



PROBLEM SUMMARY

Sample Rating Trend



WEAR



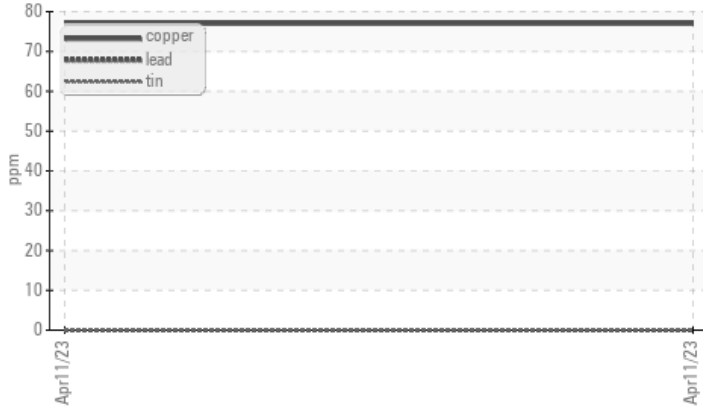
Machine Id
263977

Component
Compressor

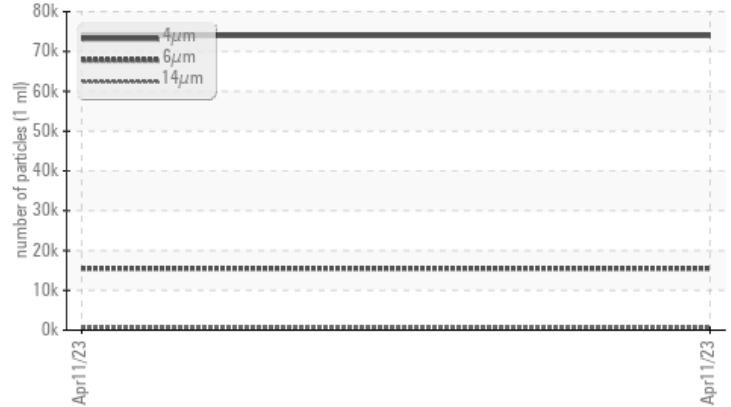
Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



▲ Particle Trend



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

| Sample Status | | | | ABNORMAL | --- | --- |
|-----------------|-----|--------------|-----------|-------------------|-----|-----|
| Copper | ppm | ASTM D5185m | >50 | ▲ 77 | --- | --- |
| Particles >6µm | | ASTM D7647 | >1300 | ▲ 15484 | --- | --- |
| Particles >14µm | | ASTM D7647 | >80 | ▲ 574 | --- | --- |
| Particles >21µm | | ASTM D7647 | >20 | ▲ 121 | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >--/17/13 | ▲ 23/21/16 | --- | --- |

Customer Id: ALLCATKC
Sample No.: KC110992
Lab Number: 05822776
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
angela.borella@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

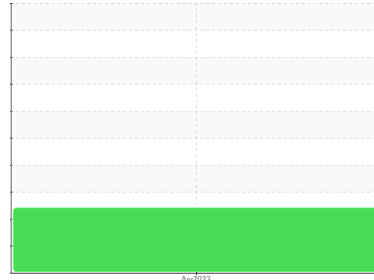
| Action | Status | Date | Done By | Description |
|---------------|--------|------|---------|---|
| Change Fluid | --- | --- | ? | Oil and filter change at the time of sampling has been noted. |
| Change Filter | --- | --- | ? | Oil and filter change at the time of sampling has been noted. |

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
263977

Component
Compressor

Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

The copper level is abnormal. All other component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

| method | limit/base | current | history1 | history2 |
|---------------|-----------------|--------------------|----------|----------|
| Sample Number | Client Info | KC110992 | --- | --- |
| Sample Date | Client Info | 11 Apr 2023 | --- | --- |
| Machine Age | hrs Client Info | 0 | --- | --- |
| Oil Age | hrs Client Info | 0 | --- | --- |
| Oil Changed | Client Info | Changed | --- | --- |
| Sample Status | | ABNORMAL | --- | --- |

