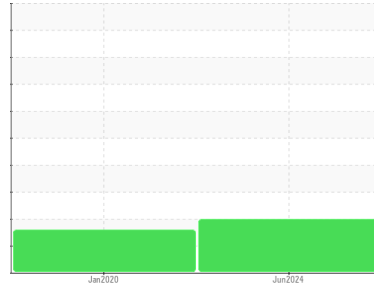




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
KAESER AIRTOWER 7.5C 5423522 (S/N 1398)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

▲ Contamination

There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris 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 | | | KCPA012309 | KCP21901 | --- |
| Sample Date | Client Info | | | 06 Jun 2024 | 03 Jan 2020 | --- |
| Machine Age | hrs | Client Info | | 1593 | 579 | --- |
| Oil Age | hrs | Client Info | | 1593 | 579 | --- |
| Oil Changed | Client Info | | | Changed | Changed | --- |
| Sample Status | | | | ABNORMAL | ABNORMAL | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|------------|----------|----------|
| Iron | ppm | ASTM D5185m | >50 | 0 | <1 | --- |
| Chromium | ppm | ASTM D5185m | >10 | 0 | 0 | --- |
| Nickel | ppm | ASTM D5185m | >3 | 6 | 0 | --- |
| Titanium | ppm | ASTM D5185m | >3 | 0 | 0 | --- |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >10 | 0 | 0 | --- |
| Lead | ppm | ASTM D5185m | >10 | 0 | 0 | --- |
| Copper | ppm | ASTM D5185m | >50 | 39 | 4 | --- |
| Tin | ppm | ASTM D5185m | >10 | 0 | <1 | --- |
| Antimony | ppm | ASTM D5185m | | --- | 0 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | --- |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | --- |

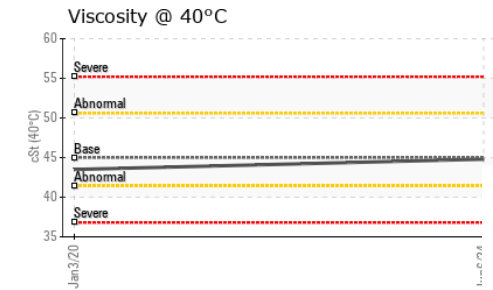
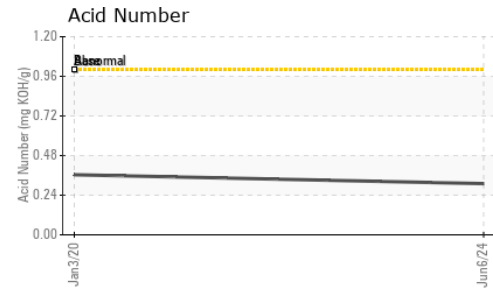
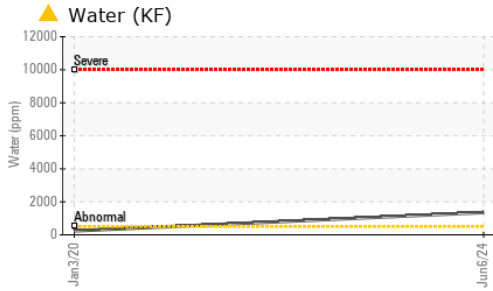
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 0 | 0 | <1 | --- |
| Barium | ppm | ASTM D5185m | 90 | <1 | 36 | --- |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | <1 | --- |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | --- |
| Magnesium | ppm | ASTM D5185m | 100 | 5 | 70 | --- |
| Calcium | ppm | ASTM D5185m | 0 | 3 | 1 | --- |
| Phosphorus | ppm | ASTM D5185m | 0 | 4 | 3 | --- |
| Zinc | ppm | ASTM D5185m | 0 | 74 | 14 | --- |
| Sulfur | ppm | ASTM D5185m | 23500 | 23718 | 24787 | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|----------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >25 | 2 | 2 | --- |
| Sodium | ppm | ASTM D5185m | | 3 | 9 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 2 | --- |
| Water | % | ASTM D6304 | >0.05 | ▲ 0.135 | 0.023 | --- |
| ppm Water | ppm | ASTM D6304 | >500 | ▲ 1350 | 239.2 | --- |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--|--------------|------------|------------|----------------|----------|
| Particles >4µm | | ASTM D7647 | | --- | 21960 | --- |
| Particles >6µm | | ASTM D7647 | >1300 | --- | ▲ 7961 | --- |
| Particles >14µm | | ASTM D7647 | >80 | --- | ▲ 919 | --- |
| Particles >21µm | | ASTM D7647 | >20 | --- | ▲ 217 | --- |
| Particles >38µm | | ASTM D7647 | >4 | --- | ▲ 6 | --- |
| Particles >71µm | | ASTM D7647 | >3 | --- | 0 | --- |
| Oil Cleanliness | | ISO 4406 (c) | >--/17/13 | --- | ▲ 20/17 | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | 0.31 | 0.364 | --- |

OIL ANALYSIS REPORT



| 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 | ▲ MODER | LIGHT |
| Sand/Dirt | scalar | *Visual | NONE | NONE | --- |
| Appearance | scalar | *Visual | NORML | NORML | --- |
| Odor | scalar | *Visual | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.05 | 0.2% | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 45 | 44.8 | 43.5 |

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

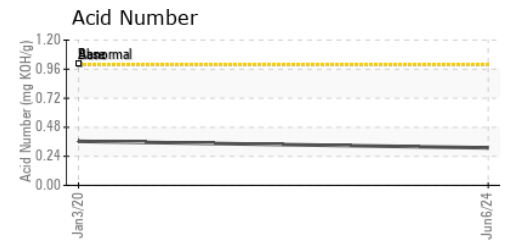
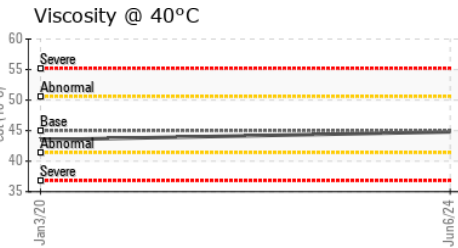
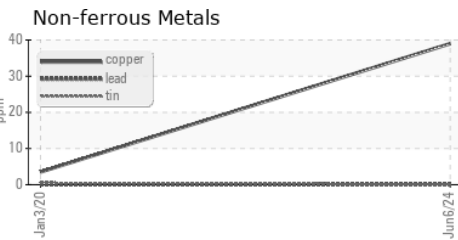
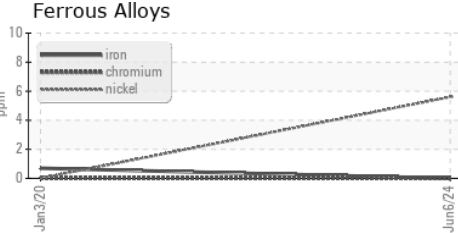
Color

no image

Bottom

no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA012309
Lab Number : 06216296
Unique Number : 11089160
Test Package : IND 2 (Additional Tests: KF, PrtCount)

Received : 20 Jun 2024
Tested : 23 Jun 2024
Diagnosed : 23 Jun 2024 - Don Baldrige

BROOKSIDE GOLF & COUNTRY CLUB
 2770 W DUBLIN GRANVILLE RD
 COLUMBUS, OH
 US 43235
 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)