

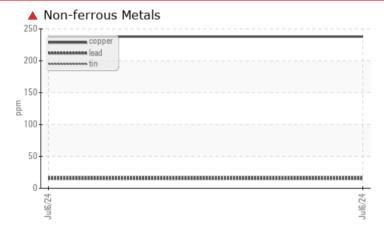


# **PROBLEM SUMMARY**



#### Machine Id K2 P1 NW Component Bearing Fluid MOBIL MOBILGEAR SHC 1500 (40 LTR)

# COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

| PROBLEMATIC TEST RESULTS |        |               |      |              |          |          |  |  |
|--------------------------|--------|---------------|------|--------------|----------|----------|--|--|
| Sample Status            |        |               |      | SEVERE       |          |          |  |  |
| Copper                   | ppm    | ASTM D5185(m) | >20  | <b>A</b> 238 |          |          |  |  |
| Yellow Metal             | scalar | Visual*       | NONE | 🔺 LIGHT      |          |          |  |  |
| PrtFilter                |        |               |      |              | no image | no image |  |  |

Customer Id: CARDUN Sample No.: WC0959791 Lab Number: 02647703 Test Package: IND 2



To manage this report scan the QR code

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| RECOMMENDED ACTIONS       |        |      |         |   |  |  |
|---------------------------|--------|------|---------|---|--|--|
| Action                    | Status | Date | Done By | Description   |  |  |
| Change Fluid              |        |      | ?       | We recommend that you drain the oil from the component if this has not already been done. |  |  |
| Resample                  |        |      | ?       | We recommend an early resample to monitor this condition.                                 |  |  |
| Check For Visual<br>Metal |        |      | ?       | We advise that you check for visible metal particles in the oil.                          |  |  |

HISTORICAL DIAGNOSIS



# **OIL ANALYSIS REPORT**



#### Machine Id K2 P1 NW Component Bearing Fluid MOBIL MOBILGEAR SHC 1500 (40 LTR)

# DIAGNOSIS

### A Recommendation

We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

# A Wear

Copper ppm levels are severe. Light concentration of visible metal present. Bearing wear is indicated.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

| SAMPLE INFORM    | 1ATI <u>ON</u> | method        | limit/base | current     | history1 | history2 |
|------------------|----------------|---------------|------------|-------------|----------|----------|
| Sample Number    |                | Client Info   |            | WC0959791   |          |          |
| Sample Date      |                | Client Info   |            | 06 Jul 2024 |          |          |
| Machine Age      | mths           | Client Info   |            | 4           |          |          |
| Oil Age          | mths           | Client Info   |            | 0           |          |          |
| Oil Changed      |                | Client Info   |            | N/A         |          |          |
| Sample Status    |                |               |            | SEVERE      |          |          |
| CONTAMINATION    | ١              | method        | limit/base | current     | history1 | history2 |
| Water            |                | WC Method     | >2         | NEG         |          |          |
| WEAR METALS      |                | method        | limit/base | current     | history1 | history2 |
| PQ               |                | ASTM D8184*   |            | 8           |          |          |
| Iron             | ppm            | ASTM D5185(m) | >20        | 19          |          |          |
| Chromium         | ppm            | ASTM D5185(m) | >20        | 0           |          |          |
| Nickel           | ppm            | ASTM D5185(m) | >20        | 2           |          |          |
| Titanium         | ppm            | ASTM D5185(m) |            | 1           |          |          |
| Silver           | ppm            | ASTM D5185(m) |            | 0           |          |          |
| Aluminum         | ppm            | ASTM D5185(m) | >20        | <1          |          |          |
| Lead             | ppm            | ASTM D5185(m) | >20        | 15          |          |          |
| Copper           | ppm            | ASTM D5185(m) | >20        | <b>238</b>  |          |          |
| Tin              | ppm            | ASTM D5185(m) | >20        | 18          |          |          |
| Antimony         | ppm            | ASTM D5185(m) |            | 0           |          |          |
| Vanadium         | ppm            | ASTM D5185(m) |            | 0           |          |          |
| Beryllium        | ppm            | ASTM D5185(m) |            | 0           |          |          |
| Cadmium          | ppm            | ASTM D5185(m) |            | 0           |          |          |
| ADDITIVES        |                | method        | limit/base | current     | history1 | history2 |
| Boron            | ppm            | ASTM D5185(m) |            | 27          |          |          |
| Barium           | ppm            | ASTM D5185(m) |            | 0           |          |          |
| Molybdenum       | ppm            | ASTM D5185(m) |            | 0           |          |          |
| Manganese        | ppm            | ASTM D5185(m) |            | <1          |          |          |
| Magnesium        | ppm            | ASTM D5185(m) |            | 14          |          |          |
| Calcium          | ppm            | ASTM D5185(m) |            | 25          |          |          |
| Phosphorus       | ppm            | ASTM D5185(m) |            | 183         |          |          |
| Zinc             | ppm            | ASTM D5185(m) |            | 13          |          |          |
| Sulfur           | ppm            | ASTM D5185(m) |            | 3364        |          |          |
| Lithium          | ppm            | ASTM D5185(m) |            | <1          |          |          |
| CONTAMINANTS     |                | method        | limit/base | current     | history1 | history2 |
| Silicon          | ppm            | ASTM D5185(m) | >15        | 9           |          |          |
| Sodium           | ppm            | ASTM D5185(m) |            | <1          |          |          |
| Potassium        | ppm            | ASTM D5185(m) | >20        | 0           |          |          |
| FLUID DEGRADA    | TION           | method        | limit/base | current     | history1 | history2 |
| Acid Number (AN) | mg KOH/g       | ASTM D974*    |            | 0.76        |          |          |



