



OIL ANALYSIS REPORT

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

Machine Id
1WM/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 | | WC0932113 | WC0807391 | WC0807266 |
| Sample Date | | Client Info | | 18 Apr 2024 | 06 Nov 2023 | 07 Apr 2023 |
| Machine Age | mths | Client Info | | 0 | 0 | 70 |
| Oil Age | mths | Client Info | | 82 | 77 | 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 | 10 | 7 | 8 |
| Chromium | ppm | ASTM D5185m | >15 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >15 | 0 | 0 | 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

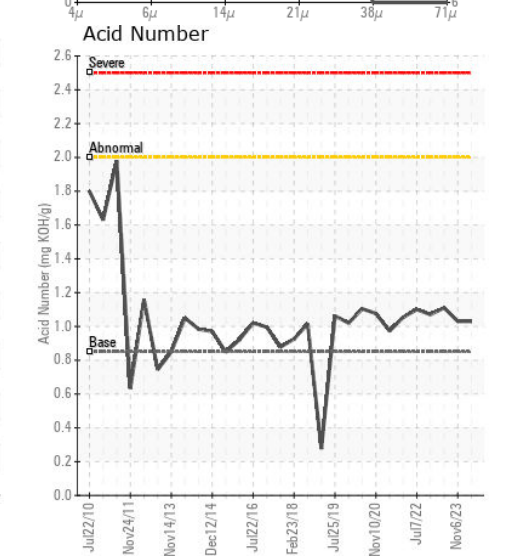
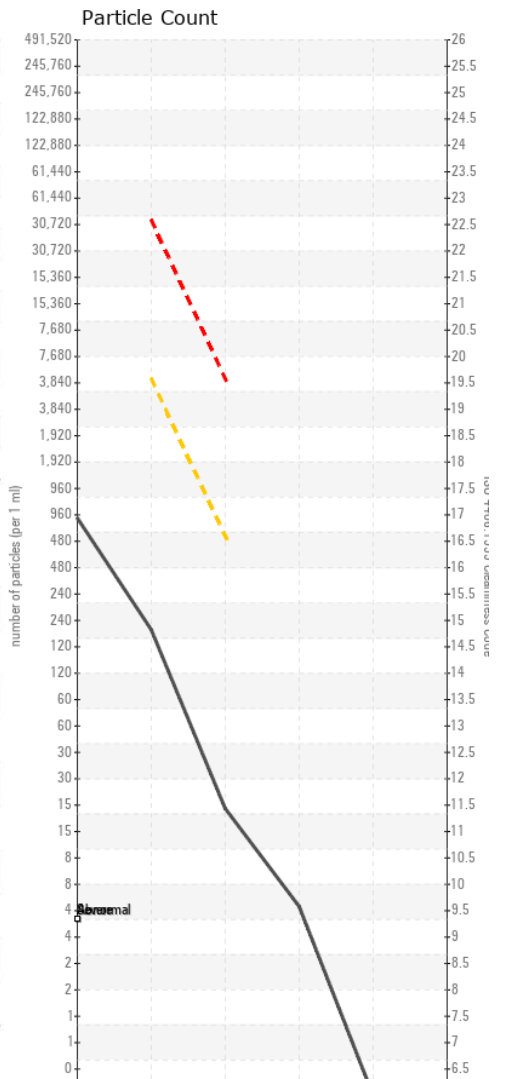
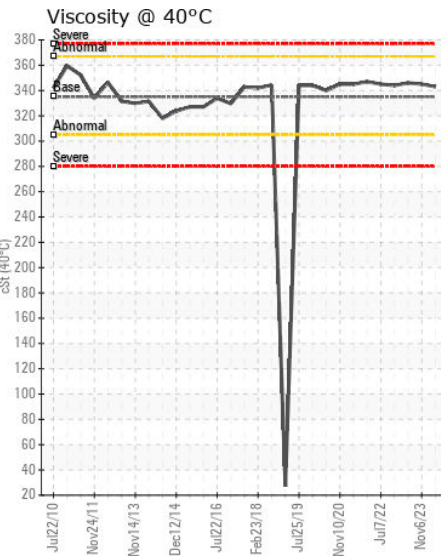
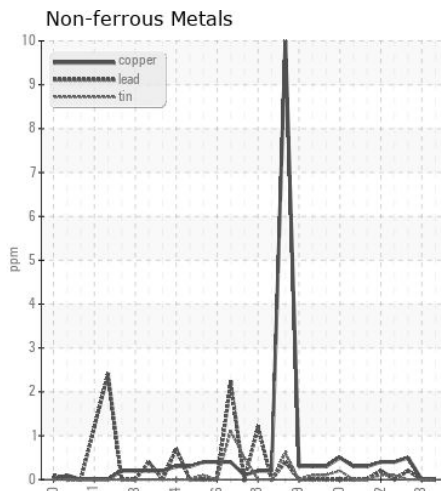
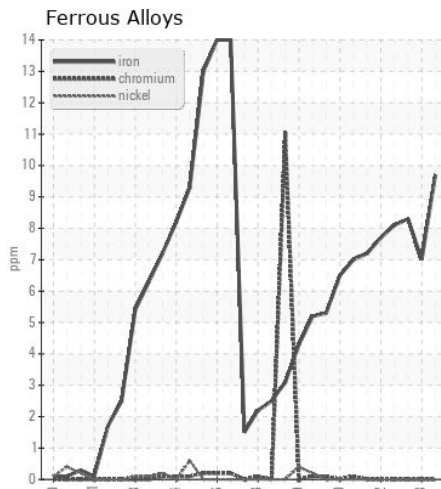
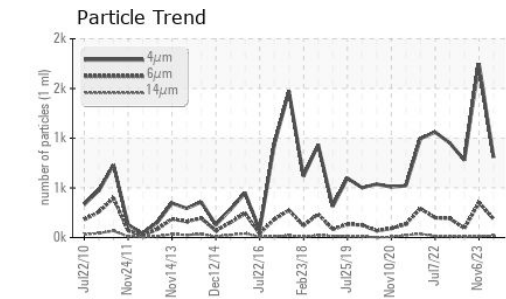
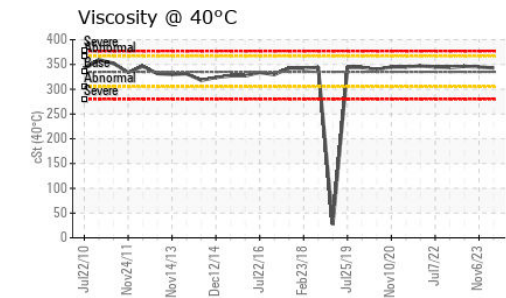
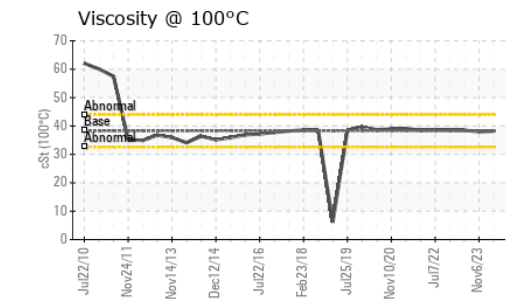
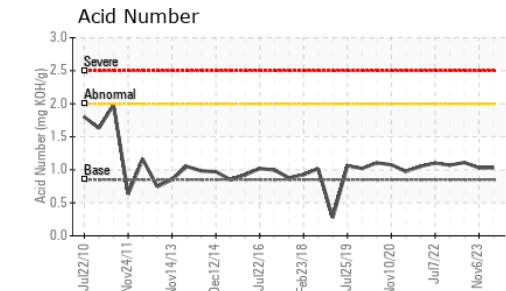
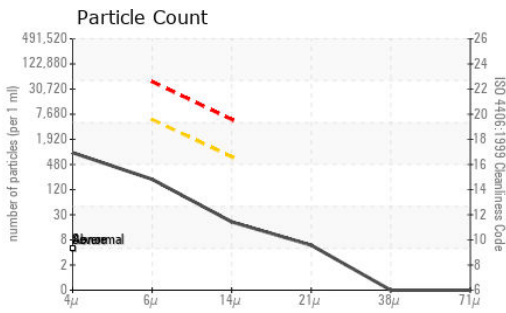
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|--------------|----------|-----------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >50 | 1 | 1 | 1 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 2 | 5 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | | 807 | 1751 | 779 |
| Particles >6µm | | ASTM D7647 | >5000 | 187 | 352 | 94 |
| Particles >14µm | | ASTM D7647 | >640 | 18 | 13 | 7 |
| Particles >21µm | | ASTM D7647 | >160 | 5 | 4 | 2 |
| Particles >38µm | | ASTM D7647 | >40 | 0 | 0 | 1 |
| Particles >71µm | | ASTM D7647 | >10 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >-/19/16 | 17/15/11 | 18/16/11 | 17/14/10 |
| 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 | 0 | <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 | 0 |
| Magnesium | ppm | ASTM D5185m | | 0 | 1 | 3 |
| Calcium | ppm | ASTM D5185m | 0 | <1 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 485 | 422 | 410 | 440 |
| Zinc | ppm | ASTM D5185m | 0 | 35 | 23 | 28 |
| Sulfur | ppm | ASTM D5185m | | 4893 | 4461 | 5626 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.85 | 1.03 | 1.03 | 1.11 |
| Visc @ 40°C | cSt | ASTM D445 | 335 | 343 | 345 | 346 |
| Visc @ 100°C | cSt | ASTM D445 | 38.3 | 38.2 | 38.0 | 38.5 |
| Viscosity Index (VI) | Scale | ASTM D2270 | 164 | 160 | 159 | 161 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0932113 **Received** : 12 Jul 2024
Lab Number : 06234877 **Tested** : 15 Jul 2024
Unique Number : 11123711 **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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