

# **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# **7719543 (S/N 1063)** Compressor

## Fluid KAESER SIGMA (OEM) M-460 (--- GAL)

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

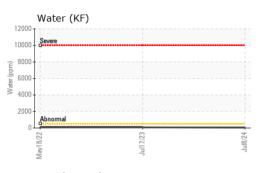
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

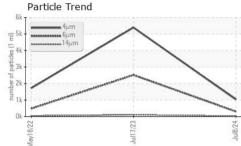
| SAMPLE INFORM    | IATION   | method       | limit/base | current     | history1    | history2    |
|------------------|----------|--------------|------------|-------------|-------------|-------------|
| Sample Number    |          | Client Info  |            | KCPA020766  | KC100962    | KC104323    |
| Sample Date      |          | Client Info  |            | 08 Jul 2024 | 17 Jul 2023 | 18 May 2022 |
| Machine Age      | hrs      | Client Info  |            | 8870        | 6159        | 1607        |
| Oil Age          | hrs      | Client Info  |            | 2711        | 4552        | 1607        |
| Oil Changed      |          | Client Info  |            | Changed     | Changed     | Changed     |
| Sample Status    |          |              |            | NORMAL      | ABNORMAL    | NORMAL      |
| WEAR METALS      |          | method       | limit/base | current     | history1    | history2    |
| Iron             | ppm      | ASTM D5185m  | >50        | 0           | 0           | 1           |
| 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           | 0           | <1          |
| Lead             | ppm      | ASTM D5185m  | >10        | 0           | 0           | 0           |
| Copper           | ppm      |              | >50        | 11          | 12          | 9           |
| Tin              | ppm      | ASTM D5185m  | >10        | 0           | 0           | 0           |
| Vanadium         | ppm      | ASTM D5185m  | 210        | 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  | 90         | 0           | 0           | 0           |
| Molybdenum       | ppm      | ASTM D5185m  | 0          | 0           | 0           | 0           |
| Manganese        | ppm      | ASTM D5185m  |            | 0           | 0           | <1          |
| Magnesium        | ppm      | ASTM D5185m  | 100        | 2           | 0           | 34          |
| Calcium          | ppm      | ASTM D5185m  | 0          | 0           | 0           | 1           |
| Phosphorus       | ppm      | ASTM D5185m  | 0          | 0           | 0           | 11          |
| Zinc             | ppm      | ASTM D5185m  | 0          | 0           | 0           | 10          |
| Sulfur           | ppm      | ASTM D5185m  | 23500      | 17986       | 22919       | 19699       |
| CONTAMINANTS     |          | method       | limit/base | current     | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m  | >25        | <1          | 0           | <1          |
| Sodium           | ppm      | ASTM D5185m  |            | 1           | 0           | 11          |
| Potassium        | ppm      | ASTM D5185m  | >20        | 0           | <1          | 0           |
| Water            | %        | ASTM D6304   | >0.05      | 0.004       | 0.007       | 0.008       |
| ppm Water        | ppm      | ASTM D6304   | >500       | 46          | 79.8        | 84.1        |
| FLUID CLEANLIN   | ESS      | method       | limit/base | current     | history1    | history2    |
| Particles >4µm   |          | ASTM D7647   |            | 1031        | 5391        | 1718        |
| Particles >6µm   |          | ASTM D7647   | >1300      | 303         | <u> </u>    | 481         |
| Particles >14µm  |          | ASTM D7647   | >80        | 30          | <b>1</b> 06 | 46          |
| Particles >21µm  |          | ASTM D7647   | >20        | 8           | 20          | 12          |
| Particles >38µm  |          | ASTM D7647   | >4         | 1           | 1           | 0           |
| Particles >71µm  |          | ASTM D7647   | >3         | 0           | 0           | 0           |
| Oil Cleanliness  |          | ISO 4406 (c) | >17/13     | 15/12       | ▲ 19/14     | 16/13       |
| FLUID DEGRADA    | TION     | method       | limit/base | current     | history1    | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D8045   | 1.0        | 0.33        | 0.43        | 0.38        |

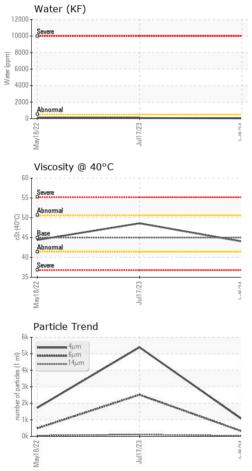
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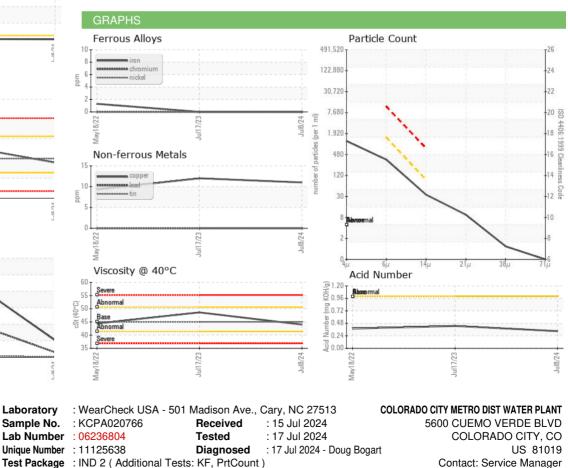
# **OIL ANALYSIS REPORT**







| VISUAL           |        | method    | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| 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    | NONE     | NONE     |
| 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      |
| Free Water       | scalar | *Visual   |            | NEG     | NEG      | NEG      |
| FLUID PROPERTIES |        | method    | limit/base | current | history1 | history2 |
| Visc @ 40°C      | cSt    | ASTM D445 | 45         | 44.0    | 48.6     | 44.4     |
| SAMPLE IMAGES    |        | method    | limit/base | current | history1 | history2 |
| Color            |        |           |            |         |          |          |
| Bottom           |        |           |            |         |          |          |



- 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)

Report Id: COLCOLCOKC [WUSCAR] 06236804 (Generated: 07/17/2024 09:25:12) Rev: 1

Certificate 12367

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