

OIL ANALYSIS REPORT

Sample Rating Trend





Compressor

KAESER SIGMA (OEM) FG-460 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

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

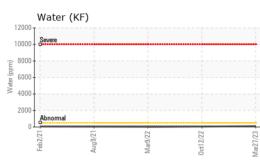
| | | Feb2021 | Aug2021 | Mar2022 Oct2022 | Mar2023 | | |
|---|--|--------------|------------|-----------------|--------------|-------------|--|
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 | |
| Sample Number | | Client Info | | KCPA001508 | KCP46439 | KCP41148 | |
| Sample Date | | Client Info | | 27 Mar 2023 | 12 Oct 2022 | 09 Mar 2022 | |
| Machine Age | hrs | Client Info | | 18065 | 14922 | 11785 | |
| Oil Age | hrs | Client Info | | 0 | 3137 | 31502 | |
| Oil Changed | | Client Info | | N/A | Changed | Changed | |
| Sample Status | | | | NORMAL | ATTENTION | NORMAL | |
| WEAR METALS | | method | limit/base | current | history1 | history2 | |
| Iron | ppm | ASTM D5185m | >50 | 5 | 3 | <1 | |
| Chromium | ppm | ASTM D5185m | >10 | 0 | 0 | 0 | |
| Nickel | ppm | ASTM D5185m | >3 | 0 | 0 | 0 | |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 | |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 | |
| Aluminum | ppm | ASTM D5185m | | 8 | 1 | 2 | |
| Lead | ppm | ASTM D5185m | >10 | 0 | 0 | <1 | |
| Copper | ppm | ASTM D5185m | | <1 | <1 | 0 | |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | <1 | |
| Antimony | | ASTM D5185m | 210 | | | | |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 | |
| | ppm | | | 0 | | 0 | |
| Cadmium | ppm | ASTM D5185m | | | 0 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 | |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 | |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 | |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 | |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | 0 | |
| Magnesium | ppm | ASTM D5185m | | 2 | 0 | 0 | |
| Calcium | ppm | ASTM D5185m | | 0 | 0 | 0 | |
| Phosphorus | ppm | ASTM D5185m | 500 | 51 | 14 | 14 | |
| Zinc | ppm | ASTM D5185m | | 1 | 0 | 0 | |
| Sulfur | ppm | ASTM D5185m | | 1231 | 1033 | 919 | |
| CONTAMINANTS | 5 | method | limit/base | current | history1 | history2 | |
| Silicon | ppm | ASTM D5185m | >25 | 0 | 0 | 0 | |
| Sodium | ppm | ASTM D5185m | | 0 | 0 | 0 | |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 0 | 1 | |
| Water | % | ASTM D6304 | | 0.010 | 0.005 | 0.001 | |
| ppm Water | ppm | ASTM D6304 | >500 | 102.7 | 54.3 | 10.5 | |
| FLUID CLEANLIN | NESS | method | limit/base | current | history1 | history2 | |
| Particles >4µm | | ASTM D7647 | | 1092 | 14184 | 3462 | |
| Particles >6µm | | ASTM D7647 | >1300 | 267 | 1 653 | 869 | |
| Particles >14μm | | ASTM D7647 | >80 | 24 | 40 | 65 | |
| Particles >21μm | | ASTM D7647 | >20 | 7 | 8 | 21 | |
| Particles >38µm | | ASTM D7647 | | 0 | 1 | 0 | |
| Particles >71µm | | ASTM D7647 | | 0 | 0 | 0 | |
| Oil Cleanliness | | ISO 4406 (c) | >/17/13 | 17/15/12 | 21/18/12 | 17/13 | |
| FLUID DEGRADA | ATION | method | limit/base | | history1 | history2 | |
| | mg KOH/g | ASTM D8045 | 1.5 | 0.65 | 0.46 | 0.41 | |
| Acid Number (AN) (15:54) Rev: 1 | Contact/Location: BONNIE BUBCHEIELD - GREKNC | | | | | | |
| .5:54) Rev: 1 Contact/Location: RONNIE BURCHFIELD - GREKN | | | | | | | |

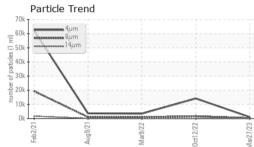
Report Id: GREKNO [WUSCAR] 05809961 (Generated: 10/03/2023 02:15:54) Rev: 1

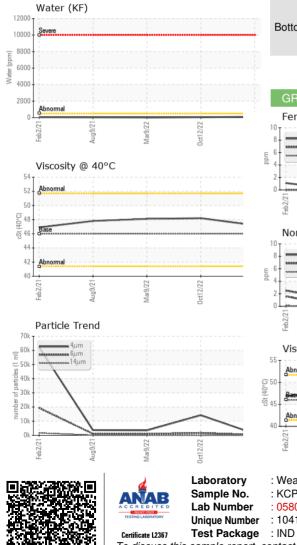
Contact/Location: RONNIE BURCHFIELD - GREKNO



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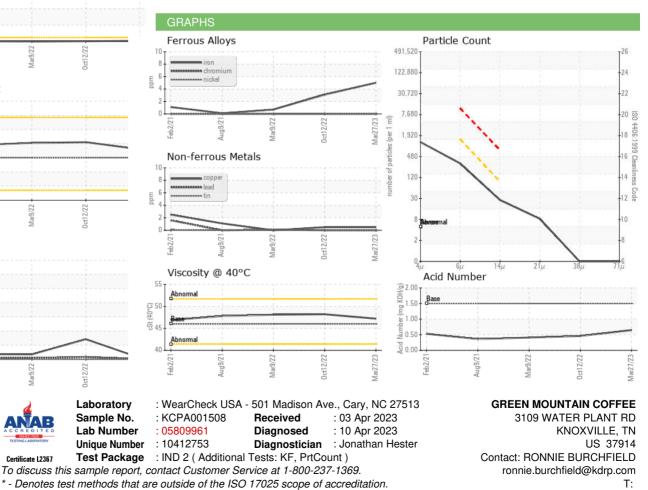






| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|--------------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | 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 | 47.2 | 48.2 | 48.1 |
| SAMPLE IMAGES | ; | method | limit/base | current | history1 | history2 |
| Color | | | | | | |
| Bottom | | | | | | (\bigcirc) |





* - 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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