

# **OIL ANALYSIS REPORT**



current

history1

history2

limit/base

<sup>Machine Id</sup> 6146358 (S/N 1224) Component

Compressor KAESER SIGMA (OEM) M-460 (--- GAL)

### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. 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

Moderate concentration of visible dirt/debris present in the oil.

## Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

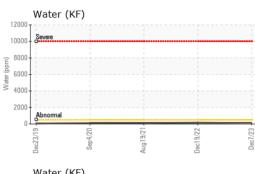
|                                    |                   | mothod        | initia babe       | ourient     | Thotory         | motory                     |
|------------------------------------|-------------------|---------------|-------------------|-------------|-----------------|----------------------------|
| Sample Number                      |                   | Client Info   |                   | KCPA011401  | KCP52166        | KCP42981                   |
| Sample Date                        |                   | Client Info   |                   | 07 Dec 2023 | 19 Dec 2022     | 19 Aug 2021                |
| Machine Age                        | hrs               | Client Info   |                   | 20403       | 18280           | 16398                      |
| Oil Age                            | hrs               | Client Info   |                   | 0           | 1887            | 4448                       |
| Oil Changed                        |                   | Client Info   |                   | N/A         | Not Changd      | Changed                    |
| Sample Status                      |                   |               |                   | ABNORMAL    | ABNORMAL        | NORMAL                     |
|                                    |                   | un a the a al | line it /le e e e |             | la la tana si d | bister 0                   |
| WEAR METALS                        |                   | method        | limit/base        | current     | history1        | history2                   |
| Iron                               | ppm               | ASTM D5185m   | >50               | 0           | 1               | 0                          |
| Chromium                           | ppm               | ASTM D5185m   | >10               | 0           | 0               | 0                          |
| Nickel                             | ppm               | ASTM D5185m   | >3                | 0           | 0               | 0                          |
| Titanium                           | ppm               | ASTM D5185m   | >3                | 0           | 0               | 0                          |
| Silver                             | ppm               | ASTM D5185m   | >2                | 0           | 0               | 0                          |
| Aluminum                           | ppm               | ASTM D5185m   | >10               | 0           | 2               | 7                          |
| Lead                               | ppm               | ASTM D5185m   | >10               | 0           | 0               | 0                          |
| Copper                             | ppm               | ASTM D5185m   | >50               | 8           | 7               | 14                         |
| Tin                                | ppm               | ASTM D5185m   | >10               | 0           | 0               | 0                          |
| Antimony                           | ppm               | ASTM D5185m   |                   |             |                 | 0                          |
| Vanadium                           | ppm               | ASTM D5185m   |                   | 0           | 0               | 0                          |
| Cadmium                            | ppm               | ASTM D5185m   |                   | 0           | 0               | 0                          |
| ADDITIVES                          |                   | method        | limit/base        | current     | history1        | history2                   |
| Boron                              | ppm               | ASTM D5185m   | 0                 | 0           | 0               | 0                          |
| Barium                             | ppm               | ASTM D5185m   |                   | 0           | 0               | 0                          |
| Molybdenum                         | ppm               | ASTM D5185m   | 0                 | 0           | 0               | 0                          |
| Manganese                          | ppm               | ASTM D5185m   | 0                 | <1          | <1              | 0                          |
| Magnesium                          | ppm               | ASTM D5185m   | 100               | 0           | 11              | 0                          |
| Calcium                            | ppm               | ASTM D5185m   |                   | 0           | 0               | 0                          |
| Phosphorus                         |                   | ASTM D5185m   | 0                 | 4           | 1               | 0                          |
| Zinc                               | ppm               | ASTM D5185m   |                   | 45          | 72              | 65                         |
| Sulfur                             | ppm               |               | 23500             | 45<br>19995 | 22302           | 16736                      |
|                                    | ppm               |               |                   | 19990       |                 |                            |
| CONTAMINANTS                       | 5                 | method        | limit/base        | current     | history1        | history2                   |
| Silicon                            | ppm               | ASTM D5185m   | >25               | 1           | 2               | 0                          |
| Sodium                             | ppm               | ASTM D5185m   |                   | <1          | 2               | 0                          |
| Potassium                          | ppm               | ASTM D5185m   | >20               | 0           | 0               | 0                          |
| Water                              | %                 | ASTM D6304    | >0.05             | 0.011       | 0.015           | 0.012                      |
| ppm Water                          | ppm               | ASTM D6304    | >500              | 111         | 159.3           | 126.2                      |
| FLUID CLEANLIN                     | IESS              | method        | limit/base        | current     | history1        | history2                   |
| Particles >4µm                     |                   | ASTM D7647    |                   |             | ▲ 56697         | 1990                       |
| Particles >6µm                     |                   | ASTM D7647    | >1300             |             | <b>1</b> 1122   | 801                        |
| Particles >14µm                    |                   | ASTM D7647    | >80               |             | <b>4</b> 17     | 23                         |
| Particles >21µm                    |                   | ASTM D7647    | >20               |             | <u> </u>        | 3                          |
| Particles >38µm                    |                   | ASTM D7647    | >4                |             | 3               | 0                          |
| and the second                     |                   |               | 13                |             | 0               | 0                          |
|                                    |                   | ASTM D7647    | >0                |             |                 |                            |
| Particles >71µm                    |                   | ISO 4406 (c)  | >/17/13           |             | ▲ 23/21/16      | 17/12                      |
| •                                  |                   |               |                   | <br>current | ▲ 23/21/16      |                            |
| Particles >71µm<br>Oil Cleanliness | ATION<br>mg KOH/g | ISO 4406 (c)  | >/17/13           |             |                 | 17/12<br>history2<br>0.424 |

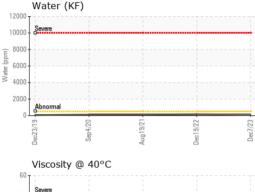
Report Id: BATBATKCP [WUSCAR] 06056702 (Generated: 01/11/2024 10:28:17) Rev: 1

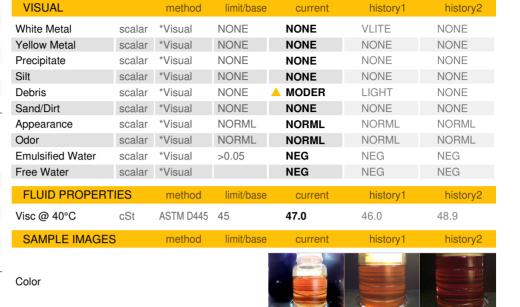
Contact/Location: Service Manager - BATBATKCP



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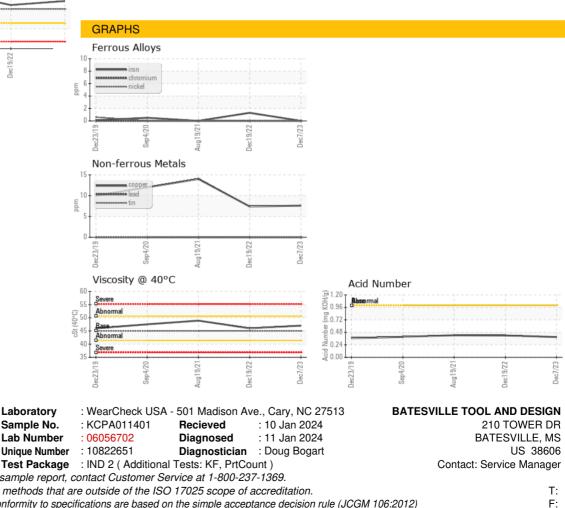






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Bottom





Certificate L2367 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)