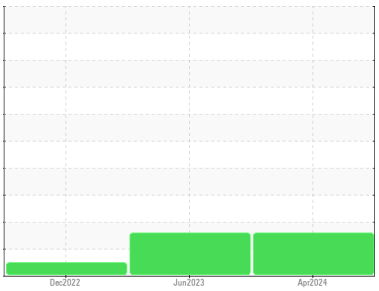
KAESER COMPRESSORS
Built for a lifetime.

# OIL ANALYSIS REPORT

Sample Rating Trend




ISO

Machine Id
## 7198521 (S/N 1267)
Component
**Compressor**
Fluid
**KAESER SIGMA (OEM) FG-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 INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **KC125063** | KC101091 | KC97013 |
| Sample Date | | Client Info | | **25 Apr 2024** | 28 Jun 2023 | 19 Dec 2022 |
| Machine Age | hrs | Client Info | | **834** | 779 | 699 |
| Oil Age | hrs | Client Info | | **0** | 80 | 699 |
| Oil Changed | | Client Info | | **N/A** | Not Changd | Changed |
| Sample Status | | | | **ABNORMAL** | ABNORMAL | NORMAL |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >50 | **2** | <1 | 1 |
| Chromium | ppm | ASTM D5185m | >10 | **0** | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >3 | **0** | 0 | 0 |
| Titanium | ppm | ASTM D5185m | >3 | **0** | <1 | 0 |
| Silver | ppm | ASTM D5185m | >2 | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | **4** | 1 | <1 |
| Lead | ppm | ASTM D5185m | >10 | **0** | 0 | 0 |
| Copper | ppm | ASTM D5185m | >50 | **3** | 2 | 9 |
| Tin | ppm | ASTM D5185m | >10 | **<1** | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | **0** | 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 | | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | **1** | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | | **<1** | 5 | 0 |
| Calcium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 500 | **449** | 425 | 232 |
| Zinc | ppm | ASTM D5185m | | **260** | 193 | 319 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >25 | **<1** | <1 | 2 |
| Sodium | ppm | ASTM D5185m | | **4** | 4 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | **1** | 0 | 0 |
| Water | % | ASTM D6304 | >0.05 | **0.004** | 0.006 | 0.006 |
| ppm Water | ppm | ASTM D6304 | >500 | **49** | 64.5 | 60.6 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | | **7947** | 7209 | 1887 |
| Particles >6µm | | ASTM D7647 | >1300 | ▲ **3552** | 2408 | 411 |
| Particles >14µm | | ASTM D7647 | >80 | ▲ **284** | ▲ 175 | 15 |
| Particles >21µm | | ASTM D7647 | >20 | ▲ **47** | ▲ 46 | 2 |
| Particles >38µm | | ASTM D7647 | >4 | **0** | 6 | 0 |
| Particles >71µm | | ASTM D7647 | >3 | **0** | 1 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >--/17/13 | ▲ **20/19/15** | ▲ 20/18/15 | 18/16/11 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.5 | **1.13** | 1.19 | 0.56 |

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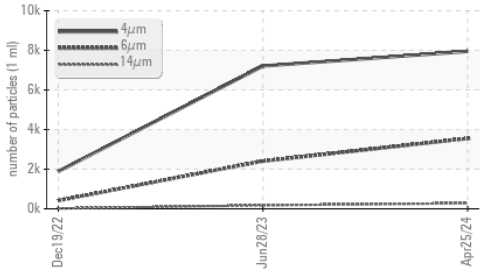
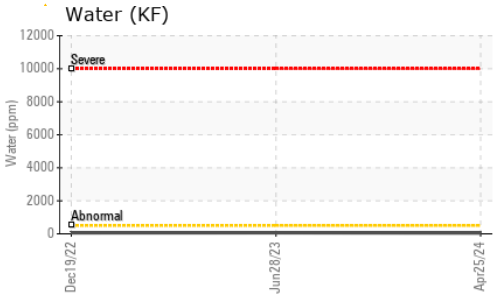
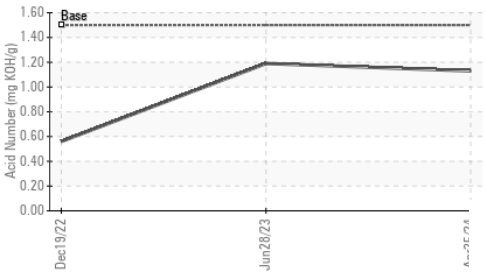
Particle Trend



