 US 29644
 Contact: DARRIN WARD
 dward@elevatedindustrial.com

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)

F: (864)862-7653