

OIL ANALYSIS

Particles >38µm

Particles >71µm

Oil Cleanliness

ASTM D7647 >10

ASTM D7647 >3

4

3

ISO 4406 (c) >20/18/14 🔺 24/21/15



Area **412 621 AIRVAYOR** Inboard Bearing Fluid

MOBIL SHC 630 (10 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The oil 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 high amount of particulates present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

Fluid Condition

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

| Sample Rating Trend | | | | | | | | | | |
|-----------------------|------------|----------------------------|-----------------|------------------------|-------------|-------------|--|--|--|--|
| SIS REPC | ORT | | | | | DIRT | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | av2014 De | c2016 Jun2018 D | ec2019 Jun2021 Dec2022 | Mar2024 | | | | | |
| | | | | | | | | | | |
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 | | | | |
| Sample Number | | Client Info | | WC0912141 | WC0912150 | WC0838896 | | | | |
| Sample Date | | Client Info | | 05 Jun 2024 | 07 Mar 2024 | 10 Nov 2023 | | | | |
| Machine Age | hrs | Client Info | | 0 | 0 | 6 | | | | |
| Oil Age | hrs | Client Info | | 0 | 2160 | 0 | | | | |
| Oil Changed | | Client Info | | Changed | Changed | Changed | | | | |
| Sample Status | | | | ABNORMAL | ABNORMAL | ABNORMAL | | | | |
| CONTAMINATIO | N | method | limit/base | current | history1 | history2 | | | | |
| Water | | WC Method | >2 | NEG | NEG | NEG | | | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 | | | | |
| PQ | | ASTM D8184 | | 18 | 18 | 16 | | | | |
| Iron | ppm | ASTM D5185m | >20 | 10 | 11 | <u>▲</u> 21 | | | | |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | <1 | | | | |
| Nickel | ppm | ASTM D5185m | >20 | <1 | 0 | 0 | | | | |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | 0 | | | | |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | 0 | <1 | | | | |
| Lead | ppm | ASTM D5185m | >20 | 0 | <1 | 0 | | | | |
| Copper Tin | ppm | ASTM D5185m ASTM D5185m | >20 >20 | <1 <1 | <1 <1 | <1 0 | | | | |
| Vanadium | ppm ppm | ASTM D5185m | >20 | 0 | <1 | 0 | | | | |
| Cadmium | ppm | ASTM D5185m | | <1 | 0 | 0 | | | | |
| | ppm | | | | | - | | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 | | | | |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | |
| Barium | ppm | ASTM D5185m | | <1 | 0 | 7 | | | | |
| Molybdenum | ppm | ASTM D5185m | | <1 | 0 | 0 | | | | |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | 0 | | | | |
| Magnesium | ppm | ASTM D5185m | | <1 0 | 0 | <1 | | | | |
| Calcium Phosphorus | ppm | ASTM D5185m ASTM D5185m | | 482 | <1 487 | 444 | | | | |
| Zinc | ppm ppm | ASTM D5185m | | 2 | 0 | 0 | | | | |
| Sulfur | ppm | ASTM D5185m | | 0 | 2 | 0 | | | | |
| | | | | | | - | | | | |
| CONTAMINANTS | 5 | method | limit/base | | history1 | history2 | | | | |
| Silicon | ppm | | >15 | ▲ 33 | 2 9 | 4 3 | | | | |
| Sodium | ppm | ASTM D5185m | 00 | <1 | <1 | 0 | | | | |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 0 | <1 | | | | |
| FLUID CLEANLIN | IESS | method | limit/base | | history1 | history2 | | | | |
| Particles >4µm | | ASTM D7647 | >10000 | <u> </u> | | ▲ 76519 | | | | |
| Particles >6µm | | ASTM D7647 | >2500 | 18423 | | ▲ 16561 | | | | |
| Particles >14µm | | ASTM D7647 | >160 | A 240 | | ▲ 561 | | | | |
| Particles >21µm | | ASTM D7647 | >40 | 36 | | <u> </u> | | | | |

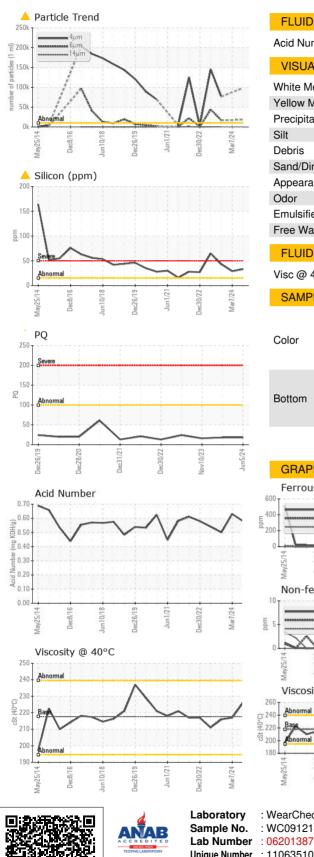
5

3

▲ 23/21/16



OIL ANALYSIS REPORT

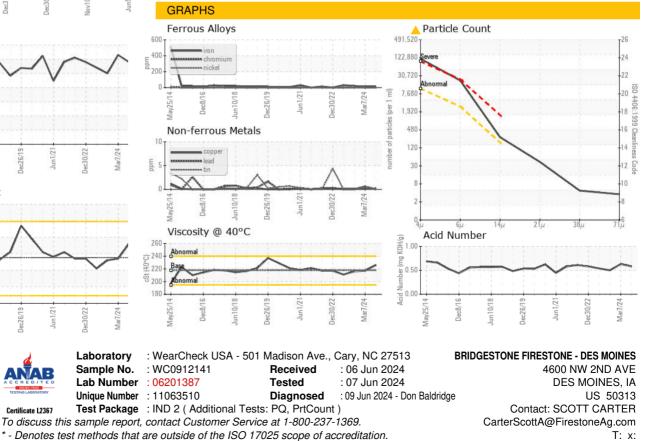


| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|---------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.58 | 0.63 | 0.50 |
| VISUAL | | method | limit/base | current | history1 | history2 |
| 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 | 🔺 MODER | 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 | >2 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D445 | 217.7 | 226 | 217 | 216 |
| SAMPLE IMAGES | | method | limit/base | current | history1 | history2 |
| | | | | | | |

Color



Bottom



* - 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: BRIDES [WUSCAR] 06201387 (Generated: 06/09/2024 10:46:11) Rev: 1

Certificate 12367

Contact/Location: SCOTT CARTER - BRIDES

Page 2 of 2

F: x: