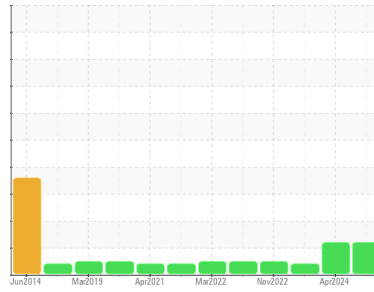




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER CSD 125 4491879 (S/N 1282)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. 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 | | KCPA020838 | KCPA012727 | KCP53990 |
| Sample Date | Client Info | | 27 Jun 2024 | 16 Apr 2024 | 23 May 2023 |
| Machine Age | hrs | Client Info | 37470 | 35923 | 29034 |
| Oil Age | hrs | Client Info | 2667 | 5003 | 0 |
| Oil Changed | Client Info | | Not Chngd | Changed | Not Chngd |
| Sample Status | | | ABNORMAL | ATTENTION | ABNORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|-----------|----------|----------|
| Iron | ppm | ASTM D5185m >50 | 0 | <1 | <1 |
| Chromium | ppm | ASTM D5185m >10 | 0 | <1 | 0 |
| Nickel | ppm | ASTM D5185m >3 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m >3 | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >10 | 0 | 2 | <1 |
| Lead | ppm | ASTM D5185m >10 | 0 | <1 | 0 |
| Copper | ppm | ASTM D5185m >50 | 15 | 8 | 9 |
| Tin | ppm | ASTM D5185m >10 | 0 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | <1 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|----------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m 90 | 1 | 4 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | <1 | 0 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m 90 | 5 | 6 | 4 |
| Calcium | ppm | ASTM D5185m 2 | 0 | 3 | 0 |
| Phosphorus | ppm | ASTM D5185m | 0 | 2 | 2 |
| Zinc | ppm | ASTM D5185m | 2 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | 18637 | 18325 | 14954 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >25 | 0 | <1 | <1 |
| Sodium | ppm | ASTM D5185m | <1 | 0 | 1 |
| Potassium | ppm | ASTM D5185m >20 | 0 | <1 | 0 |
| Water | % | ASTM D6304 >0.05 | 0.008 | 0.007 | 0.008 |
| ppm Water | ppm | ASTM D6304 >500 | 83 | 76 | 85.4 |

FLUID CLEANLINESS

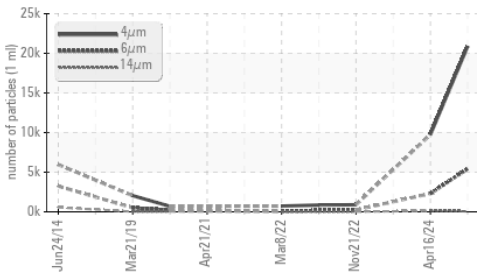
| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-------------------|------------|----------|
| Particles >4µm | ASTM D7647 | | 20870 | 9741 | --- |
| Particles >6µm | ASTM D7647 | >1300 | ▲ 5438 | ● 2308 | --- |
| Particles >14µm | ASTM D7647 | >80 | ▲ 66 | ● 114 | --- |
| Particles >21µm | ASTM D7647 | >20 | 6 | 25 | --- |
| Particles >38µm | ASTM D7647 | >4 | 0 | 0 | --- |
| Particles >71µm | ASTM D7647 | >3 | 0 | 0 | --- |
| Oil Cleanliness | ISO 4406 (c) | >--/17/13 | ▲ 22/20/13 | ● 20/18/14 | --- |

FLUID DEGRADATION

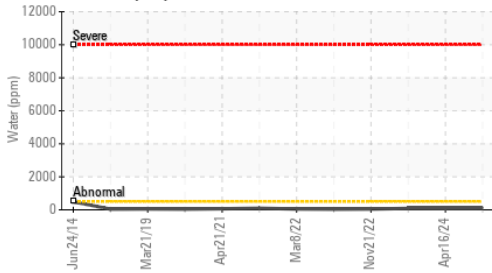
| | method | limit/base | current | history1 | history2 |
|------------------|----------|----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.4 | 0.45 | 0.49 | 0.48 |

