

## WEAR **ABNORMAL** CONTAMINATION **ABNORMAL** FLUID CONDITION NORMAL

History1

History2

## Contracting 1DW310EXJNF716118 5111 Component Rear Differential

MOBIL MOBILFLUID 424 (--- GAL)

| RECOMMENDATION  | Test            | UOM    | Method      | Limit/Abn | Current        |
|---|-----------------|--------|-------------|-----------|----------------|
| We recommend you service the filters on this component if applicable.       | Sample Number   |        | Client Info |           | WC0809011      |
| Resample at the next service interval to monitor.                           | Sample Date     | la un  | Client Info |           | 18 May 2023    |
|   | Machine Age     | hrs    | Client Info |           | 772            |
|   | Oil Age         | hrs    | Client Info |           | 103            |
|   | Filter Age      | hrs    | Client Info |           | 0              |
|   | Oil Changed     |        | Client Info |           | Not Changd     |
|   | Filter Changed  |        | Client Info |           | Not Changd     |
|   | Sample Status   |        |             | ABNORMAL  |                |
| WEAR  | Iron            | ppm    | ASTM D5185m | >500      | 235            |
|   | Chromium        | ppm    | ASTM D5185m | >10       | 3              |
| The copper level is abnormal. All other component wear rates are<br>normal. | Nickel          | ppm    | ASTM D5185m | >10       | 8              |
| nonnai.   | Titanium        | ppm    | ASTM D5185m |           | <1             |
|   | Silver          | ppm    | ASTM D5185m |           | 0              |
|   | Aluminum        | ppm    | ASTM D5185m | >25       | 3              |
|   | Lead            | ppm    | ASTM D5185m | >25       | 6              |
|   | Copper          | ppm    | ASTM D5185m | >100      | 🔺 114          |
|   | Tin             | ppm    | ASTM D5185m | >10       | 7              |
|   | Vanadium        | ppm    | ASTM D5185m |           | <1             |
|   | White Metal     | scalar | *Visual     | NONE      | MODER          |
|   | Yellow Metal    | scalar | *Visual     | NONE      | NONE           |
| CONTAMINATION   | Silicon         | ppm    | ASTM D5185m | >75       | 13             |
|   | Potassium       | ppm    | ASTM D5185m | >20       | 2              |
| There is a high amount of particulates present in the oil. High             | Water           |        | WC Method   | >.2       | NEG            |
| concentration of visible dirt/debris present in the oil.                    | Particles >4µm  |        | ASTM D7647  | >20000    | ▲ 50067        |
|   | Particles >6µm  |        | ASTM D7647  | >5000     | <b>A</b> 27274 |
|   | Particles >14µm |        | ASTM D7647  | >640      | <b>4642</b>    |
|   | Particles >21µm |        | ASTM D7647  | >160      | 🔺 1564         |
|   | Particles >38µm |        | ASTM D7647  | >40       | <b>A</b> 241   |
|   | Particles >71µm |        | ASTM D7647  | >10       | <b>4</b> 25    |

**FLUID CONDITION** 

The condition of the oil is acceptable for the time in service.

| White Metal      | scalar | *Visual      | NONE      | MODER    |      |
|------------------|--------|--------------|-----------|----------|------|
| Yellow Metal     |        |              | NONE      | NONE     |      |
| Yellow Metal     | scalar | *Visual      | NONE      | <br>NONE | <br> |
| Silicon          | ppm    | ASTM D5185m  | >75       | 13       | <br> |
| Potassium        | ppm    | ASTM D5185m  | >20       | 2        | <br> |
| Water            | 1-1-   | WC Method    | >.2       | NEG      | <br> |
| Particles >4µm   |        | ASTM D7647   | >20000    | 50067    | <br> |
| Particles >6µm   |        | ASTM D7647   | >5000     | 27274    | <br> |
| Particles >14µm  |        | ASTM D7647   | >640      | 4642     | <br> |
| Particles >21µm  |        | ASTM D7647   | >160      | 1564     | <br> |
| Particles >38µm  |        | ASTM D7647   | >40       | 241      | <br> |
| Particles >71µm  |        | ASTM D7647   | >10       | 25       | <br> |
| Oil Cleanliness  |        | ISO 4406 (c) | >21/19/16 | 23/22/19 | <br> |
| Silt             | scalar | *Visual      | NONE      | NONE     | <br> |
| Debris           | scalar | *Visual      | NONE      | HEAVY    | <br> |
| Sand/Dirt        | scalar | *Visual      | NONE      | NONE     | <br> |
| Appearance       | scalar | *Visual      | NORML     | NORML    | <br> |
| Odor             | scalar | *Visual      | NORML     | NORML    | <br> |
| Emulsified Water | scalar | *Visual      | >.2       | NEG      | <br> |
|                  |        |              |           | <br>     | <br> |
| Sodium           | ppm    | ASTM D5185m  |           | 19       | <br> |
| Boron            | ppm    | ASTM D5185m  |           | 96       | <br> |
| Barium           | ppm    | ASTM D5185m  |           | 0        | <br> |
| Molybdenum       | ppm    | ASTM D5185m  |           | <1       | <br> |
| Manganese        | ppm    | ASTM D5185m  |           | 62       | <br> |
| Magnesium        | ppm    | ASTM D5185m  |           | 22       | <br> |
| Calcium          | ppm    | ASTM D5185m  |           | 3620     | <br> |
| Phosphorus       | ppm    | ASTM D5185m  |           | 1176     | <br> |
| Zinc             | ppm    | ASTM D5185m  |           | 1495     | <br> |
| Sulfur           | ppm    | ASTM D5185m  |           | 4093     | <br> |
| Visc @ 40°C      | cSt    | ASTM D445    | 55        | 63.5     | <br> |
|                  |        |              |           |          |      |



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