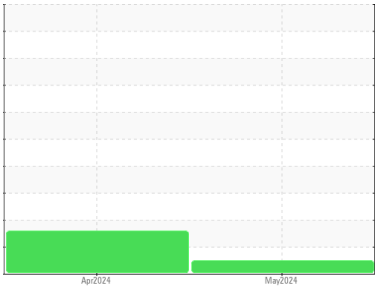
KAESER COMPRESSORS
Built for a lifetime.

# OIL ANALYSIS REPORT

Sample Rating Trend




NORMAL

Machine Id
## KAESER SM 7.5 8855743 (S/N 1373)
Component
**Compressor**
Fluid
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## DIAGNOSIS

**Recommendation**
Resample at the next service interval to monitor.

**Wear**
All component wear rates are normal.

**Contamination**
The amount and size of particulates present in the system are acceptable. 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 | | **KC130502** | KC124436 | --- |
| Sample Date | | Client Info | | **14 May 2024** | 25 Apr 2024 | --- |
| Machine Age | hrs | Client Info | | **9716** | 8416 | --- |
| Oil Age | hrs | Client Info | | **6000** | 0 | --- |
| Oil Changed | | Client Info | | **Changed** | N/A | --- |
| Sample Status | | | | **NORMAL** | ABNORMAL | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >50 | **0** | <1 | --- |
| Chromium | ppm | ASTM D5185m | >10 | **0** | <1 | --- |
| Nickel | ppm | ASTM D5185m | >3 | **0** | <1 | --- |
| Titanium | ppm | ASTM D5185m | >3 | **<1** | <1 | --- |
| Silver | ppm | ASTM D5185m | >2 | **0** | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >10 | **0** | 2 | --- |
| Lead | ppm | ASTM D5185m | >10 | **0** | <1 | --- |
| Copper | ppm | ASTM D5185m | >50 | **10** | 10 | --- |
| Tin | ppm | ASTM D5185m | >10 | **0** | <1 | --- |
| Vanadium | ppm | ASTM D5185m | | **<1** | <1 | --- |
| Cadmium | ppm | ASTM D5185m | | **0** | <1 | --- |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **0** | 0 | --- |
| Barium | ppm | ASTM D5185m | 90 | **0** | <1 | --- |
| Molybdenum | ppm | ASTM D5185m | | **0** | <1 | --- |
| Manganese | ppm | ASTM D5185m | | **<1** | 0 | --- |
| Magnesium | ppm | ASTM D5185m | 90 | **2** | 18 | --- |
| Calcium | ppm | ASTM D5185m | 2 | **0** | 3 | --- |
| Phosphorus | ppm | ASTM D5185m | | **2** | 2 | --- |
| Zinc | ppm | ASTM D5185m | | **5** | 8 | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >25 | **2** | 3 | --- |
| Sodium | ppm | ASTM D5185m | | **2** | 5 | --- |
| Potassium | ppm | ASTM D5185m | >20 | **0** | 2 | --- |
| Water | % | ASTM D6304 | >0.05 | **0.005** | 0.006 | --- |
| ppm Water | ppm | ASTM D6304 | >500 | **59** | 69 | --- |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | | **2301** | 25835 | --- |
| Particles >6µm | | ASTM D7647 | >1300 | **779** | ▲ 6661 | --- |
| Particles >14µm | | ASTM D7647 | >80 | **50** | ▲ 510 | --- |
| Particles >21µm | | ASTM D7647 | >20 | **7** | ▲ 120 | --- |
| Particles >38µm | | ASTM D7647 | >4 | **1** | 4 | --- |
| Particles >71µm | | ASTM D7647 | >3 | **0** | 0 | --- |
| Oil Cleanliness | | ISO 4406 (c) | >--/17/13 | **18/17/13** | ▲ 22/20/16 | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.4 | **0.24** | 0.31 | --- |

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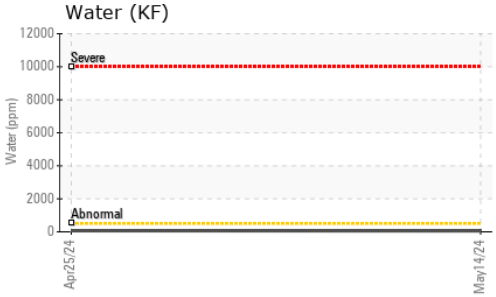
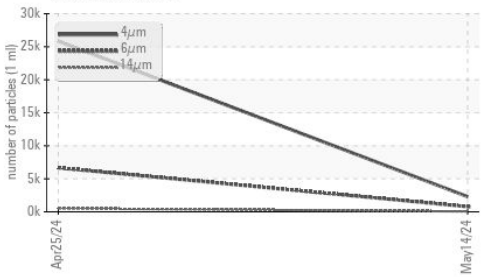
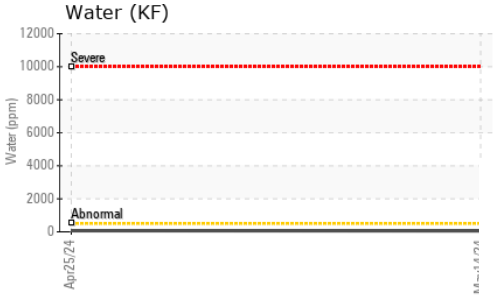
Water (KF)



