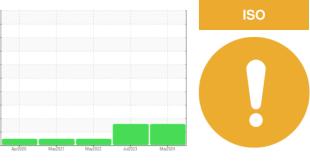


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

6656176 (S/N 1280)

Component Compressor Fluid KAESER SIGMA (OEM) S-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.

Wear

All component wear rates are normal.

Contamination

There is a moderate 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.

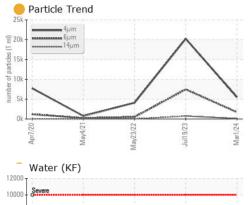
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|-----------------------------------|---------------|--------------|------------|--------------------|------------------------|----------------------|
| Sample Number | | Client Info | | KCPA013078 | KCPA004818 | KCP51249 |
| Sample Date | | Client Info | | 01 Mar 2024 | 19 Jul 2023 | 23 May 2022 |
| Machine Age | hrs | Client Info | | 19159 | 14643 | 8642 |
| Oil Age | hrs | Client Info | | 4516 | 0 | 4224 |
| Oil Changed | | Client Info | | Not Changd | N/A | Changed |
| Sample Status | | | | ATTENTION | ABNORMAL | NORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | 0 | <1 | 2 |
| Chromium | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >3 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | <1 | <1 |
| Aluminum | ppm | ASTM D5185m | >10 | <1 | <1 | <1 |
| Lead | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | | 6 | 11 | 4 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | <1 |
| Antimony | ppm | ASTM D5185m | 2 10 | | | |
| 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 | <1 |
| Barium | ppm | ASTM D5185m | 90 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | 90 | 2 | <1 | 30 |
| Calcium | ppm | ASTM D5185m | 2 | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | | 1 | 4 | 4 |
| Zinc | ppm | ASTM D5185m | | 21 | <1 | 39 |
| Sulfur | ppm | ASTM D5185m | | 20366 | 22011 | 18598 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | <1 | <1 | <1 |
| Sodium | ppm | ASTM D5185m | | 1 | 0 | 13 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 1 | 5 |
| Water | % | ASTM D6304 | >0.05 | 0.008 | 0.010 | 0.027 |
| ppm Water | ppm | ASTM D6304 | >500 | 84 | 106.5 | 272.2 |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | | 5521 | 20237 | 4100 |
| Particles >6µm | | ASTM D7647 | | <u> </u> | <u> </u> | 507 |
| Particles >14µm | | ASTM D7647 | >80 | <mark> </mark> 103 | A 735 | 27 |
| Particles >21µm | | ASTM D7647 | >20 | <mark> </mark> 21 | <u> </u> | 7 |
| Particles >38µm | | ASTM D7647 | >4 | 0 | 3 | 0 |
| Particles >71µm | | ASTM D7647 | | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >/17/13 | e 20/18/14 | <u>22/20/17</u> | 19/16/12 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) 09:11) Rev: 1 | mg KOH/g | ASTM D8045 | 0.4 | 0.41 Contact/ | 0.50 Location: B WA | 0.38 LKER - RICJA |

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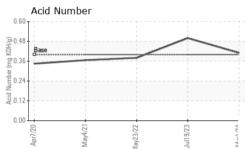
Contact/Location: B WALKER - RICJAS

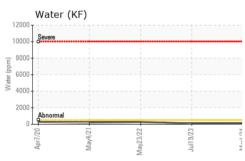


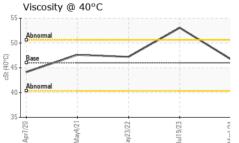
OIL ANALYSIS REPORT





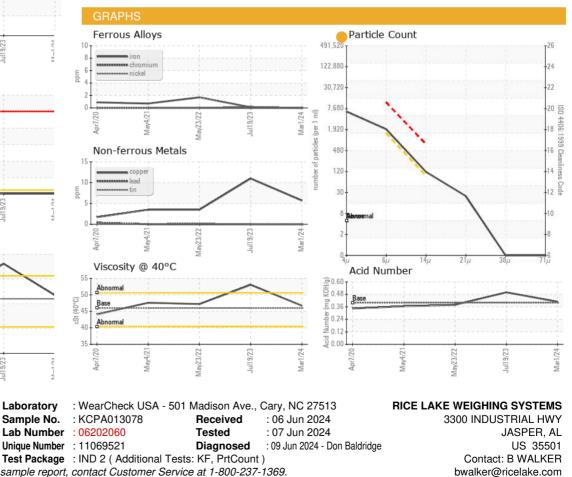






| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *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 PROPERT | IES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D445 | 46 | 46.7 | 53.05 | 47.2 |
| SAMPLE IMAGES | 3 | 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)

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Certificate 12367

Contact/Location: B WALKER - RICJAS Page 2 of 2

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