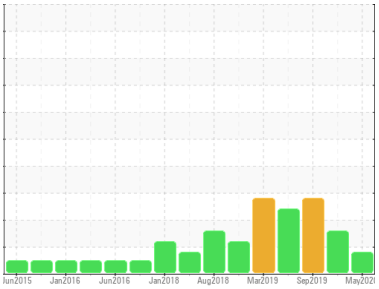
# PROBLEM SUMMARY

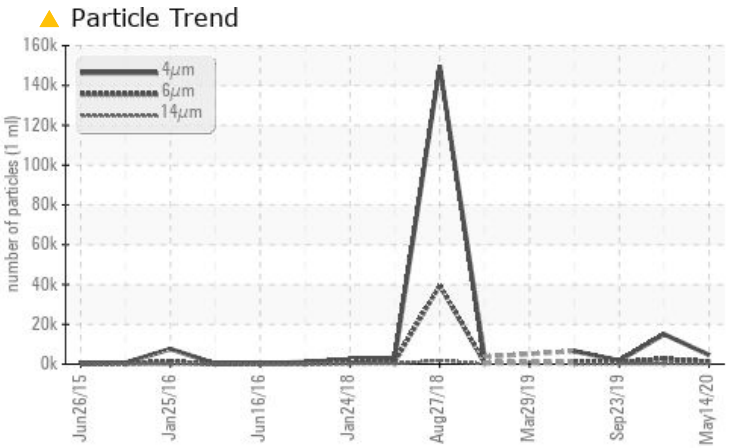
Sample Rating Trend



ISO

Machine Id
## KAESER C-706 (S/N 1031)
Component
**Compressor**
Fluid
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY




## 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 | | | | ATTENTION | ABNORMAL | ABNORMAL |
|---|---|---|---|---|---|---|
| Particles >14µm | | ASTM D7647 | >80 | ▲ **99** | ▲ 196 | ▲ 163 |
| Particles >21µm | | ASTM D7647 | >20 | ▲ **34** | ▲ 62 | ▲ 55 |
| Oil Cleanliness | | ISO 4406 (c) | >--/17/13 | ▲ **19/17/14** | ▲ 21/19/15 | ▲ 18/17/15 |

**Customer Id:** WESLONWC
**Sample No.:** WC0465729
**Lab Number:** 04981690
**Test Package:** IND 2

*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*
Don Baldridge +1
don.b505@comcast.net

*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

**08 Jan 2020 Diag: Doug Bogart**

**ISO**

We recommend you service the filters on this component. 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**

**23 Sep 2019 Diag: Don Baldridge**

**WATER**

We recommend you service the filters on this component. 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. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid.

**view report**

**18 Jun 2019 Diag: Jonathan Hester**

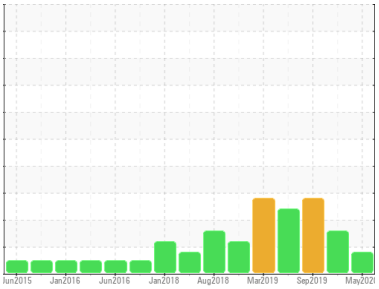
**VISCOSITY**

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of particulates present in the oil. The oil viscosity is higher than normal. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid.

**view report**

# OIL ANALYSIS REPORT

Sample Rating Trend




ISO

Machine Id
## KAESER C-706 (S/N 1031)
Component
**Compressor**
Fluid
**KAESER SIGMA (OEM) S-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**
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 | history 1 | history 2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **WC0465729** | WC0390909 | WCI2335364 |
| Sample Date | | Client Info | | **14 May 2020** | 08 Jan 2020 | 23 Sep 2019 |
| Machine Age | hrs | Client Info | | **28868** | 25619 | 0 |
| Oil Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Changed | | Client Info | | **Changed** | Not Changd | N/A |
| Sample Status | | | | **ATTENTION** | ABNORMAL | ABNORMAL |

