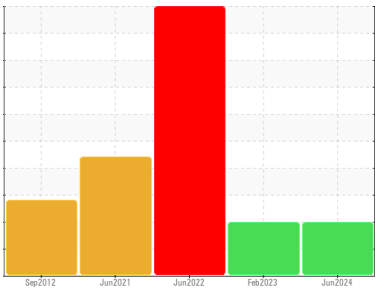
KAESER COMPRESSORS
Built for a lifetime.

# OIL ANALYSIS REPORT

Sample Rating Trend




ISO

Machine Id
## KAESER SK26 1544338 (S/N 1062)
Component
**Compressor**
Fluid
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

**Recommendation**
No corrective action is recommended at this time. 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 | | **KCPA019184** | KCP55739 | KCP41387 |
| Sample Date | | Client Info | | **12 Jun 2024** | 02 Feb 2023 | 29 Jun 2022 |
| Machine Age | hrs | Client Info | | **94049** | 93862 | 93846 |
| Oil Age | hrs | Client Info | | **143** | 0 | 93846 |
| Oil Changed | | Client Info | | **Not Changd** | Changed | Not Changd |
| Sample Status | | | | **ABNORMAL** | ABNORMAL | SEVERE |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >50 | **2** | 4 | 1 |
| Chromium | ppm | ASTM D5185m | >10 | **0** | <1 | 0 |
| Nickel | ppm | ASTM D5185m | | **0** | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | **<1** | <1 | <1 |
| Silver | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | **<1** | 6 | <1 |
| Lead | ppm | ASTM D5185m | >25 | **0** | <1 | 0 |
| Copper | ppm | ASTM D5185m | >50 | **<1** | <1 | 14 |
| Tin | ppm | ASTM D5185m | >15 | **0** | <1 | 0 |
| Antimony | ppm | ASTM D5185m | | **---** | --- | --- |
| Vanadium | ppm | ASTM D5185m | | **<1** | <1 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | 0 | 0 |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | 0 | **0** | 0 | 0 |
| Barium | ppm | ASTM D5185m | 90 | **38** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | **0** | <1 | 0 |
| Manganese | ppm | ASTM D5185m | | **<1** | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | 100 | **102** | 60 | 2 |
| Calcium | ppm | ASTM D5185m | 0 | **7** | 2 | 0 |
| Phosphorus | ppm | ASTM D5185m | 0 | **2** | 4 | 5 |
| Zinc | ppm | ASTM D5185m | 0 | **31** | 44 | 21 |
| Sulfur | ppm | ASTM D5185m | 23500 | **21021** | 22871 | 20052 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >25 | **<1** | 1 | <1 |
| Sodium | ppm | ASTM D5185m | | **20** | 24 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | **1** | 4 | 0 |
| Water | % | ASTM D6304 | >0.1 | **0.021** | 0.011 | ▲ 7.83 |
| ppm Water | ppm | ASTM D6304 | >1000 | **211** | 116.8 | ▲ 78300 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | | **20992** | 57969 | 49031 |
| Particles >6µm | | ASTM D7647 | >1300 | ▲ **7201** | ▲ 17759 | ▲ 26710 |
| Particles >14µm | | ASTM D7647 | >80 | ▲ **653** | ▲ 1519 | ▲ 4546 |
| Particles >21µm | | ASTM D7647 | >20 | ▲ **143** | ▲ 302 | ▲ 1531 |
| Particles >38µm | | ASTM D7647 | >4 | ▲ **5** | ▲ 17 | ▲ 236 |
| Particles >71µm | | ASTM D7647 | >3 | **0** | 0 | ▲ 24 |
| Oil Cleanliness | | ISO 4406 (c) | >--/17/13 | ▲ **22/20/17** | ▲ 23/21/18 | ▲ 23/22/19 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | **0.43** | 0.36 | 0.39 |

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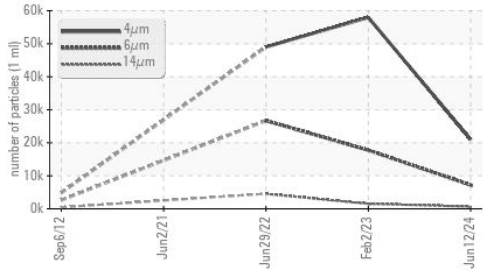
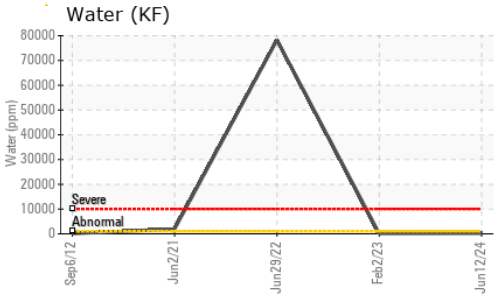
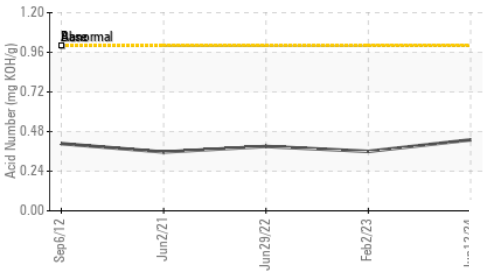
Particle Trend