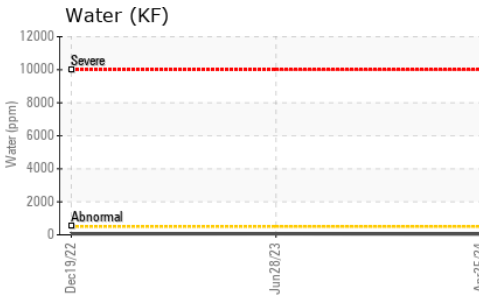

Water (KF)



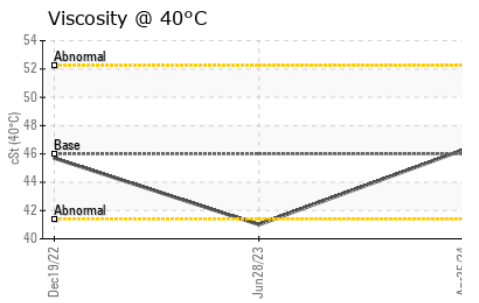

Acid Number




Water (KF)

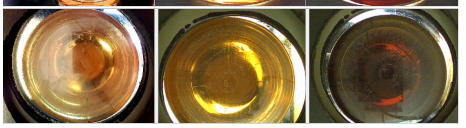



Viscosity @ 40°C



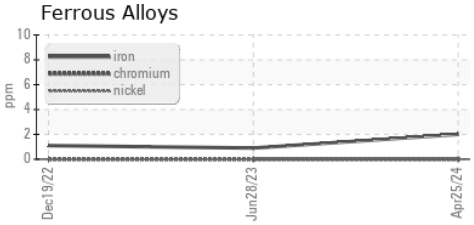

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| 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 PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 46 | **46.3** | 41.0 | 45.7 |

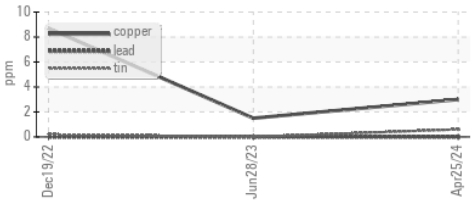
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

## GRAPHS

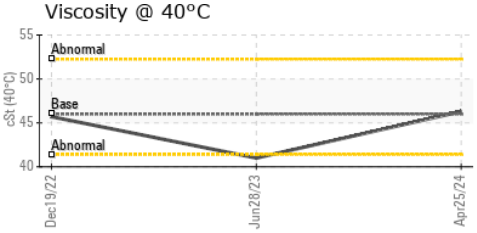
Ferrous Alloys



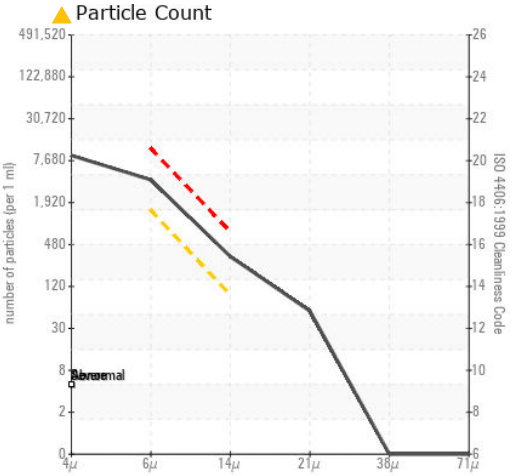

Non-ferrous Metals



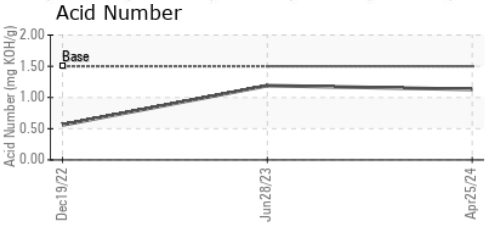

Viscosity @ 40°C




Particle Count




Acid Number




ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : KC125063
**Lab Number** : 06184984
**Unique Number** : 11036310
**Test Package** : IND 2

**Received** : 20 May 2024
**Tested** : 22 May 2024
**Diagnosed** : 22 May 2024 - Jonathan Hester

**WHITE LABEL LEAF**
6205 JOHNS RD, SUITE 9
TAMPA, FL
US 33629
Contact: Service Manager
T:
F:

*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)*