| WEAR METALS | | method | limit/base | current | history 1 | history 2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >50 | **0** | <1 | 0 |
| Chromium | ppm | ASTM D5185m | >10 | **0** | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >3 | **0** | 0 | <1 |
| Titanium | ppm | ASTM D5185m | >3 | **0** | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | **<1** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | **0** | 0 | <1 |
| Lead | ppm | ASTM D5185m | >10 | **<1** | <1 | 0 |
| Copper | ppm | ASTM D5185m | >50 | **5** | 6 | 8 |
| Tin | ppm | ASTM D5185m | >10 | **<1** | 0 | <1 |
| Antimony | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | 0 | 0 |

| ADDITIVES | | method | limit/base | current | history 1 | history 2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **<1** | 0 | <1 |
| Barium | ppm | ASTM D5185m | 90 | **0** | 2 | 4 |
| Molybdenum | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | 90 | **0** | 0 | 0 |
| Calcium | ppm | ASTM D5185m | 2 | **2** | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | | **6** | 3 | <1 |
| Zinc | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | | **9938** | 12137 | 9792 |

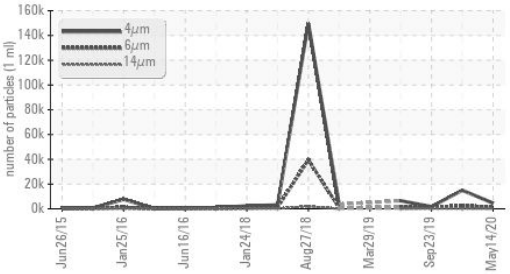
| CONTAMINANTS | | method | limit/base | current | history 1 | history 2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >25 | **<1** | <1 | <1 |
| Sodium | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | **0** | <1 | <1 |

| FLUID CLEANLINESS | | method | limit/base | current | history 1 | history 2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | | **4588** | 15003 | 1756 |
| Particles >6µm | | ASTM D7647 | >1300 | **1196** | ▲ 2624 | 956 |
| Particles >14µm | | ASTM D7647 | >80 | ▲ **99** | ▲ 196 | ▲ 163 |
| Particles >21µm | | ASTM D7647 | >20 | ▲ **34** | ▲ 62 | ▲ 55 |
| Particles >38µm | | ASTM D7647 | >4 | **4** | ▲ 5 | ▲ 8 |
| Particles >71µm | | ASTM D7647 | >3 | **0** | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >--/17/13 | ▲ **19/17/14** | ▲ 21/19/15 | ▲ 18/17/15 |

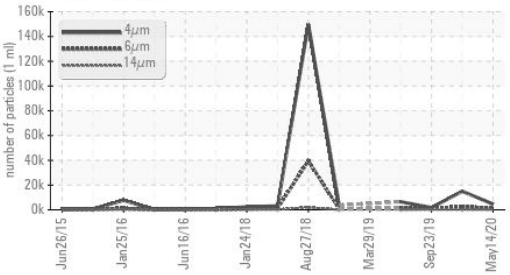
| FLUID DEGRADATION | | method | limit/base | current | history 1 | history 2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.4 | **0.426** | 0.363 | 0.375 |