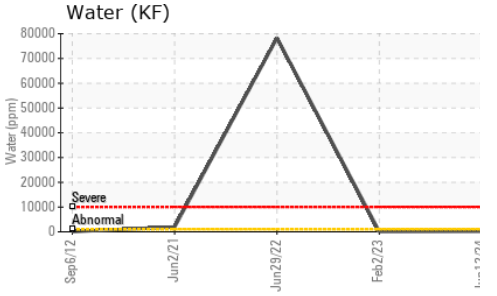

Water (KF)



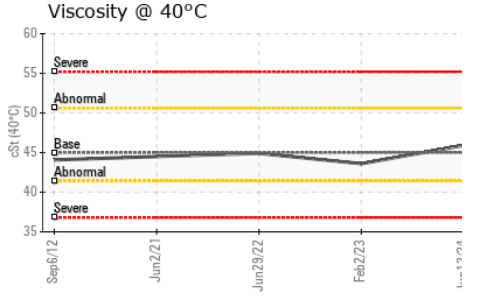

Acid Number




Water (KF)

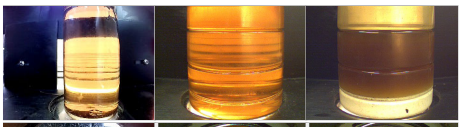
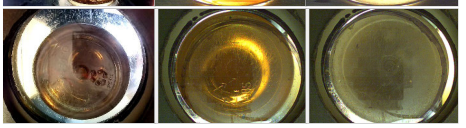



Viscosity @ 40°C



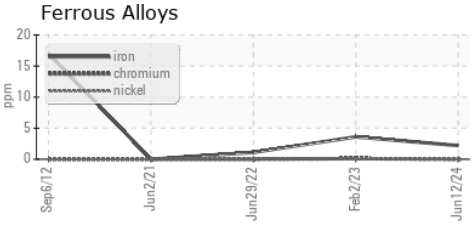

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | LIGHT |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Debris | scalar | *Visual | NONE | **NONE** | VLITE | 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 | >0.1 | **NEG** | NEG | ▲ 0.2% |
| Free Water | scalar | *Visual | | **NEG** | NEG | ▲ 2.0 |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 45 | **45.9** | 43.6 | 44.9 |

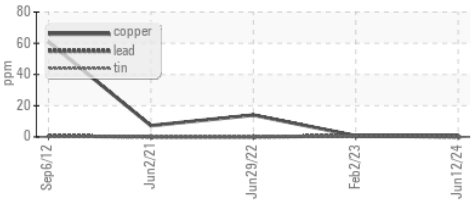
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

## GRAPHS

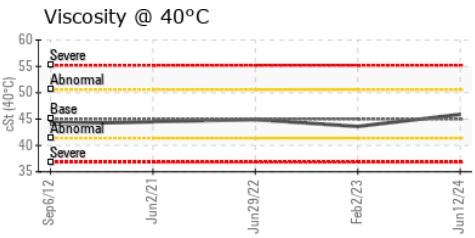
Ferrous Alloys



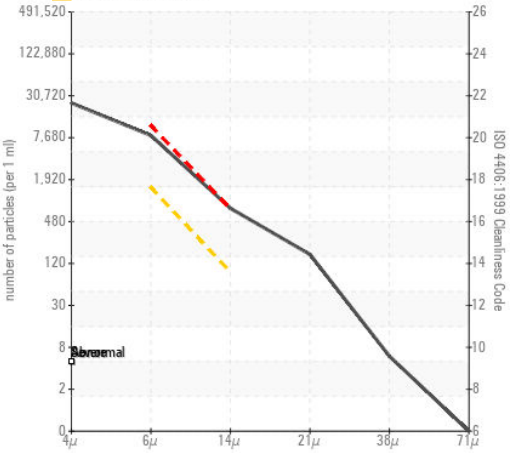

Non-ferrous Metals



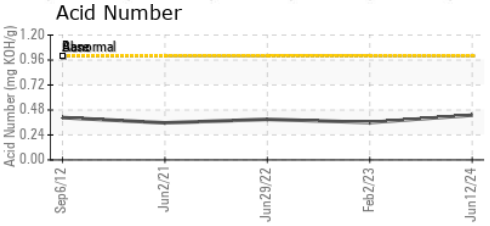

Viscosity @ 40°C




Particle Count




Acid Number




**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : KCPA019184
**Lab Number** : 06212465
**Unique Number** : 11085329
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

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

Certificate L2367

**POMPS TIRE SERVICE**
1301 BUSSE RD
ELK GROVE VILLAGE, IL
US 60007
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)*