



OIL ANALYSIS REPORT

| | |
|-----------------|----------|
| WEAR | NORMAL |
| CONTAMINATION | ABNORMAL |
| FLUID CONDITION | NORMAL |

Area
SAP-325684 - VIAVI SOLUTIONS [2010550031]

Machine Id
KAESER 2665 - VIAVI SOLUTIONS

Component
Compressor

Fluid
KAESER SIGMA (OEM) S-460 (10 GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|-------------|-------------|
| Sample Number | | Client Info | | APC06177177 | APC06076378 | APC05993721 |
| Sample Date | | Client Info | | 12 May 2024 | 22 Jan 2024 | 24 Oct 2023 |
| Machine Age | hrs | Client Info | | 63742 | 61393 | 59235 |
| Oil Age | hrs | Client Info | | 6620 | 6507 | 4349 |
| Filter Age | hrs | Client Info | | 2349 | 2158 | 2121 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | ABNORMAL | ABNORMAL | ABNORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|------|------|------|
| Iron | ppm | ASTM D5185m | >50 | 0 | 0 | 0 |
| Chromium | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | >3 | 0 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Lead | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >50 | 8 | 9 | 11 |
| Tin | ppm | ASTM D5185m | >10 | <1 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

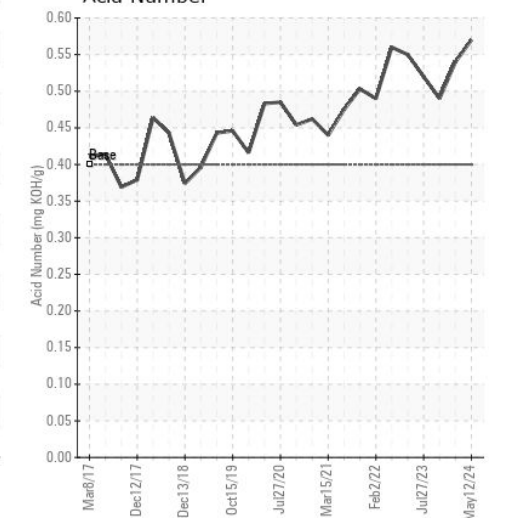
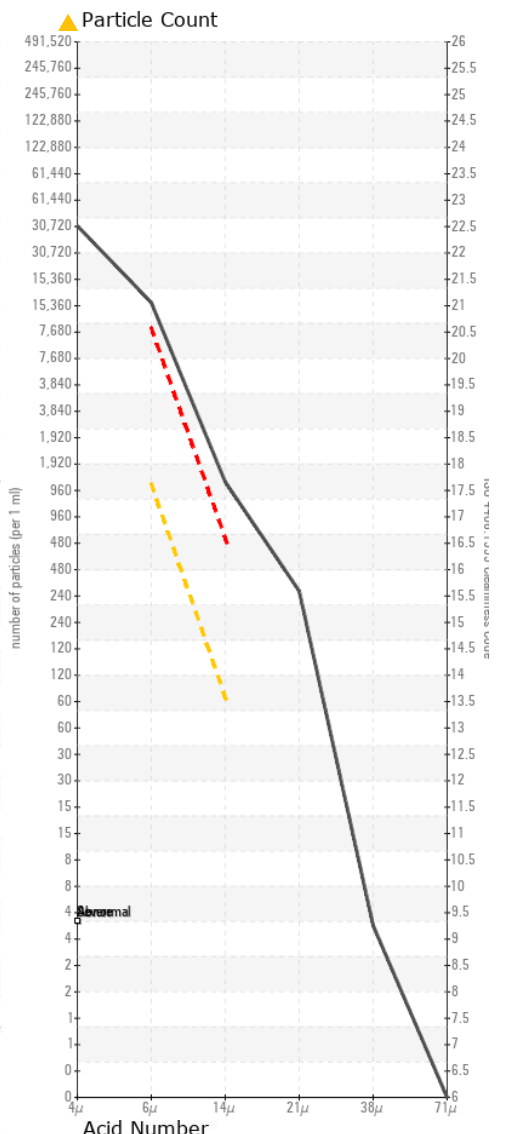
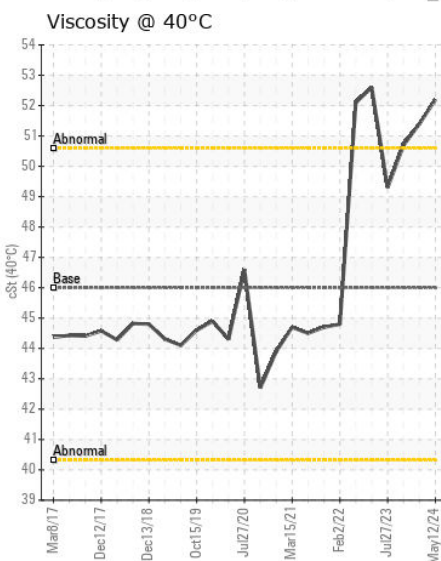
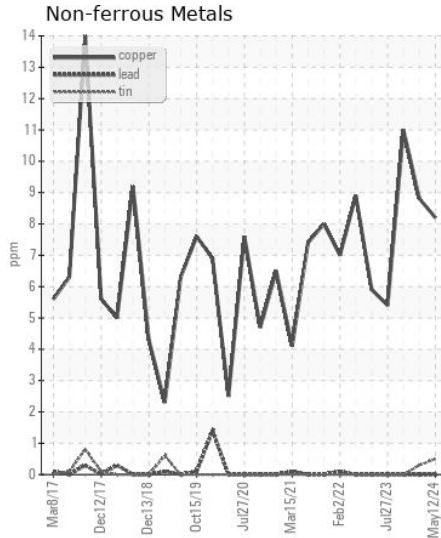
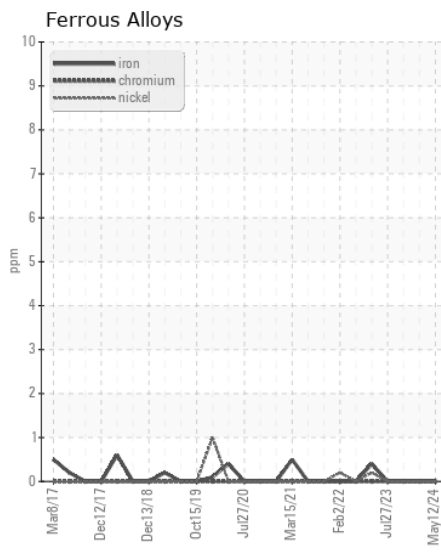
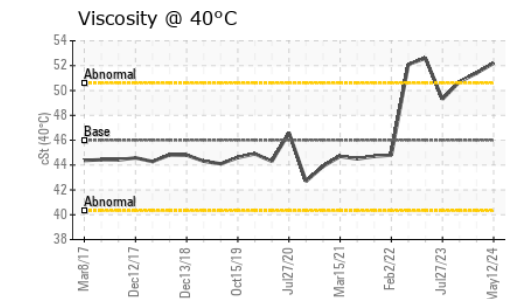
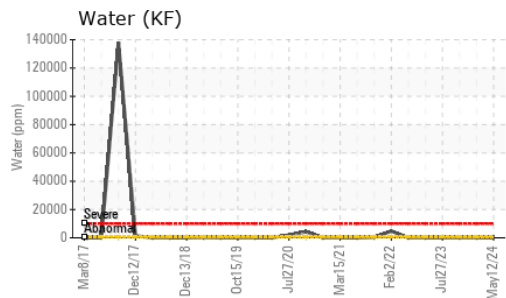
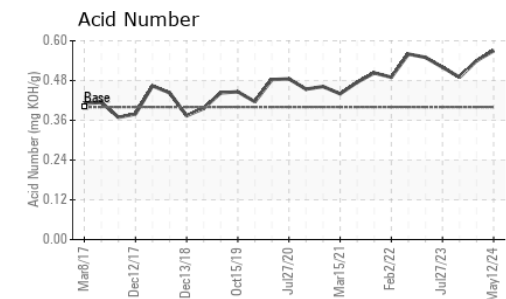
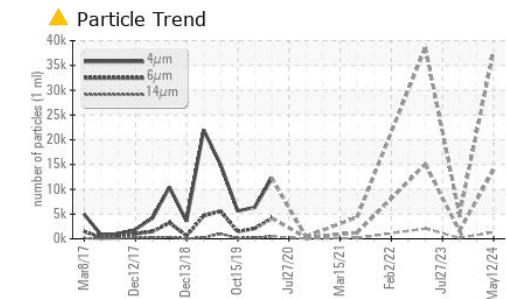
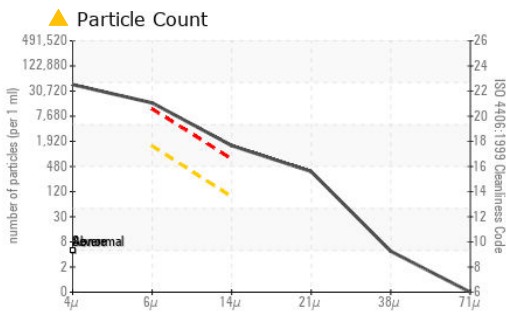
There is a high amount of particulates present in the oil.

