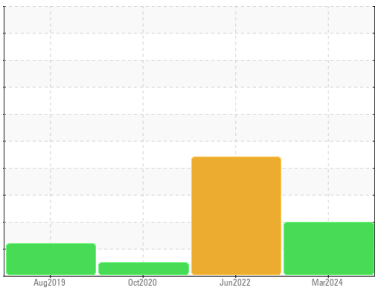
KAESER COMPRESSORS
Built for a lifetime.

# OIL ANALYSIS REPORT

Sample Rating Trend




ISO

Machine Id
## KAESER AS 30T 6595598 (S/N 1235)
Component
**Compressor**
Fluid
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## DIAGNOSIS

**Recommendation**
No corrective action is recommended at this time. Oil and 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 acceptable for the time in service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **KCPA013048** | KC102238 | KC90987 |
| Sample Date | | Client Info | | **07 Mar 2024** | 15 Jun 2022 | 07 Oct 2020 |
| Machine Age | hrs | Client Info | | **17827** | 11259 | 6800 |
| Oil Age | hrs | Client Info | | **0** | 4459 | 3307 |
| Oil Changed | | Client Info | | **Changed** | Not Changd | Changed |
| Sample Status | | | | **ABNORMAL** | ABNORMAL | NORMAL |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >50 | **3** | 1 | 0 |
| Chromium | ppm | ASTM D5185m | >10 | **<1** | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >3 | **<1** | 0 | 0 |
| Titanium | ppm | ASTM D5185m | >3 | **<1** | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | **0** | <1 | <1 |
| Aluminum | ppm | ASTM D5185m | >10 | **2** | 0 | 0 |
| Lead | ppm | ASTM D5185m | >10 | **<1** | 0 | 0 |
| Copper | ppm | ASTM D5185m | >50 | **20** | 24 | 11 |
| Tin | ppm | ASTM D5185m | >10 | **<1** | 0 | 0 |
| Antimony | ppm | ASTM D5185m | | **---** | --- | 0 |
| Vanadium | ppm | ASTM D5185m | | **<1** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **<1** | 0 | 0 |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **0** | 1 | 0 |
| Barium | ppm | ASTM D5185m | 90 | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | **<1** | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | **<1** | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | 90 | **<1** | 0 | 0 |
| Calcium | ppm | ASTM D5185m | 2 | **3** | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | | **12** | 3 | 8 |
| Zinc | ppm | ASTM D5185m | | **5** | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | | **15801** | 14172 | 15748 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >25 | **<1** | <1 | 0 |
| Sodium | ppm | ASTM D5185m | | **<1** | <1 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | **<1** | 0 | 0 |
| Water | % | ASTM D6304 | >0.05 | **0.006** | ▲ 0.455 | 0.006 |
| ppm Water | ppm | ASTM D6304 | >500 | **68** | ▲ 4550 | 69.0 |

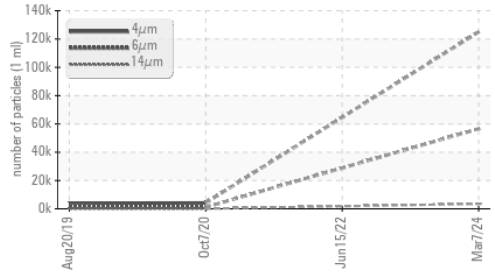
| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | | **124939** | --- | 4197 |
| Particles >6µm | | ASTM D7647 | >1300 | ▲ **56578** | --- | 1135 |
| Particles >14µm | | ASTM D7647 | >80 | ▲ **3495** | --- | 60 |
| Particles >21µm | | ASTM D7647 | >20 | ▲ **671** | --- | 19 |
| Particles >38µm | | ASTM D7647 | >4 | ▲ **7** | --- | 3 |
| Particles >71µm | | ASTM D7647 | >3 | **0** | --- | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >--/17/13 | ▲ **24/23/19** | --- | 17/13 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.4 | **0.312** | 0.28 | 0.361 |

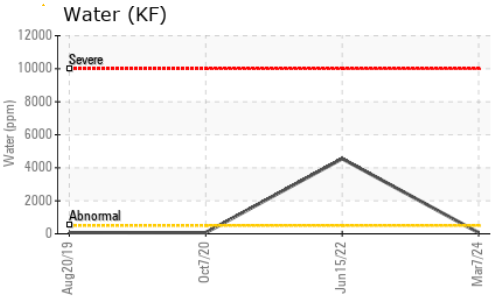
KAESER COMPRESSORS
Built for a lifetime.

