



# OIL ANALYSIS REPORT

|                 |               |
|-----------------|---------------|
| WEAR            | <b>NORMAL</b> |
| CONTAMINATION   | <b>NORMAL</b> |
| FLUID CONDITION | <b>NORMAL</b> |

Area  
**Mobile Fleet**  
 Machine Id  
**6454 6454**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL MOBILFLUID 424 (20 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>WC0939247</b>   | WC0902912   | WC0885810   |
| Sample Date    |     | Client Info |           | <b>20 May 2024</b> | 23 Feb 2024 | 22 Dec 2023 |
| Machine Age    | hrs | Client Info |           | <b>8084</b>        | 7605        | 7308        |
| Oil Age        | hrs | Client Info |           | <b>479</b>         | 1034        | 737         |
| Filter Age     | hrs | Client Info |           | <b>479</b>         | 1034        | 737         |
| Oil Changed    |     | Client Info |           | <b>Not Changd</b>  | Changed     | Not Changd  |
| Filter Changed |     | Client Info |           | <b>Not Changd</b>  | Changed     | Not Changd  |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## WEAR

All component wear rates are normal.

|              |        |             |      |              |      |      |
|--------------|--------|-------------|------|--------------|------|------|
| Iron         | ppm    | ASTM D5185m | >20  | <b>2</b>     | 0    | 3    |
| Chromium     | ppm    | ASTM D5185m | >10  | <b>0</b>     | <1   | <1   |
| Nickel       | ppm    | ASTM D5185m | >10  | <b>0</b>     | 0    | 0    |
| Titanium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | 0    |
| Silver       | ppm    | ASTM D5185m |      | <b>0</b>     | <1   | 0    |
| Aluminum     | ppm    | ASTM D5185m | >10  | <b>1</b>     | 1    | 2    |
| Lead         | ppm    | ASTM D5185m | >10  | <b>0</b>     | 0    | 0    |
| Copper       | ppm    | ASTM D5185m | >75  | <b>&lt;1</b> | <1   | 1    |
| Tin          | ppm    | ASTM D5185m | >10  | <b>0</b>     | 0    | 0    |
| Vanadium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | 0    |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |

