

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area D230 [2950934] Machine Id 71AG213 (S/N 1000003190878)

Component Agitator Gearbox

MOBIL SHC CIBUS 220 (--- GAL)

DIAGNOSIS

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

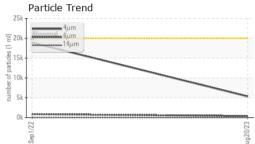
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

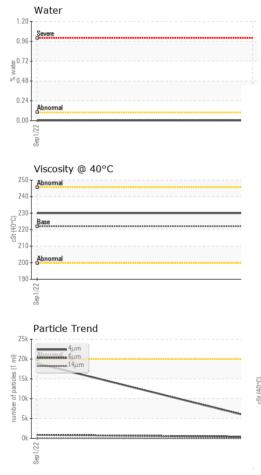
| SAMPLE INFORM Sample Number Sample Date | MATION | method | limit/base | current | history1 | history2 |
|---|----------|--------------|------------|-------------|-------------|----------|
| • | | <u> </u> | | | | |
| Sample Date | | Client Info | | WC0806756 | WC0711951 | |
| | | Client Info | | 20 Aug 2023 | 01 Sep 2022 | |
| Machine Age | mths | Client Info | | 0 | 0 | |
| Oil Age | mths | Client Info | | 0 | 0 | |
| Oil Changed | | Client Info | | N/A | N/A | |
| Sample Status | | | | NORMAL | NORMAL | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >150 | <1 | 1 | |
| Chromium | ppm | ASTM D5185m | | 0 | 0 | |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | |
| Titanium | | ASTM D5185m | >10 | 0 | 0 | |
| | ppm | | | | | |
| Silver | ppm | ASTM D5185m | 05 | 0 | 0 | |
| Aluminum | ppm | ASTM D5185m | >25 | 0 | <1 | |
| Lead | ppm | ASTM D5185m | >100 | 0 | 0 | |
| Copper | ppm | ASTM D5185m | | <1 | 0 | |
| Tin | ppm | ASTM D5185m | >10 | <1 | 0 | |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 0 | <1 | |
| Barium | ppm | ASTM D5185m | | 0 | 0 | |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | |
| Manganese | ppm | ASTM D5185m | | <1 | 0 | |
| Magnesium | ppm | ASTM D5185m | | <1 | 0 | |
| Calcium | ppm | ASTM D5185m | | 1 | <1 | |
| Phosphorus | ppm | ASTM D5185m | | 520 | 554 | |
| Zinc | ppm | ASTM D5185m | | 0 | 0 | |
| Sulfur | ppm | ASTM D5185m | | 626 | 534 | |
| CONTAMINANTS | 6 | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >50 | 1 | <1 | |
| Sodium | ppm | ASTM D5185m | | 1 | <1 | |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | |
| Water | % | ASTM D6304 | >0.1 | 0.002 | 0.002 | |
| ppm Water | ppm | ASTM D6304 | >1000 | 24.8 | 23.9 | |
| FLUID CLEANLIN | NESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >20000 | 5316 | 18899 | |
| Particles >6µm | | ASTM D7647 | >5000 | 388 | 865 | |
| Particles >14µm | | ASTM D7647 | >640 | 14 | 16 | |
| Particles >21µm | | ASTM D7647 | >160 | 3 | 2 | |
| Particles >38µm | | ASTM D7647 | >40 | 0 | 0 | |
| Particles >71µm | | ASTM D7647 | | 0 | 0 | |
| Oil Cleanliness | | ISO 4406 (c) | >21/19/16 | 20/16/11 | 21/17/11 | |
| FLUID DEGRADA | | method | limit/base | current | history1 | history2 |
| | | | | | | |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.35 | 0.35 | |



OIL ANALYSIS REPORT







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| White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water | scalar scalar scalar scalar scalar scalar scalar scalar scalar | *Visual *Visual *Visual *Visual *Visual *Visual *Visual | NONE NONE NONE NONE NONE | NONE NONE NONE NONE NONE NONE | NONE NONE NONE NONE NONE NONE | |
|---|--|--|---|---|--|---|
| Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water | scalar scalar scalar scalar scalar scalar scalar | *Visual *Visual *Visual *Visual *Visual | NONE NONE NONE | NONE NONE NONE NONE | NONE NONE NONE | |
| Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water | scalar scalar scalar scalar scalar scalar | *Visual *Visual *Visual *Visual *Visual | NONE NONE NONE | NONE NONE NONE NONE | NONE NONE NONE | |
| Silt Debris Sand/Dirt Appearance Odor Emulsified Water | scalar scalar scalar scalar | *Visual *Visual *Visual *Visual | NONE | NONE NONE | NONE | |
| Debris Sand/Dirt Appearance Odor Emulsified Water | scalar scalar scalar | *Visual *Visual *Visual | NONE | NONE NONE | | |
| Sand/Dirt Appearance Odor Emulsified Water | scalar scalar scalar | *Visual *Visual *Visual | NONE | NONE | | |
| Appearance Odor Emulsified Water | scalar scalar | *Visual *Visual | | | NONE | |
| Emulsified Water | | | NORML | NORML | NORML | |
| | | | NORML | NORML | NORML | |
| Free Water | | *Visual | >0.1 | NEG | NEG | |
| | scalar | *Visual | | NEG | NEG | |
| FLUID PROPER | TIES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D445 | 222 | 230 | 230 | |
| SAMPLE IMAGE | S | method | limit/base | current | history1 | history2 |
| COLOCOLOGIC | | | | | | no image |
| Bottom | | | | \bigcirc | | no image |
| GRAPHS | | | | | | |
| Ferrous Alloys | | | | Particle Count | | |
| I iron | | | 491 520 | | | |
| | | | 101,020 | Severe | | ľ |
| chromium | | | 122,880 | Severe | | -2 |
| o chromium | | | 122,880 | | | -2 |
| chromium | | | 122,880 30,720 | Abnormal | | +2 +2 |
| 6 4 2 | | | 122,880 30,720 7,680 | Abnormal | | +2 +2 |
| 6 4 2 | | | 122,880 30,720 7,680 | Abnormal | | +2 +2 |
| end d d d d d d d d d d d d d d d d d d | | | 122,880 30,720 7,680 | Abnormal | | +2 +2 |
| Non-ferrous Meta | ls | | 122,880 30,720 7,680 | Abnormal | • | +2 +2 |
| Non-ferrous Meta | ls | | 122,880 30,720 7,680 | Abnormal | | +2 +2 +2 +1 +1 +1 |
| Non-ferrous Meta | ls | | 122,880 30,720 7,680 EZ/0720PW 480 5300 geographic for a for | Abnormal | | +2 +2 +2 +1 +1 +1 |
| Non-ferrous Meta | ls | | 122,880 30,720 7,680 | Abnormal | • | +2 +2 |
| Non-ferrous Meta | ls | | 122,880 30,720 7,680 EZ/0720PW 480 5300 geographic for a for | Abnormal | | +2 +2 +2 +1 +1 +1 |
| Non-ferrous Meta | ls | | 122,880 30,720 7,680 (IIII 1,920 5,899 1,920 1,9 | Abnormal | | +2 +2 +2 +1 +1 +1 |
| Non-ferrous Meta | ls | | 122,880 30,720 7,680 (IIII 1,920 5,899 1,920 1,9 | Abnormal | | +2 +2 +2 +1 +1 +1 |
| Non-ferrous Meta | ls | | 122,880 30,720 7,680 EZ/0720PW 480 5300 geographic for a for | Abnormal | 14μ 21μ | +2 +2 +2 +1 +1 +1 |
| Non-ferrous Meta | ls | | 122,880 30,720 7,680 (m 1.920 800 to 1.920 1200 1200 1200 300 1200 300 1200 300 1200 300 1200 300 1200 300 1200 300 1200 12 | Abnormal | 14μ 21μ | -2 -2 -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 |
| Non-ferrous Meta | ls | | 122,880 30,720 7,680 (m 1.920 800 to 1.920 1200 1200 1200 300 1200 300 1200 300 1200 300 1200 300 1200 300 1200 300 1200 12 | Abnormal | 14μ 21μ | -2 -2 -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 |
| Non-ferrous Meta | ls | | 122,880 30,720 7,680 (m 1.920 800 to 1.920 1200 1200 1200 300 1200 300 1200 300 1200 300 1200 300 1200 300 1200 300 1200 12 | Abnormal | 14μ 21μ | -2 -2 -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 |
| Non-ferrous Meta | ls | | 122,880 30,720 7,680 (m 1.920 890 ted jo te 480 120 890 ted jo te 480 30 88 88 88 88 88 80 88 80 80 80 80 80 80 | Abnormal | 14μ 21μ | -2 -2 -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 |
| Non-ferrous Meta Non-ferrous Meta lead Viscosity @ 40°C 200 Clippe Viscosity @ 40°C | ls | | 122,880 30,720 7,680 (m 1.920 890 ted jo te 480 120 890 ted jo te 480 30 88 88 88 88 88 80 88 80 80 80 80 80 80 | Abnormal | 14μ 21μ | -2 -2 -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 |
| Non-ferrous Meta | ls | | 122,880 30,720 7,680 (ILL 1,920 2002DHP 1,920 1, | Abnormal | 14μ 21μ | -2 -2 -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 |
| | Visc @ 40°C SAMPLE IMAGE Color Bottom GRAPHS | Visc @ 40°C cSt SAMPLE IMAGES Color Bottom GRAPHS Ferrous Alloys | Visc @ 40°C cSt ASTM D445 SAMPLE IMAGES method Color GRAPHS Ferrous Alloys | Visc @ 40°C cSt ASTM D445 222 SAMPLE IMAGES method limit/base Color Imit/base Imit/base Bottom Imit/base Imit/base GRAPHS Imit/base Imit/base | Visc @ 40°C cSt ASTM D445 222 230 SAMPLE IMAGES method imit/base current Color Color Imit/base Imit/base Bottom Imit/base Imit/base Imit/base GRAPHS Ferrous Alloys Particle Count | Visc @ 40°C cSt ASTM D445 222 230 230 SAMPLE IMAGES method limit/base current history1 Color Color Image: Same Same Same Same Same Same Same Same |