WEAR METALS

| method | limit/base | current | history1 | history2 |
|--------------------------|------------|--------------|----------|----------|
| Iron ppm ASTM D5185m | >50 | 4 | --- | --- |
| Chromium ppm ASTM D5185m | >10 | 0 | --- | --- |
| Nickel ppm ASTM D5185m | >3 | 0 | --- | --- |
| Titanium ppm ASTM D5185m | >3 | 0 | --- | --- |
| Silver ppm ASTM D5185m | >2 | 0 | --- | --- |
| Aluminum ppm ASTM D5185m | >10 | <1 | --- | --- |
| Lead ppm ASTM D5185m | >10 | 0 | --- | --- |
| Copper ppm ASTM D5185m | >50 | ▲ 77 | --- | --- |
| Tin ppm ASTM D5185m | >10 | 0 | --- | --- |
| Vanadium ppm ASTM D5185m | | 0 | --- | --- |
| Cadmium ppm ASTM D5185m | | 0 | --- | --- |

ADDITIVES

| method | limit/base | current | history1 | history2 |
|----------------------------|------------|----------|----------|----------|
| Boron ppm ASTM D5185m | 0 | 0 | --- | --- |
| Barium ppm ASTM D5185m | 90 | 0 | --- | --- |
| Molybdenum ppm ASTM D5185m | 0 | 0 | --- | --- |
| Manganese ppm ASTM D5185m | | 0 | --- | --- |
| Magnesium ppm ASTM D5185m | 100 | 0 | --- | --- |
| Calcium ppm ASTM D5185m | 0 | 0 | --- | --- |
| Phosphorus ppm ASTM D5185m | 0 | 0 | --- | --- |
| Zinc ppm ASTM D5185m | 0 | 3 | --- | --- |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|---------------------------|------------|--------------|----------|----------|
| Silicon ppm ASTM D5185m | >25 | 0 | --- | --- |
| Sodium ppm ASTM D5185m | | 0 | --- | --- |
| Potassium ppm ASTM D5185m | >20 | 0 | --- | --- |
| Water % ASTM D6304 | >0.05 | 0.008 | --- | --- |
| ppm Water ppm ASTM D6304 | >500 | 82.4 | --- | --- |

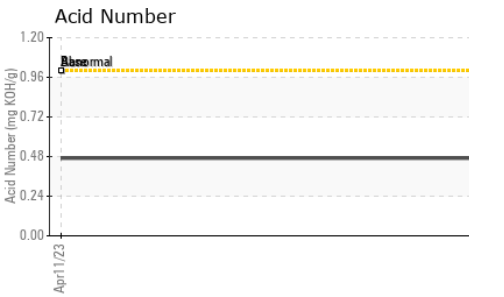
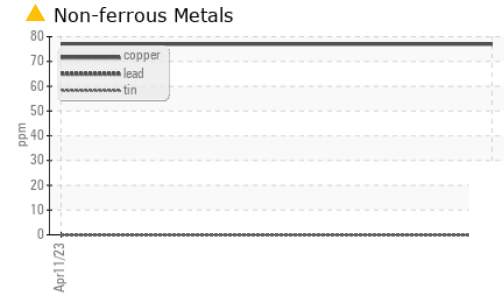
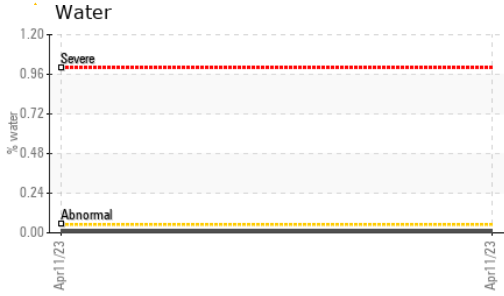
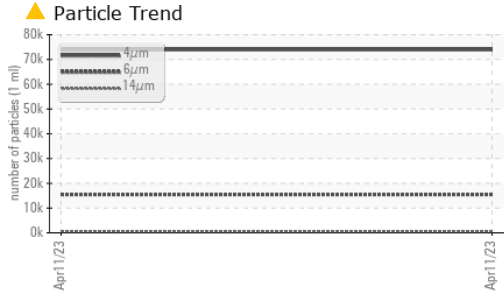
FLUID CLEANLINESS