250

200

150

51

0.80 0.70 (B/HOX

B 0.50

ua 0.40 Lagun 0.30

0.20 0.10 0.00

1700

1650 -1600 -(⊃1550 -⊕ 1500 - **Bas** 3 1450 -

> 1400 1350 1300

> > 20

150 문

50

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116/7/

PQ

100 Abnorma

Abnorma

🔺 Non-ferrous Metals

Acid Number

Viscosity @ 40°C

# **OIL ANALYSIS REPORT**

VISUAL NONE NONE White Metal Visual\* scalar Yellow Metal Visual\* NONE LIGHT scalar NONE Precipitate scalar Visual\* NONE Silt scalar Visual\* NONE VLITE Debris LIGHT Visual\* NONE scalar Sand/Dirt NONE scalar Visual\* NONE NORML Appearance scalar Visual\* NORML Odor NORML NORML scalar Visual\* **Emulsified Water** scalar Visual\* >2 NEG Free Water scalar Visual\* NEG **FLUID PROPERTIES** limit/base Visc @ 40°C cSt ASTM D7279(m) 1500 1361 SAMPLE IMAGES IB/74 Color no image no image Bottom no image no image PrtFilter no image no image GRAPHS ul6/24 Ferrous Alloys PQ 20 15 200 E 10 mickel 180 160 n 140 120 0 100 Non-ferrous Metals 80 60 200 lead 40 100 20 0 Ο ul6/74 Viscosity @ 40°C Acid Number (B/H0.80 Abnorma 1700-1600 <sub>ي</sub> B 0.60 . €1500 Ba 10.40 La 0.40 ਤੋਂ <sub>1400</sub> 1300 Pg 0.00 ul6/74 C/BIII Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Carmeuse Lime (Canada) Ltd Dundas Operations

CALA Sample No. : WC0959791 Received : 12 Jul 2024 R.R. #2, 600 5 Hwy W Lab Number : 02647703 Tested : 16 Jul 2024 Dundas, ON ISO 17025:2017 Accredited Unique Number : 5813255 Diagnosed : 16 Jul 2024 - Kevin Marson CA L9H 5E2 Laboratory Test Package : IND 2 (Additional Tests: Bottom, BottomAnalysis, FILTERPATCH, TAN Man) Contact: Harsh Murria To discuss this sample report, contact Customer Service at 1-800-268-2131. harsh.murria@carmeuse.com Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (905)628-7651 Validity of results and interpretation are based on the sample and information as supplied. E:

Report Id: CARDUN [WCAMIS] 02647703 (Generated: 07/16/2024 09:08:09) Rev: 1

Contact/Location: Harsh Murria - CARDUN Page 4 of 4