



OIL ANALYSIS REPORT

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

Machine Id
5WM/OG/JPBD
 Component
Gearbox
 Fluid
MOBIL MOBILGEAR SHC XMP 320 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|------|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0932117 | WC0807387 | WC0807244 |
| Sample Date | | Client Info | | 21 May 2024 | 30 Nov 2023 | 24 May 2023 |
| Machine Age | mths | Client Info | | 0 | 0 | 79 |
| Oil Age | mths | Client Info | | 92 | 85 | 0 |
| Filter Age | mths | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|-------------|------|------|
| Iron | ppm | ASTM D5185m | >200 | 14 | 12 | 13 |
| Chromium | ppm | ASTM D5185m | >15 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >15 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 0 | 0 | <1 |
| Lead | ppm | ASTM D5185m | >100 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >200 | 0 | 0 | <1 |
| Tin | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

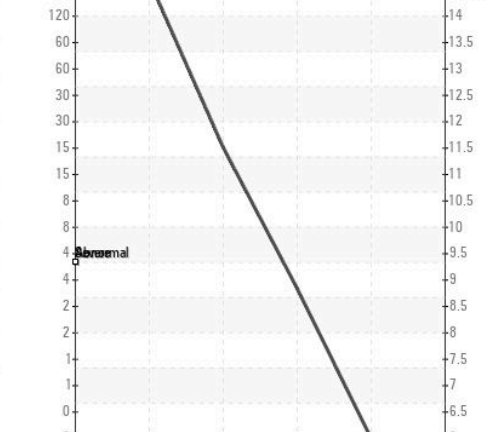
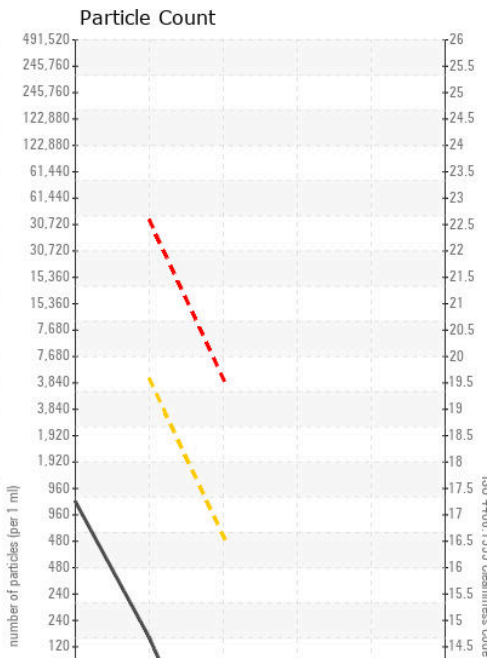
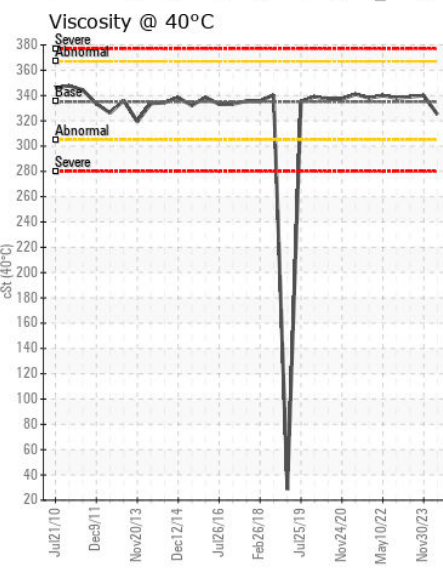
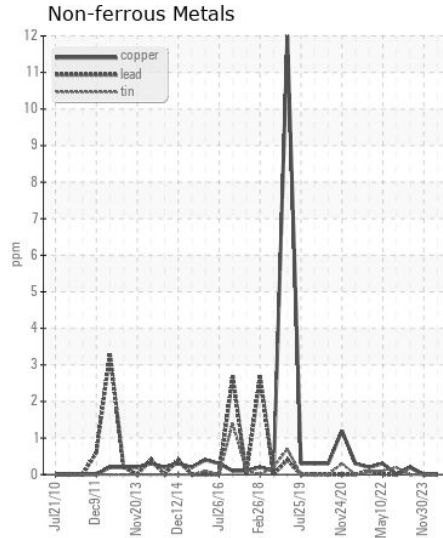
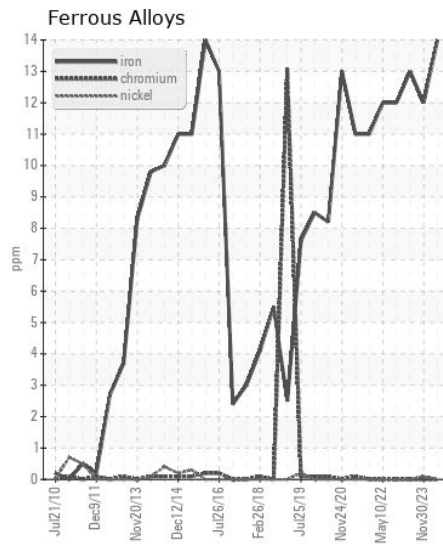
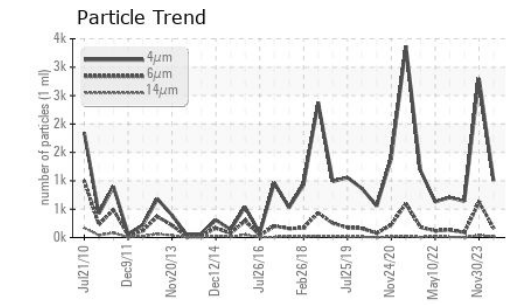
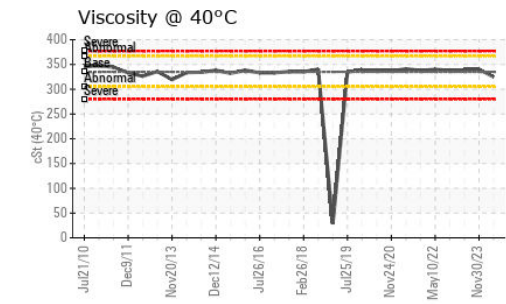
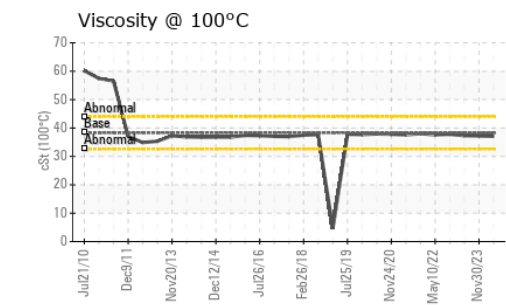
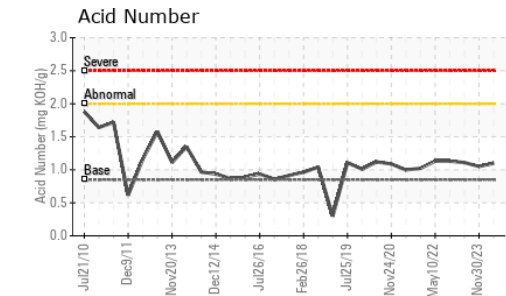
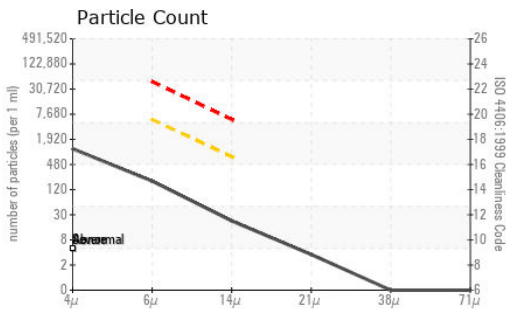
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|--------------|----------|-----------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >50 | 2 | 2 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 2 | 4 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | | 1002 | 2800 | 640 |