# OIL ANALYSIS REPORT

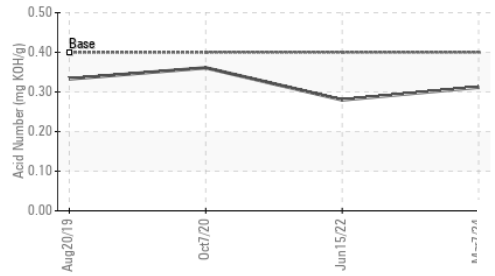
Particle Trend



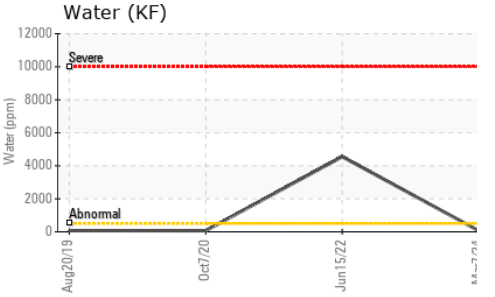

Water (KF)



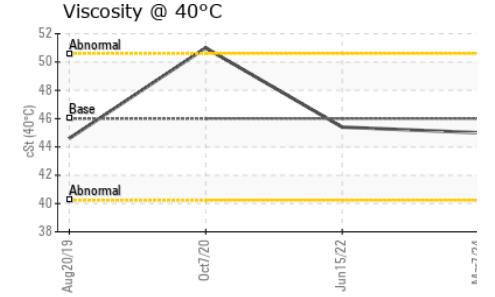

Acid Number




Water (KF)

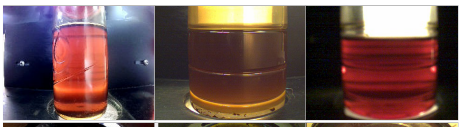



Viscosity @ 40°C



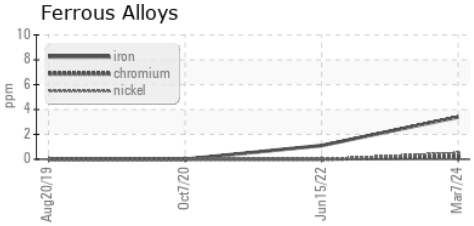

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Debris | scalar | *Visual | NONE | **LIGHT** | ▲ MODER | LIGHT |
| Sand/Dirt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Appearance | scalar | *Visual | NORML | **NORML** | ● HAZY | NORML |
| Odor | scalar | *Visual | NORML | **NORML** | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.05 | **NEG** | ▲ 0.2% | NEG |
| Free Water | scalar | *Visual | | **NEG** | ▲ 1.0 | NEG |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 46 | **45.0** | 45.4 | 51.0 |

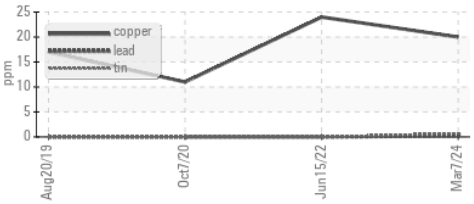
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

## GRAPHS

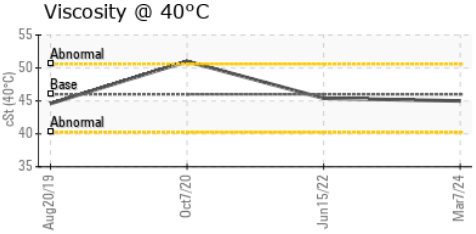
Ferrous Alloys



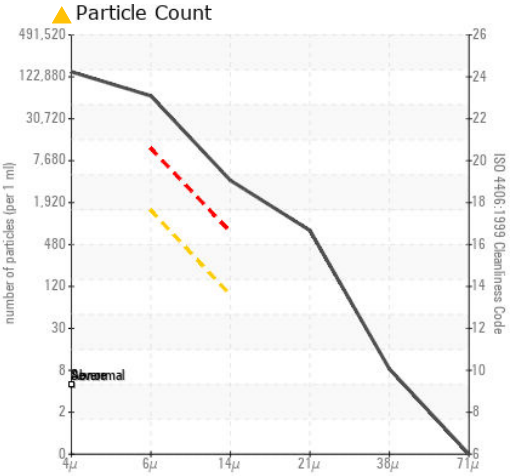

Non-ferrous Metals



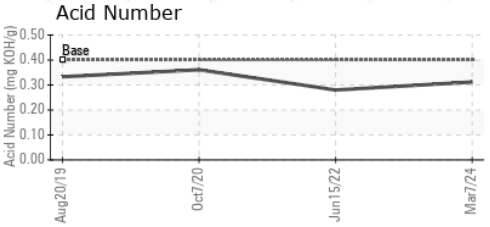

Viscosity @ 40°C




Particle Count




Acid Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : KCPA013048 **Received** : 03 Apr 2024
**Lab Number** : 06138066 **Tested** : 04 Apr 2024
**Unique Number** : 10962874 **Diagnosed** : 05 Apr 2024 - Don Baldridge
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

*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)*

**BEMD CO - RBC BEARINGS**
1376 AIRPORT DR
BALL GROUND, GA
US 30107
Contact: T. WHITLEY
twhitley@rbcbearings.com
T:
F:

Report Id: BEMBAL [WUSCAR] 06138066 (Generated: 04/05/2024 19:38:15) Rev: 1
Contact/Location: T. WHITLEY - BEMBAL