OIL ANALYSIS REPORT

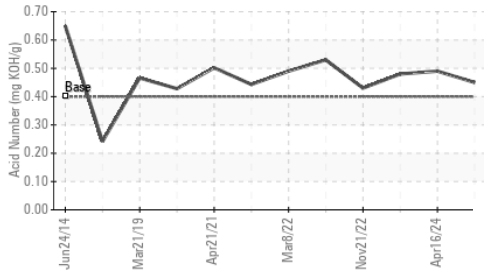
▲ Particle Trend



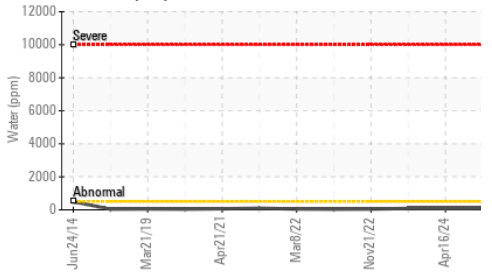
Water (KF)



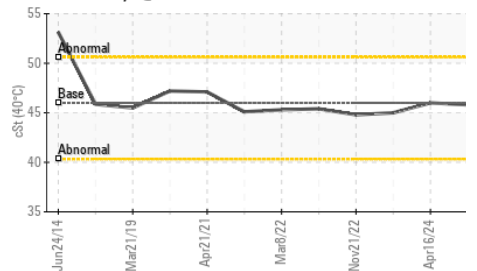
Acid Number



Water (KF)



Viscosity @ 40°C

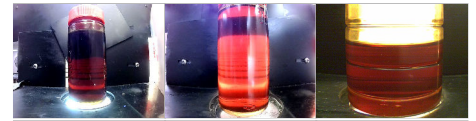


| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE |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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|--------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 46 | 45.8 | 46.0 | 45.0 |

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

Color

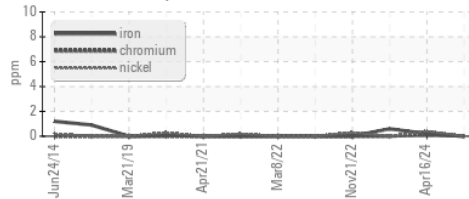


Bottom

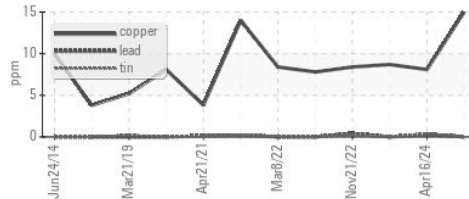


GRAPHS

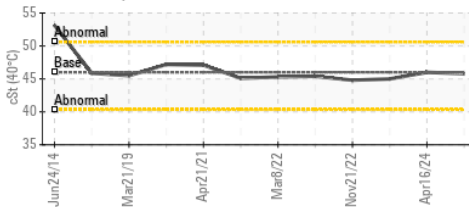
Ferrous Alloys



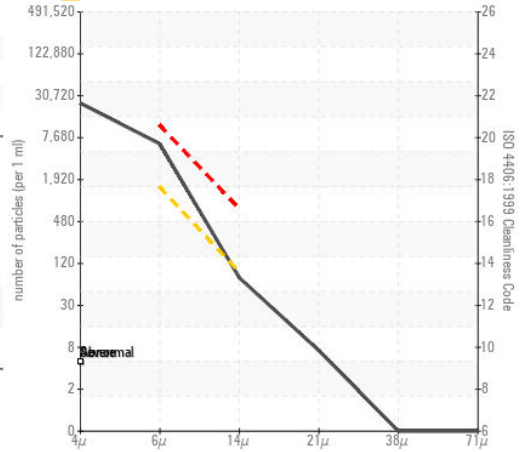
Non-ferrous Metals



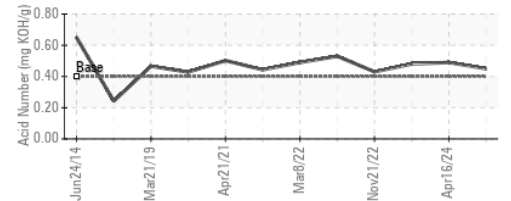
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : KCPA020838

Lab Number : 06233865

Unique Number : 11122699

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)

Received : 11 Jul 2024

Tested : 12 Jul 2024

Diagnosed : 13 Jul 2024 - Don Baldrige

AXIUM PLASTICS

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NEW ALBANY, OH

US 43054

Contact: P. LONGIA

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