

OIL ANALYSIS REPORT

Area 075 G4 [2994724] B1 Blower Component

Outboard Bearing Fluid SHELL CORENA S4 R46 (--- QTS)

DIAGNOSIS

Recommendation

No action required at this time. Resample at next normal interval.

Wear

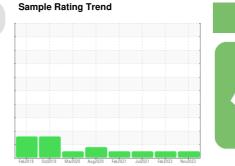
Wear particles are low and acceptable.

Contamination

Contamination is on par with new unfiltered oil.

Fluid Condition

Fluid health indicators are acceptable for continued use.



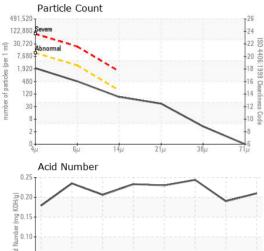


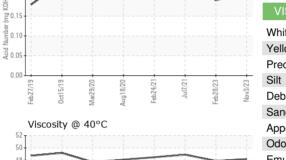
NORMAL

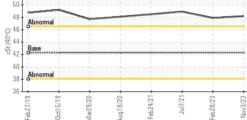
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|---------------|----------|-------------|------------|-------------|-------------|-------------|
| Sample Number | | Client Info | | PLS0000679 | PLS0000661 | PLS0000323 |
| Sample Date | | Client Info | | 03 Nov 2023 | 28 Feb 2023 | 07 Jul 2021 |
| Machine Age | mths | Client Info | | 24 | 8 | 0 |
| Oil Age | mths | Client Info | | 8 | 8 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINATION | ٨ | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >2 | NEG | NEG | NEG |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| PQ | | ASTM D8184 | | 12 | 10 | 16 |
| Iron | ppm | ASTM D5185m | >20 | 0 | 2 | <1 |
| Chromium | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| Lead | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >20 | 0 | 0 | <1 |
| Tin | ppm | ASTM D5185m | >20 | <1 | 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 |
| Barium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Calcium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Phosphorus | ppm | ASTM D5185m | | 79 | 68 | 88 |
| Zinc | ppm | ASTM D5185m | | 0 | 10 | 0 |
| Sulfur | ppm | ASTM D5185m | | 162 | 157 | 194 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >15 | <1 | <1 | <1 |
| Sodium | ppm | ASTM D5185m | | 0 | 1 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | <1 | <1 |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | *ASTM D7844 | | 0 | 0.1 | 0 |
| Nitration | Abs/cm | *ASTM D7624 | | 4.3 | 4.5 | 4.9 |
| Sulfation | Abs/.1mm | *ASTM D7415 | | 8.5 | 8.5 | 8.9 |

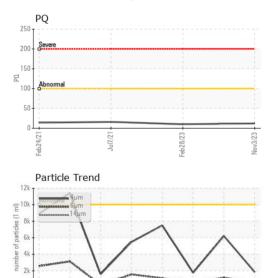


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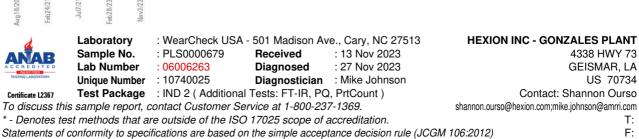
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| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
|---|--|---|------------------------------|---------------------------------------|--|--|
| Particles >4µm | | ASTM D7647 | >10000 | 1846 | 6213 | 1770 |
| Particles >6µm | | ASTM D7647 | >2500 | 434 | 1176 | 447 |
| Particles >14µm | | ASTM D7647 | >160 | 77 | 64 | 41 |
| Particles >21µm | | ASTM D7647 | >40 | 37 | 16 | 15 |
| Particles >38µm | | ASTM D7647 | >10 | 3 | 0 | 0 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/14 | 18/16/13 | 20/17/13 | 18/16/13 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Oxidation | Abs/.1mm | *ASTM D7414 | | 3.1 | 3.4 | 3.9 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.21 | 0.19 | 0.244 |
| 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 | | | | NONE | HOHE | NONE |
| 20010 | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar scalar | *Visual *Visual | NONE NONE | | | |
| | | | | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt Appearance | scalar scalar | *Visual *Visual | NONE NORML | NONE NONE NORML | NONE NONE NORML | NONE NONE NORML |
| Sand/Dirt Appearance Odor | scalar scalar scalar | *Visual *Visual *Visual | NORE NORML NORML | NONE NONE NORML NORML | NONE NORML NORML | NONE NONE NORML NORML |
| Sand/Dirt Appearance Odor Emulsified Water | scalar scalar scalar scalar scalar | *Visual *Visual *Visual *Visual | NORE NORML NORML | NONE NONE NORML NORML NEG | NONE NONE NORML NORML NEG | NONE NONE NORML NORML NEG |
| Sand/Dirt Appearance Odor Emulsified Water Free Water | scalar scalar scalar scalar scalar | *Visual *Visual *Visual *Visual *Visual | NONE NORML NORML >2 | NONE NORML NORML NEG NEG | NONE NONE NORML NORML NEG NEG | NONE NONE NORML NORML NEG NEG |

Bottom

Color



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