



OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
5277330 (S/N 1420)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-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 moderate amount of silt (particulates < 14 microns in size) 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 | | KCPA017138 | --- | --- |
| Sample Date | Client Info | | 10 Apr 2024 | --- | --- |
| Machine Age | hrs | Client Info | 13825 | --- | --- |
| Oil Age | hrs | Client Info | 3000 | --- | --- |
| Oil Changed | Client Info | | Changed | --- | --- |
| Sample Status | | | ATTENTION | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|----------|----------|----------|
| Iron | ppm | ASTM D5185m >50 | 0 | --- | --- |
| 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 | 0 | --- | --- |
| Lead | ppm | ASTM D5185m >10 | 0 | --- | --- |
| Copper | ppm | ASTM D5185m >50 | 2 | --- | --- |
| 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 | 21 | --- | --- |
| Calcium | ppm | ASTM D5185m 0 | 0 | --- | --- |
| Phosphorus | ppm | ASTM D5185m 0 | <1 | --- | --- |
| Zinc | ppm | ASTM D5185m 0 | 6 | --- | --- |
| Sulfur | ppm | ASTM D5185m 23500 | 18144 | --- | --- |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >25 | 0 | --- | --- |
| Sodium | ppm | ASTM D5185m | 7 | --- | --- |
| Potassium | ppm | ASTM D5185m >20 | 0 | --- | --- |
| Water | % | ASTM D6304 >0.05 | 0.009 | --- | --- |
| ppm Water | ppm | ASTM D6304 >500 | 96 | --- | --- |

FLUID CLEANLINESS

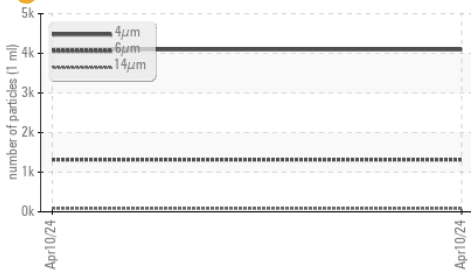
| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | | 4093 | --- | --- |
| Particles >6µm | ASTM D7647 | >1300 | 1317 | --- | --- |
| Particles >14µm | ASTM D7647 | >80 | 85 | --- | --- |
| Particles >21µm | ASTM D7647 | >20 | 20 | --- | --- |
| Particles >38µm | ASTM D7647 | >4 | 0 | --- | --- |
| Particles >71µm | ASTM D7647 | >3 | 0 | --- | --- |
| Oil Cleanliness | ISO 4406 (c) | >--/17/13 | 19/18/14 | --- | --- |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 1.0 | 0.37 | --- | --- |

OIL ANALYSIS REPORT

Particle Trend



Water (KF)



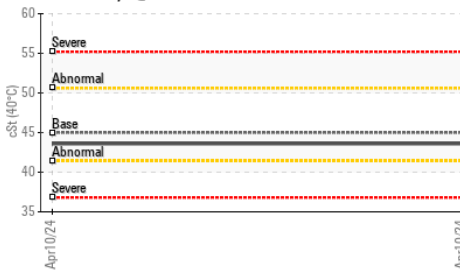
Acid Number



Water (KF)



Viscosity @ 40°C



| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| 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 | 43.6 | --- |

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

Color



Bottom



GRAPHS

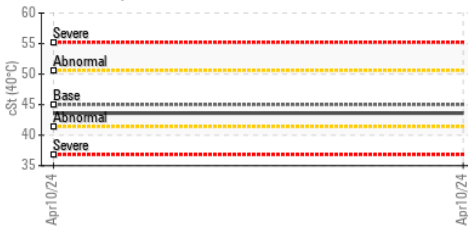
Ferrous Alloys



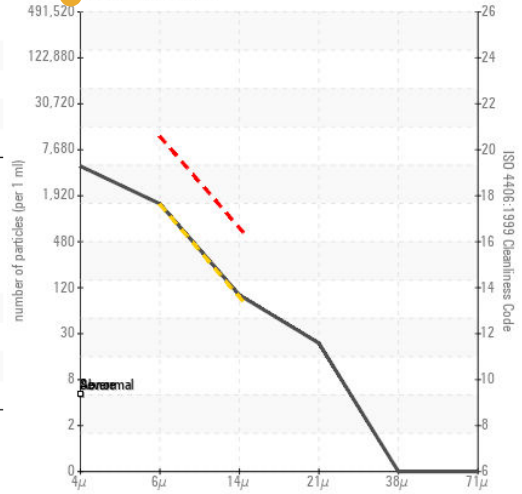
Non-ferrous Metals



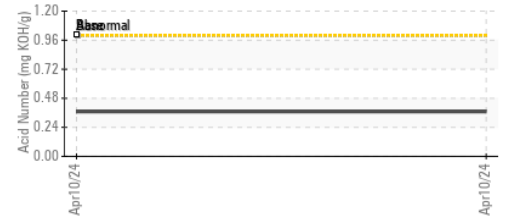
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA017138 **Received** : 15 Apr 2024
Lab Number : 06149534 **Tested** : 16 Apr 2024
Unique Number : 10979612 **Diagnosed** : 17 Apr 2024 - Don Baldrige
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)

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