



| | |
|-----------------|-----------------|
| WEAR | ABNORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Area
ROBERT W TAYLOR
Machine Id
[ROBERT W TAYLOR] 006 568680-6
Component
Starboard Reduction Gear
Fluid
SHELL ROTELLA T 40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

The copper level is abnormal. All other component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

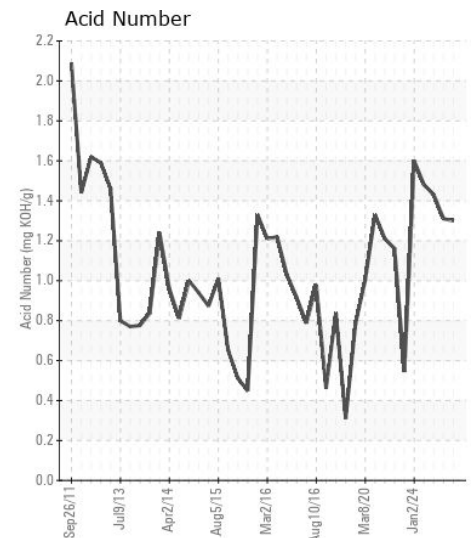
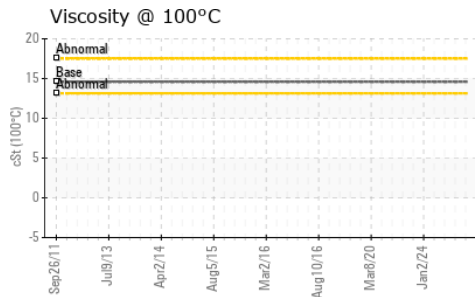
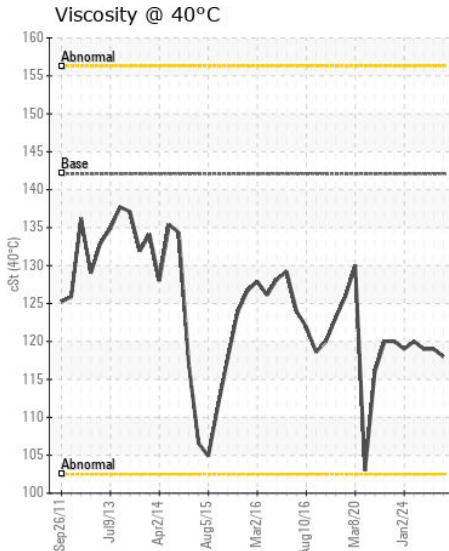
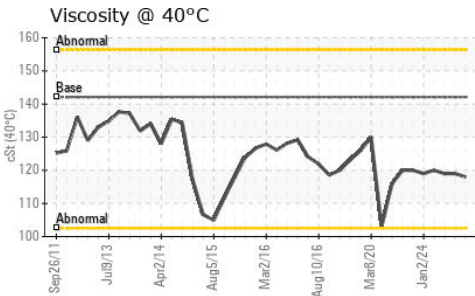
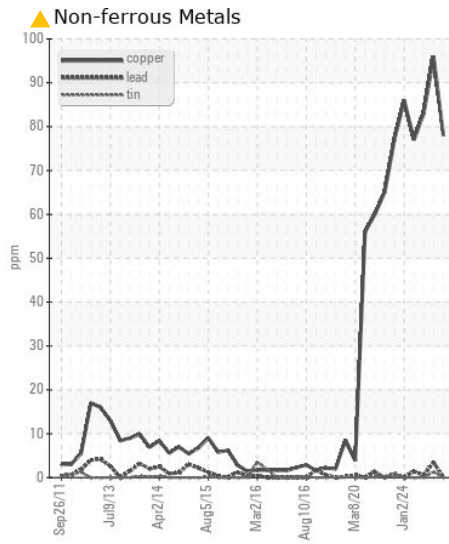
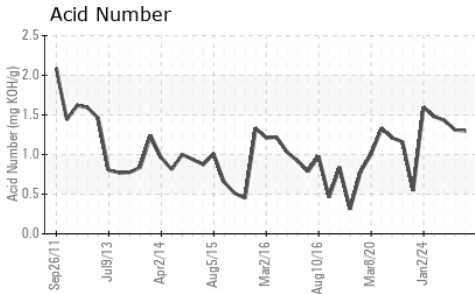
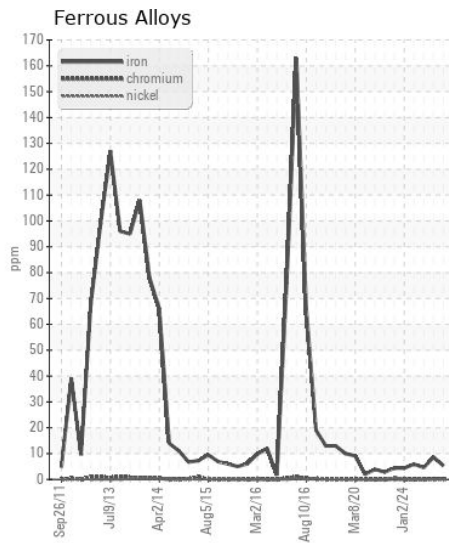
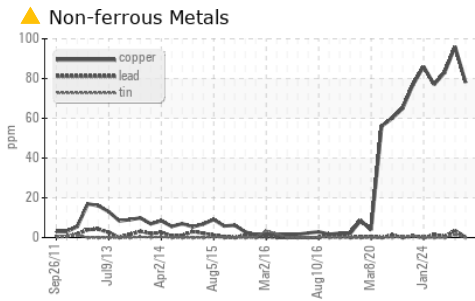
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | MW0072252 | MW0072205 | MW0062962 |
| Sample Date | | Client Info | | 02 Jul 2024 | 03 Jun 2024 | 02 May 2024 |
| Machine Age | hrs | Client Info | | 17969 | 17712 | 17505 |
| Oil Age | hrs | Client Info | | 112 | 2411 | 224 |
| Filter Age | hrs | Client Info | | 112 | 2411 | 224 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Filter Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Sample Status | | | | ABNORMAL | ABNORMAL | ABNORMAL |