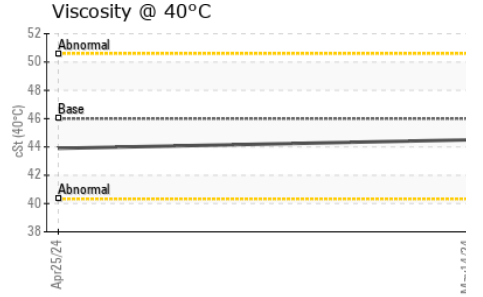

Particle Trend



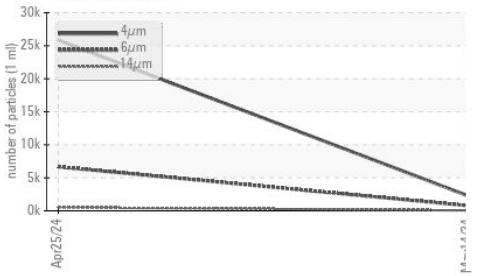

Water (KF)




Viscosity @ 40°C

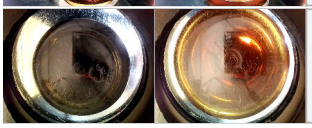



Particle Trend



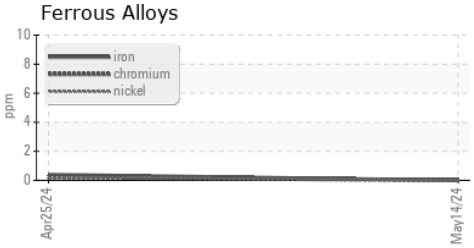

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Debris | scalar | *Visual | NONE | **NONE** | NONE | --- |
| 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** | NEG | --- |
| Free Water | scalar | *Visual | | **NEG** | NEG | --- |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 46 | **44.5** | 43.9 | --- |

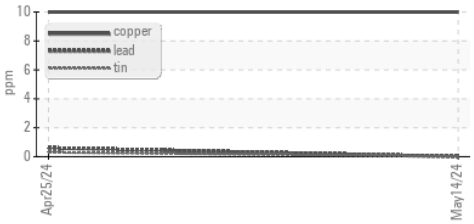
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | *no image* |
| Bottom | | |  | | *no image* |

## GRAPHS

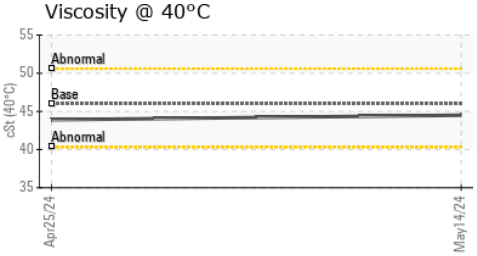
Ferrous Alloys



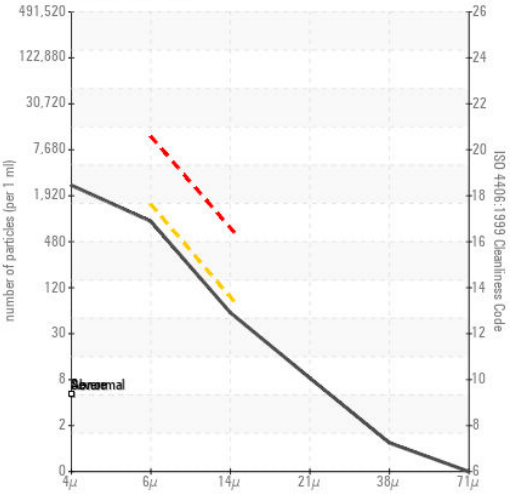

Non-ferrous Metals



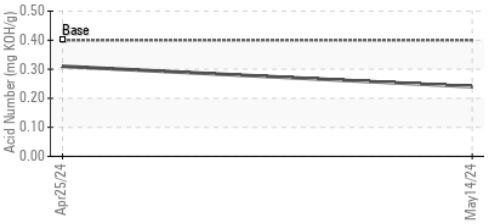

Viscosity @ 40°C




Particle Count




Acid Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : KC130502
**Lab Number** : 06212403
**Unique Number** : 11085267
**Test Package** : IND 2

**Received** : 17 Jun 2024
**Tested** : 19 Jun 2024
**Diagnosed** : 19 Jun 2024 - Don Baldridge

**AXEM PRECISION**
1895 AIRPORT EXCHANGE
ERLANGER, KY
US 41018
Contact:
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)*