| | | | | | | |
|------------------|--------|--------------|----------|------------|---------|------------|
| Silicon | ppm | ASTM D5185m | >25 | <1 | <1 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | <1 |
| Water | % | ASTM D6304 | >0.05 | 0.003 | 0.011 | 0.010 |
| ppm Water | ppm | ASTM D6304 | >500 | 40 | 114 | 107.3 |
| Particles >4µm | | ASTM D7647 | | 37910 | --- | 4836 |
| Particles >6µm | | ASTM D7647 | >1300 | ▲ 13904 | --- | ▲ 1587 |
| Particles >14µm | | ASTM D7647 | >80 | ▲ 1330 | --- | ▲ 179 |
| Particles >21µm | | ASTM D7647 | >20 | ▲ 319 | --- | ▲ 54 |
| Particles >38µm | | ASTM D7647 | >4 | 4 | --- | 3 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | --- | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >-/17/13 | ▲ 22/21/18 | --- | ▲ 19/18/15 |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | ▲ MODER | ▲ MODER |
| 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 | NEG |

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|-----|-------|-------|-------|
| Sodium | ppm | ASTM D5185m | | 2 | <1 | 3 |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | 90 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 1 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | 90 | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | 2 | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | | 0 | 0 | 8 |
| Zinc | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | | 18413 | 14323 | 16007 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.4 | 0.57 | 0.54 | 0.49 |
| Visc @ 40°C | cSt | ASTM D445 | 46 | 52.2 | 51.4 | 50.7 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : APC06177177 **Received** : 13 May 2024
Lab Number : 06177177 **Tested** : 14 May 2024
Unique Number : 11023230 **Diagnosed** : 14 May 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)

AIR PRODUCTS AND CHEMICALS INC - ALLENTOWN
 7201 HAMILTON BLVD
 ALLENTOWN, PA
 US 18195
 Contact: John Bach
 bachjm@airproducts.com
 T: 1(316)613-1421
 F: (316)729-2429