# OIL ANALYSIS REPORT

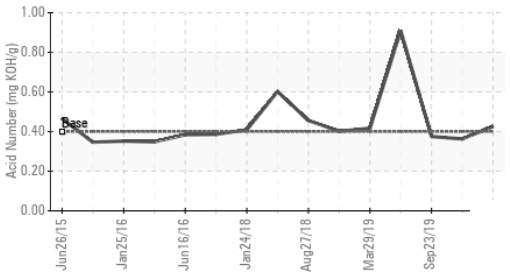
Particle Trend



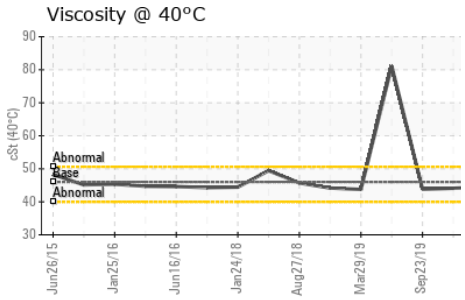

Particle Trend




Acid Number




Viscosity @ 40°C



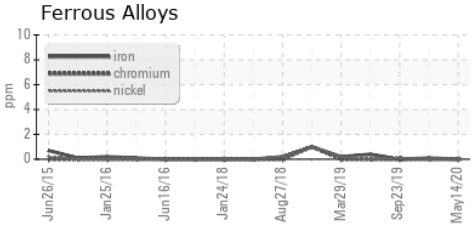

| VISUAL | | method | limit/base | current | history 1 | history 2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Debris | scalar | *Visual | NONE | **NONE** | LIGHT | LIGHT |
| Sand/Dirt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Appearance | scalar | *Visual | NORML | **NORML** | NORML | NORML |
| Odor | scalar | *Visual | NORML | **NORML** | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.05 | **NEG** | NEG | 0.2% |
| Free Water | scalar | *Visual | | **NEG** | NEG | NEG |

| FLUID PROPERTIES | | method | limit/base | current | history 1 | history 2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 46 | **44.5** | 44.1 | 43.8 |

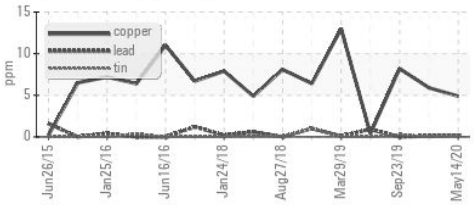
| SAMPLE IMAGES | method | limit/base | current | history 1 | history 2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

## GRAPHS

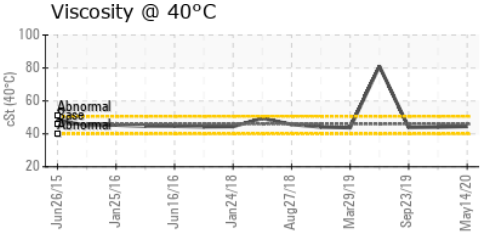
Ferrous Alloys



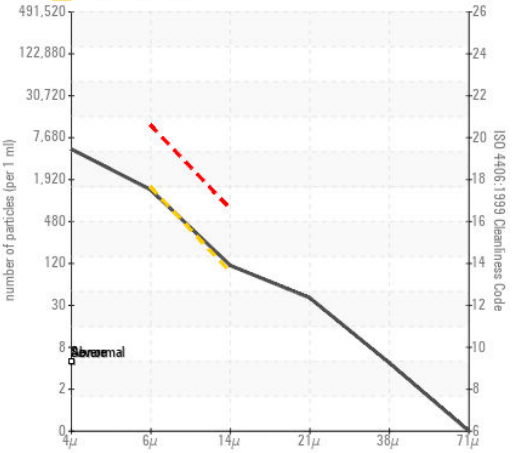

Non-ferrous Metals



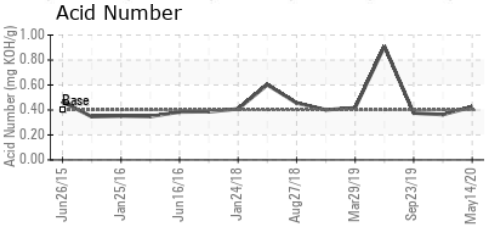

Viscosity @ 40°C




Particle Count




Acid Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : WC0465729 **Received** : 20 May 2020
**Lab Number** : 04981690 **Diagnosed** : 21 May 2020
**Unique Number** : 9036837 **Diagnostician** : Don Baldridge
**Test Package** : IND 2 ( Additional Tests: 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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