| method | limit/base | current | history1 | history2 |
|------------------------------|------------|-------------------|----------|----------|
| Particles >4µm ASTM D7647 | | 73958 | --- | --- |
| Particles >6µm ASTM D7647 | >1300 | ▲ 15484 | --- | --- |
| Particles >14µm ASTM D7647 | >80 | ▲ 574 | --- | --- |
| Particles >21µm ASTM D7647 | >20 | ▲ 121 | --- | --- |
| Particles >38µm ASTM D7647 | >4 | 5 | --- | --- |
| Particles >71µm ASTM D7647 | >3 | 0 | --- | --- |
| Oil Cleanliness ISO 4406 (c) | >--/17/13 | ▲ 23/21/16 | --- | --- |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 |
|--------------------------------------|------------|-------------|----------|----------|
| Acid Number (AN) mg KOH/g ASTM D8045 | 1.0 | 0.47 | --- | --- |

OIL ANALYSIS REPORT

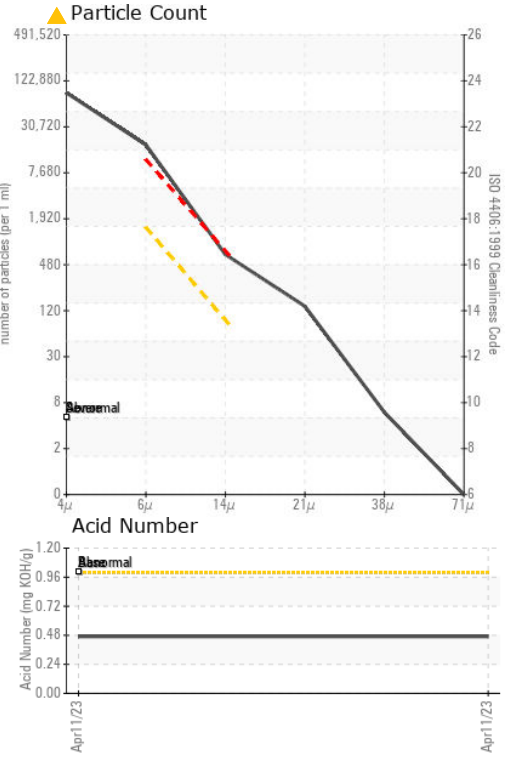
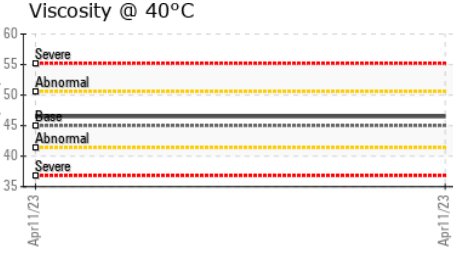
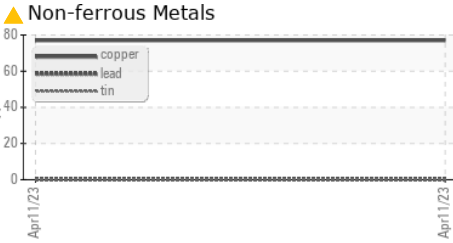
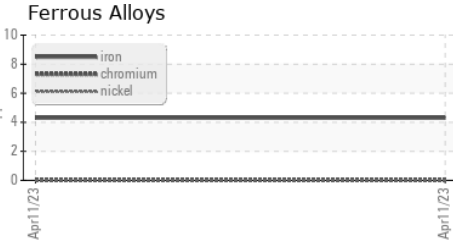


| PARAMETER | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE | --- |
| Silt | scalar | *Visual | NONE | NONE | --- |
| Debris | scalar | *Visual | NONE | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | --- |
| Appearance | scalar | *Visual | NORML | NORML | --- |
| Odor | scalar | *Visual | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.05 | NEG | --- |
| Free Water | scalar | *Visual | | NEG | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 45 | 46.5 | --- |

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC110992 **Received** : 18 Apr 2023
Lab Number : 05822776 **Diagnosed** : 19 Apr 2023
Unique Number : 10430859 **Diagnostician** : Angela Borella
Test Package : IND 2

ALLENTOWN STEEL FABRICATING
 260 RACE ST
 CATASAUQUA, PA
 US 18032
 Contact: Service Manager

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)