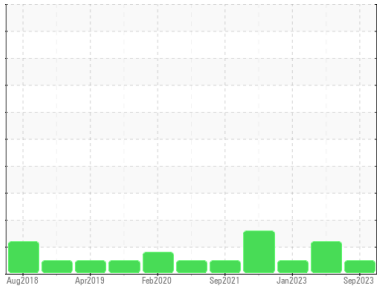
KAESER COMPRESSORS
Built for a lifetime.

# OIL ANALYSIS REPORT

Sample Rating Trend




NORMAL

Machine Id
## KAESER AIRCENTER SM 10 4142340 (S/N 1063)
Component
**Compressor**
Fluid
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

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

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

**Contamination**
There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable.

**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 | | **KCPA005873** | KCP45943 | KCP45951 |
| Sample Date | | Client Info | | **12 Sep 2023** | 13 Jun 2023 | 26 Jan 2023 |
| Machine Age | hrs | Client Info | | **80273** | 78304 | 4059 |
| Oil Age | hrs | Client Info | | **0** | 0 | 4059 |
| Oil Changed | | Client Info | | **N/A** | Changed | Changed |
| Sample Status | | | | **NORMAL** | ATTENTION | NORMAL |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >50 | **0** | <1 | <1 |
| Chromium | ppm | ASTM D5185m | >10 | **0** | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >3 | **0** | 0 | 0 |
| Titanium | ppm | ASTM D5185m | >3 | **0** | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | **0** | 0 | 0 |
| Lead | ppm | ASTM D5185m | >10 | **0** | 0 | <1 |
| Copper | ppm | ASTM D5185m | >50 | **3** | <1 | 3 |
| Tin | ppm | ASTM D5185m | >10 | **0** | 0 | <1 |
| Antimony | ppm | ASTM D5185m | | **---** | --- | --- |
| 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 | 0 |
| Barium | ppm | ASTM D5185m | 90 | **26** | 64 | 34 |
| Molybdenum | ppm | ASTM D5185m | 0 | **0** | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | 100 | **48** | 85 | 73 |
| Calcium | ppm | ASTM D5185m | 0 | **0** | 7 | 2 |
| Phosphorus | ppm | ASTM D5185m | 0 | **0** | 2 | 6 |
| Zinc | ppm | ASTM D5185m | 0 | **9** | 1 | 4 |
| Sulfur | ppm | ASTM D5185m | 23500 | **18831** | 26936 | 21286 |

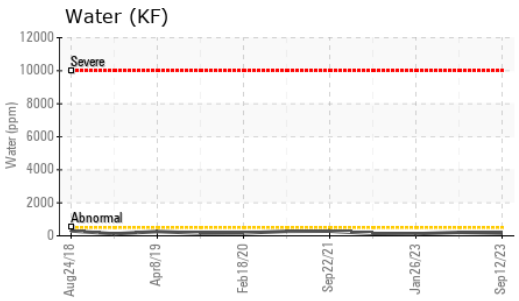
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >25 | **0** | <1 | <1 |
| Sodium | ppm | ASTM D5185m | | **19** | 32 | 27 |
| Potassium | ppm | ASTM D5185m | >20 | **3** | 12 | 11 |
| Water | % | ASTM D6304 | >0.05 | **0.016** | 0.020 | 0.012 |
| ppm Water | ppm | ASTM D6304 | >500 | **160.5** | 207.1 | 125.7 |

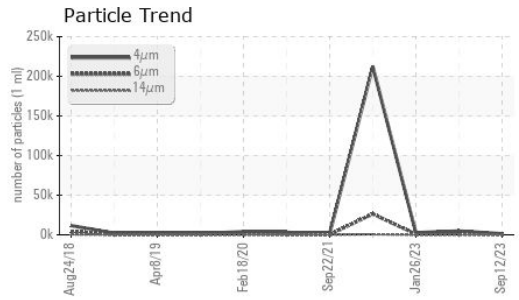
| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | | **1406** | 4817 | 2684 |
| Particles >6µm | | ASTM D7647 | >1300 | **399** | ▲ 1301 | 718 |
| Particles >14µm | | ASTM D7647 | >80 | **26** | ▲ 85 | 37 |
| Particles >21µm | | ASTM D7647 | >20 | **6** | 22 | 8 |
| Particles >38µm | | ASTM D7647 | >4 | **0** | 2 | 1 |
| Particles >71µm | | ASTM D7647 | >3 | **0** | 0 | 1 |
| Oil Cleanliness | | ISO 4406 (c) | >--/17/13 | **18/16/12** | ▲ 19/18/14 | 19/17/12 |

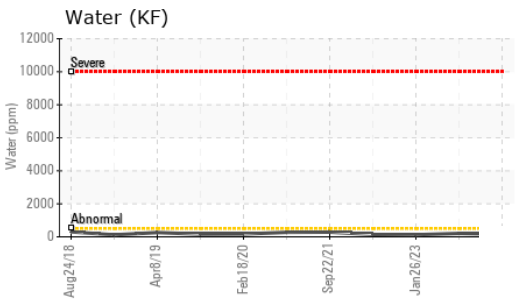
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | **0.27** | 0.38 | 0.34 |

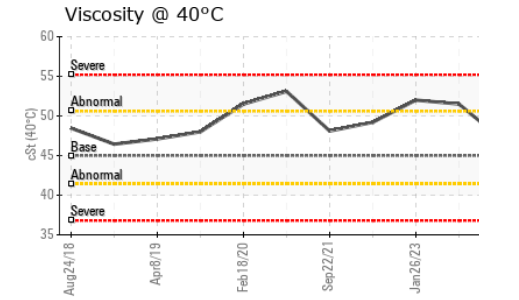
KAESER COMPRESSORS
Built for a lifetime.

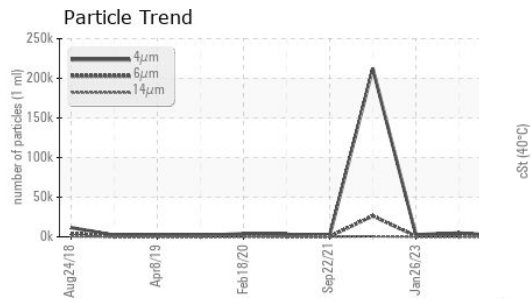
# OIL ANALYSIS REPORT



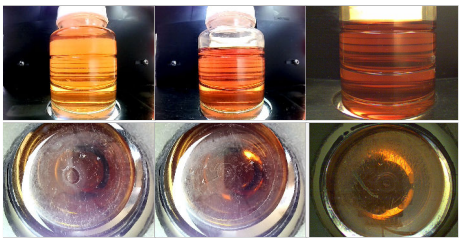



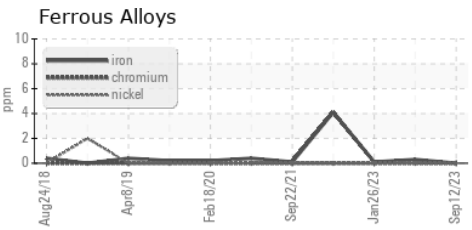

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | LIGHT | LIGHT |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |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

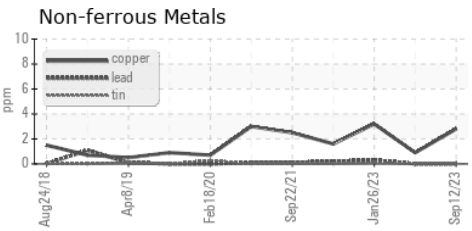
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 45 | **47.0** | 51.5 | 52.0 |

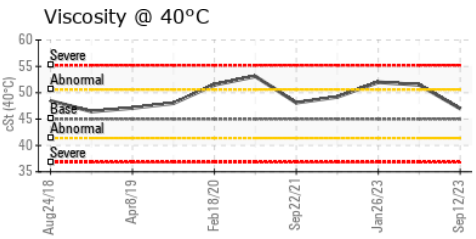
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | | | | |
| Bottom | | | | | |

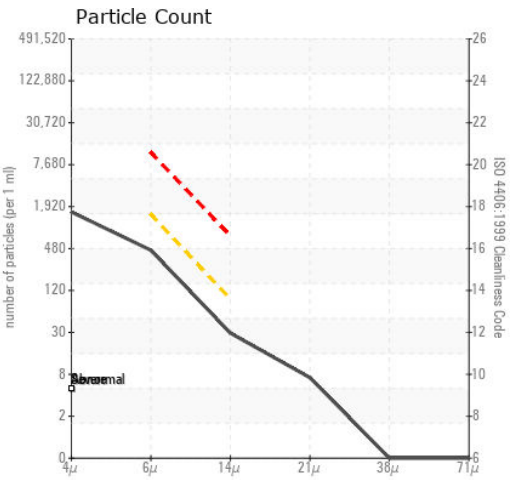


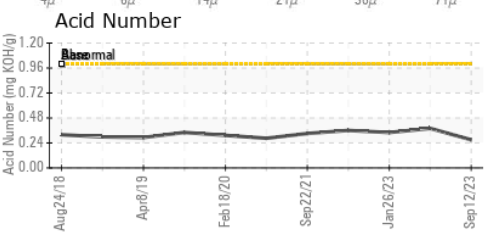
## GRAPHS




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : KCPA005873 **Received** : 17 Nov 2023
**Lab Number** : 06010843 **Diagnosed** : 20 Nov 2023
**Unique Number** : 10749987 **Diagnostician** : 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)*


**ENMET CORP**
680 FAIRFIELD CT
ANN ARBOR, MI
US 48108
Contact: RICK ZILL
rickzill@enmet.com
T:
F: