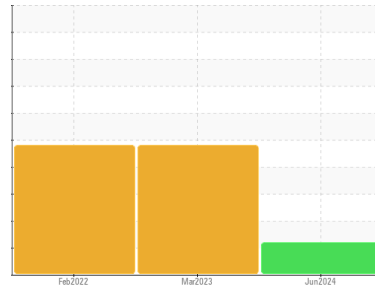




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
PMC36
 Component
Gearbox

Fluid
MOBIL MOBILGEAR SHC 320 (55 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | | WC0838828 | WC0721683 | WC956926 |
| Sample Date | Client Info | | | 06 Jun 2024 | 01 Mar 2023 | 28 Feb 2022 |
| Machine Age | hrs | Client Info | | 6000 | 0 | 0 |
| Oil Age | hrs | Client Info | | 6000 | 6000 | 0 |
| Oil Changed | Client Info | | | Not Chngd | Not Chngd | N/A |
| Sample Status | | | | ABNORMAL | SEVERE | SEVERE |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water | WC Method | | >0.2 | NEG | NEG | NEG |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|---------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) | >200 | 8 | 7 | 10 |
| Chromium | ppm | ASTM D5185(m) | >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >10 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >25 | <1 | <1 | <1 |
| Lead | ppm | ASTM D5185(m) | >50 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) | >200 | 4 | <1 | 1 |
| Tin | ppm | ASTM D5185(m) | >10 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185(m) | >5 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

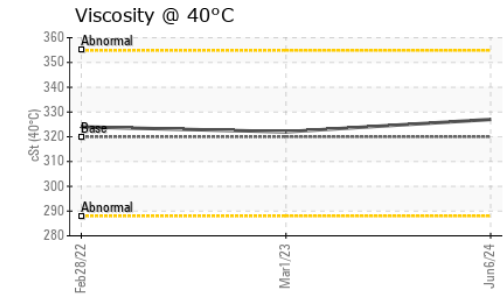
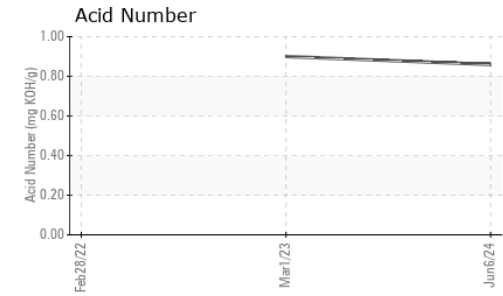
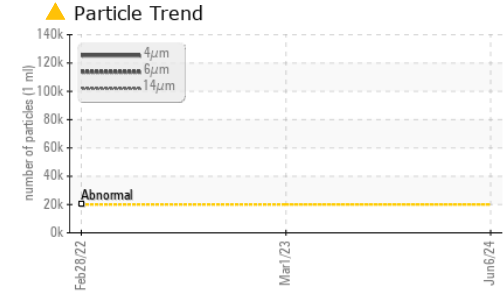
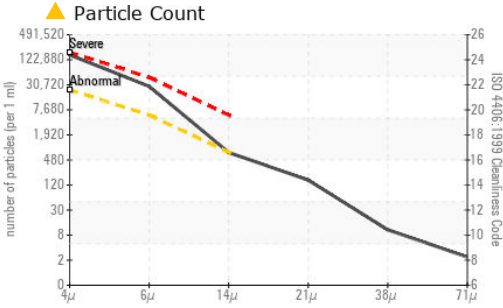
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|---------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| Barium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185(m) | | <1 | <1 | 5 |
| Phosphorus | ppm | ASTM D5185(m) | | 409 | 396 | 454 |
| Zinc | ppm | ASTM D5185(m) | | 2 | 1 | 1 |
| Sulfur | ppm | ASTM D5185(m) | | 1656 | 1600 | 1720 |
| Lithium | ppm | ASTM D5185(m) | | 1 | <1 | 1 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|---------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | >50 | 45 | ▲ 345 | ▲ 144 |
| Sodium | ppm | ASTM D5185(m) | | 3 | 3 | 3 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | 0 | <1 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--------------|-----------|-------------------|---------|----------|----------|
| Particles >4µm | ASTM D7647 | >20000 | ▲ 138524 | --- | --- | |
| Particles >6µm | ASTM D7647 | >5000 | ▲ 24503 | --- | --- | |
| Particles >14µm | ASTM D7647 | >640 | 638 | --- | --- | |
| Particles >21µm | ASTM D7647 | >160 | 139 | --- | --- | |
| Particles >38µm | ASTM D7647 | >40 | 9 | --- | --- | |
| Particles >71µm | ASTM D7647 | >10 | 2 | --- | --- | |
| Oil Cleanliness | ISO 4406 (c) | >21/19/16 | ▲ 24/22/16 | --- | --- | |



OIL ANALYSIS REPORT



| FLUID DEGRADATION | method | limit/base | current | history1 | history2 |
|-------------------|--------|------------|---------|----------|----------|
|-------------------|--------|------------|---------|----------|----------|

| | | | | | |
|------------------|----------|------------|-------------|------|-----|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.86 | 0.90 | --- |
|------------------|----------|------------|-------------|------|-----|

| VISUAL | method | limit/base | current | history1 | history2 |
|--------|--------|------------|---------|----------|----------|
|--------|--------|------------|---------|----------|----------|

| | | | | | | |
|------------------|--------|---------|-------|--------------|-------|-------|
| White Metal | scalar | Visual* | NONE | NONE | NONE | VLITE |
| 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 | NONE | NONE |
| Sand/Dirt | scalar | Visual* | NONE | NONE | VLITE | VLITE |
| Appearance | scalar | Visual* | NORML | NORML | NORML | NORML |
| Odor | scalar | Visual* | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | NEG |
| Free Water | scalar | Visual* | | NEG | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
|------------------|--------|------------|---------|----------|----------|

| | | | | | | |
|-------------|-----|---------------|-----|------------|-----|-----|
| Visc @ 40°C | cSt | ASTM D7279(m) | 320 | 327 | 322 | 324 |
|-------------|-----|---------------|-----|------------|-----|-----|

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

| | | | | | |
|-----------|----------|----------|--|--|--|
| Color | | | | | |
| Bottom | | | | | |
| PrtFilter | no image | no image | | | |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0838828 **Received** : 10 Jun 2024
Lab Number : **02640866** **Tested** : 11 Jun 2024
Unique Number : 5798405 **Diagnosed** : 11 Jun 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: PrtCount)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

DART CANADA
 2121 MARKHAM RD
 SCARBOROUGH, ON
 CA M1B 2W3
 Contact: Mike Castro
 mike.castro@dartcanada.ca
 T: (416)293-2877
 F: (416)332-3492