| Particles >6µm | | ASTM D7647 | >5000 | 169 | 623 | 89 |
| Particles >14µm | | ASTM D7647 | >640 | 19 | 39 | 5 |
| Particles >21µm | | ASTM D7647 | >160 | 3 | 10 | 2 |
| Particles >38µm | | ASTM D7647 | >40 | 0 | 0 | 0 |
| Particles >71µm | | ASTM D7647 | >10 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >-/19/16 | 17/15/11 | 19/16/12 | 16/14/10 |
| 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 | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|----------------------|----------|-------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185m | >15 | 2 | <1 | 1 |
| Boron | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 0 | 1 | 3 |
| Calcium | ppm | ASTM D5185m | 0 | 1 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 485 | 427 | 421 | 446 |
| Zinc | ppm | ASTM D5185m | 0 | 21 | 15 | 22 |
| Sulfur | ppm | ASTM D5185m | | 4980 | 4542 | 5394 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.85 | 1.10 | 1.05 | 1.11 |
| Visc @ 40°C | cSt | ASTM D445 | 335 | 325 | 340 | 339 |
| Visc @ 100°C | cSt | ASTM D445 | 38.3 | 37.1 | 37.2 | 37.3 |
| Viscosity Index (VI) | Scale | ASTM D2270 | 164 | 162 | 157 | 158 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0932117 **Received** : 12 Jul 2024
Lab Number : 06234876 **Tested** : 15 Jul 2024
Unique Number : 11123710 **Diagnosed** : 15 Jul 2024 - Don Baldridge
Test Package : PLANT (Additional Tests: KV100, VI)

JPHYTEC

JP
Contact: Service

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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