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >150 | 5 | 9 | 5 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 1 | 2 | <1 |
| Lead | ppm | ASTM D5185m | >100 | 0 | 4 | <1 |
| Copper | ppm | ASTM D5185m | >50 | ▲ 78 | ▲ 96 | ▲ 83 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 1 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >50 | 4 | 4 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 5 | <1 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| 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 | >0.1 | NEG | NEG | NEG |

| | | | | | | |
|------------------|----------|-------------|-------|-------------|------|------|
| Sodium | ppm | ASTM D5185m | | 1 | 4 | 2 |
| Boron | ppm | ASTM D5185m | 0 | 43 | 44 | 41 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 95 | 99 | 96 |
| Manganese | ppm | ASTM D5185m | | 0 | 2 | <1 |
| Magnesium | ppm | ASTM D5185m | 432 | 44 | 46 | 44 |
| Calcium | ppm | ASTM D5185m | 1121 | 2549 | 2653 | 2584 |
| Phosphorus | ppm | ASTM D5185m | 996 | 1018 | 1097 | 1051 |
| Zinc | ppm | ASTM D5185m | 881 | 1149 | 1161 | 1116 |
| Sulfur | ppm | ASTM D5185m | | 3289 | 3877 | 3862 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 1.30 | 1.31 | 1.43 |
| Visc @ 40°C | cSt | ASTM D445 | 142.1 | 118 | 119 | 119 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0072252 **Received** : 08 Jul 2024
Lab Number : 06230882 **Tested** : 10 Jul 2024
Unique Number : 11114375 **Diagnosed** : 10 Jul 2024 - Sean Felton
Test Package : MAR 2 (Additional Tests: FT-IR, KV100)

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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