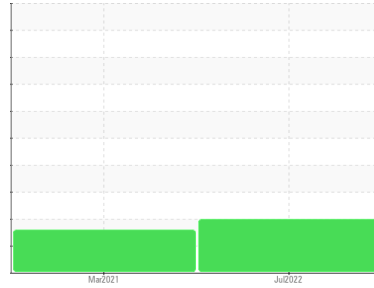




PROBLEM SUMMARY

Sample Rating Trend



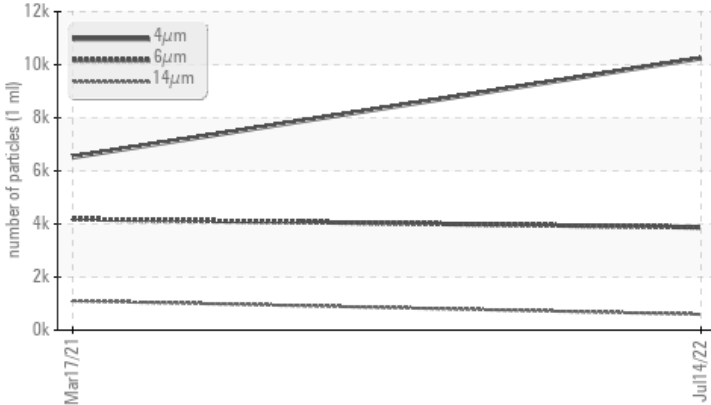
ISO



Machine Id
KAESER SM 10 7129696 (S/N 1263)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- QTS)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



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.

PROBLEMATIC TEST RESULTS

| Sample Status | | | ABNORMAL | ABNORMAL | --- |
|-----------------|--------------|-----------|------------|----------|-----|
| Particles >6µm | ASTM D7647 | >1300 | ▲ 3872 | ▲ 4186 | --- |
| Particles >14µm | ASTM D7647 | >80 | ▲ 596 | ▲ 1106 | --- |
| Particles >21µm | ASTM D7647 | >20 | ▲ 189 | ▲ 386 | --- |
| Particles >38µm | ASTM D7647 | >4 | ▲ 6 | ▲ 11 | --- |
| Oil Cleanliness | ISO 4406 (c) | >--/17/13 | ▲ 21/19/16 | ▲ 19/17 | --- |

Customer Id: DIRCOM
 Sample No.: KC05623091
 Lab Number: 05623091
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@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

17 Mar 2021 Diag: Don Baldrige

ISO



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. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER SM 10 7129696 (S/N 1263)

Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- QTS)

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 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 | | | KC05623091 | KC05224477 | --- |
| Sample Date | Client Info | | | 14 Jul 2022 | 17 Mar 2021 | --- |
| Machine Age | hrs | Client Info | | 6247 | 2956 | --- |
| Oil Age | hrs | Client Info | | 3291 | 2956 | --- |
| 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 | 0 | 0 | --- |
| Titanium | ppm | ASTM D5185m | >3 | 0 | 0 | --- |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >10 | <1 | 0 | --- |
| Lead | ppm | ASTM D5185m | >10 | 0 | 0 | --- |
| Copper | ppm | ASTM D5185m | >50 | 11 | 6 | --- |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | --- |
| Antimony | ppm | ASTM D5185m | | --- | 0 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | --- |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | --- |

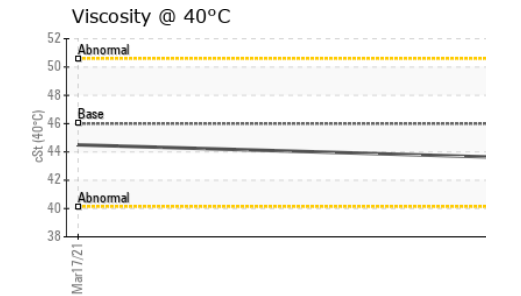
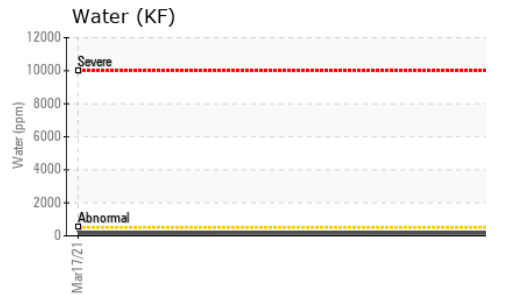
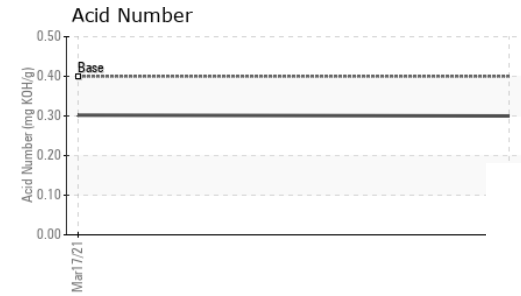
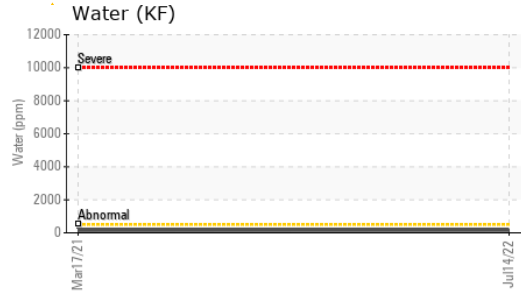
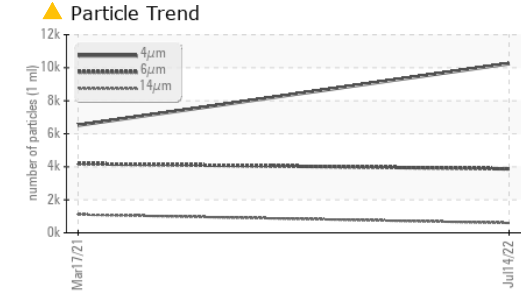
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | | 0 | 0 | --- |
| Barium | ppm | ASTM D5185m | 90 | <1 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | --- |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | --- |
| Magnesium | ppm | ASTM D5185m | 90 | 13 | 34 | --- |
| Calcium | ppm | ASTM D5185m | 2 | 0 | 0 | --- |
| Phosphorus | ppm | ASTM D5185m | | 1 | 2 | --- |
| Zinc | ppm | ASTM D5185m | | 4 | 10 | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >25 | <1 | 0 | --- |
| Sodium | ppm | ASTM D5185m | | 6 | 14 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 14 | --- |
| Water | % | ASTM D6304 | >0.05 | 0.015 | 0.015 | --- |
| ppm Water | ppm | ASTM D6304 | >500 | 158.2 | 152.0 | --- |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--|--------------|------------|-------------------|----------|----------|
| Particles >4µm | | ASTM D7647 | | 10246 | 6516 | --- |
| Particles >6µm | | ASTM D7647 | >1300 | ▲ 3872 | ▲ 4186 | --- |
| Particles >14µm | | ASTM D7647 | >80 | ▲ 596 | ▲ 1106 | --- |
| Particles >21µm | | ASTM D7647 | >20 | ▲ 189 | ▲ 386 | --- |
| Particles >38µm | | ASTM D7647 | >4 | ▲ 6 | ▲ 11 | --- |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | --- |
| Oil Cleanliness | | ISO 4406 (c) | >--/17/13 | ▲ 21/19/16 | ▲ 19/17 | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.4 | 0.30 | 0.302 | --- |

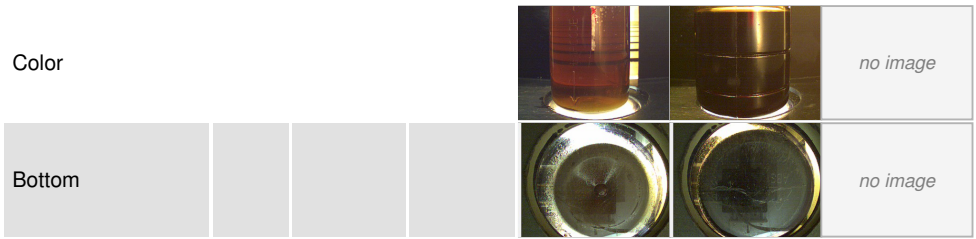
OIL ANALYSIS REPORT



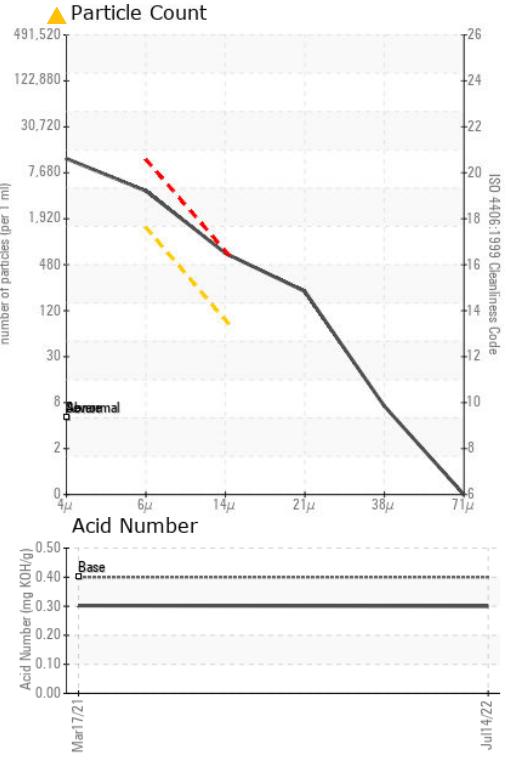
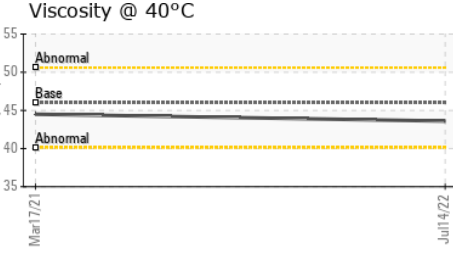
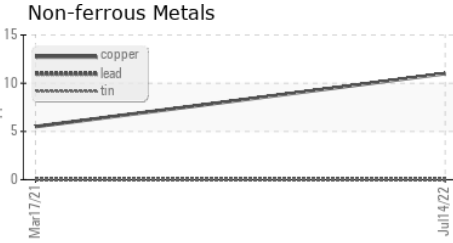
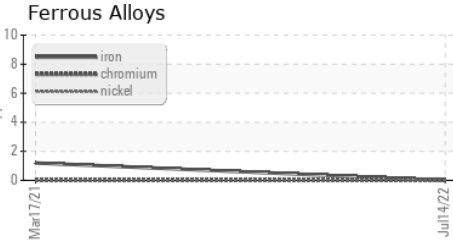
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE | --- |
| Silt | scalar | *Visual | NONE | NONE | --- |
| Debris | scalar | *Visual | NONE | 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 | 46 | 43.6 | 44.5 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC05623091 **Received** : 22 Aug 2022
Lab Number : 05623091 **Diagnosed** : 23 Aug 2022
Unique Number : 10102598 **Diagnostician** : Jonathan Hester
Test Package : IND 2

DIRT DOG
 2405 US 441 SOUTH
 COMMERCE, GA
 US 30529
 Contact:

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)