## CONTAMINATION

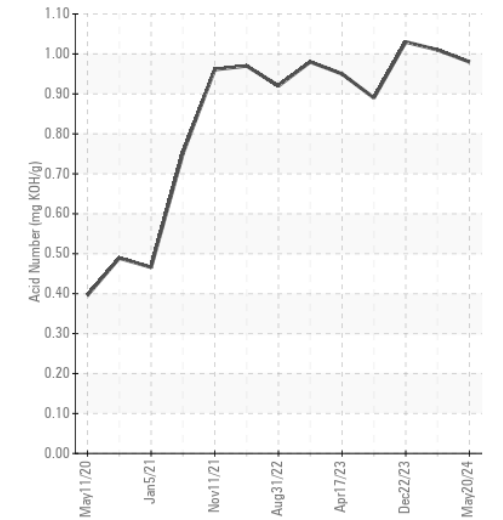
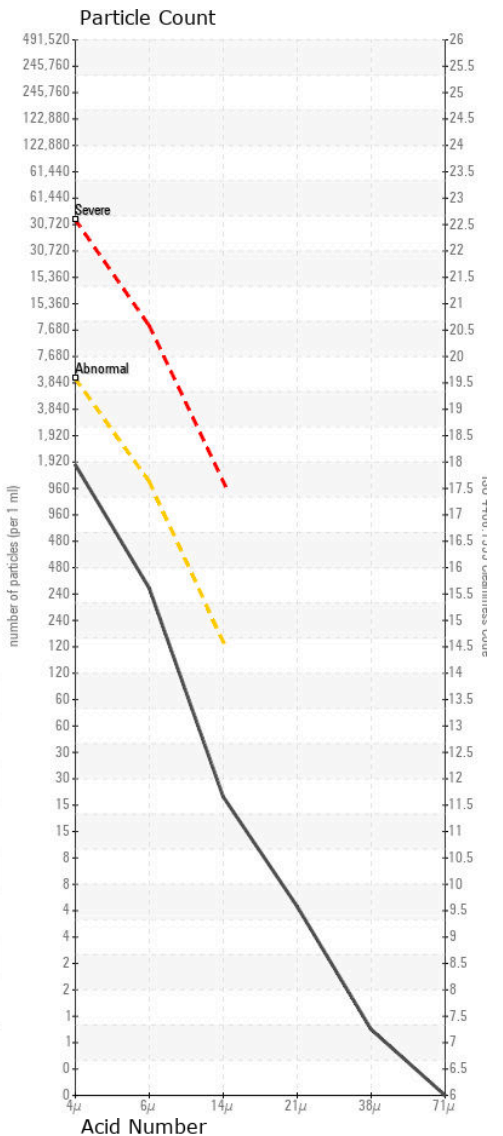
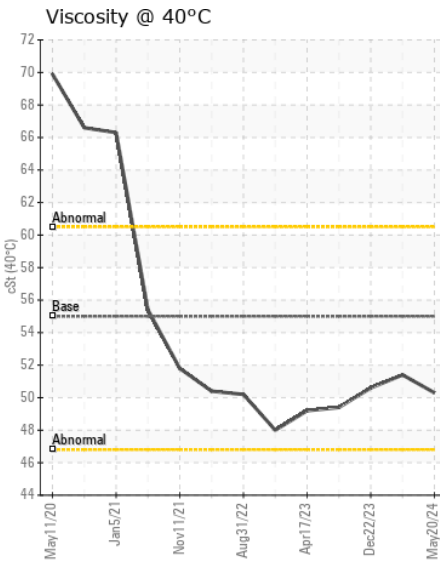
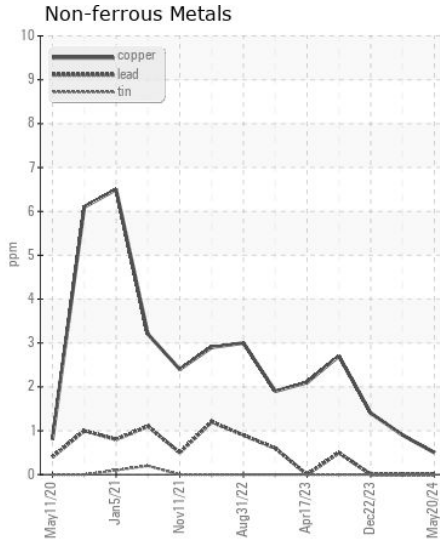
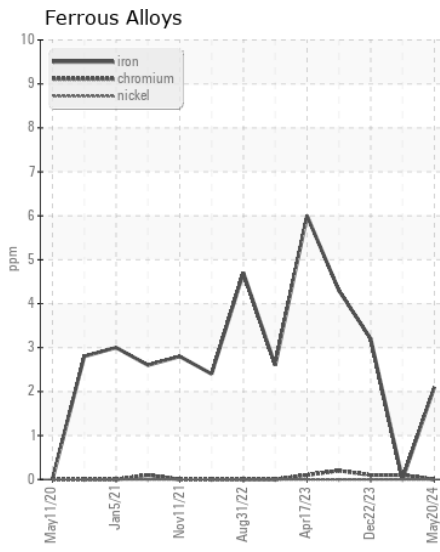
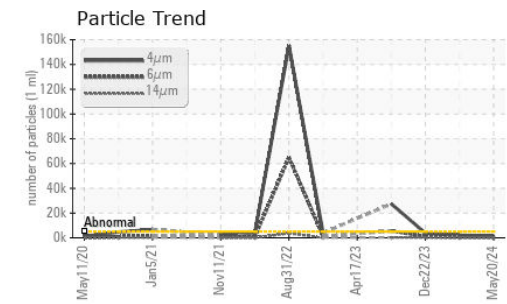
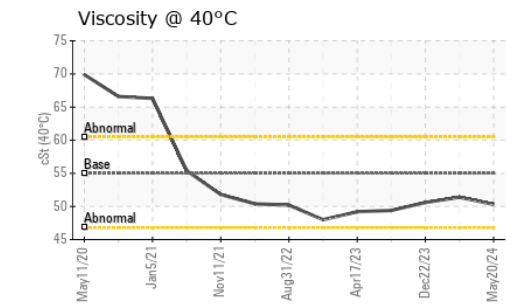
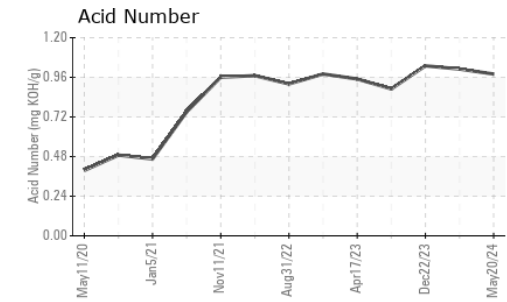
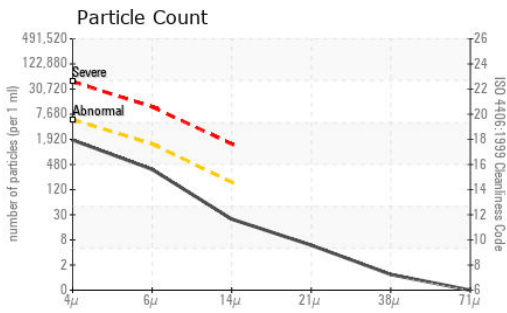
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

|                  |        |              |           |                 |          |          |
|------------------|--------|--------------|-----------|-----------------|----------|----------|
| Silicon          | ppm    | ASTM D5185m  | >20       | <b>11</b>       | 9        | 11       |
| Potassium        | ppm    | ASTM D5185m  | >20       | <b>0</b>        | 0        | 2        |
| Water            |        | WC Method    | >0.1      | <b>NEG</b>      | NEG      | NEG      |
| Particles >4µm   |        | ASTM D7647   | >5000     | <b>1621</b>     | 2070     | 3730     |
| Particles >6µm   |        | ASTM D7647   | >1300     | <b>322</b>      | 509      | 1068     |
| Particles >14µm  |        | ASTM D7647   | >160      | <b>21</b>       | 46       | 73       |
| Particles >21µm  |        | ASTM D7647   | >40       | <b>5</b>        | 12       | 21       |
| Particles >38µm  |        | ASTM D7647   | >10       | <b>1</b>        | 1        | 1        |
| Particles >71µm  |        | ASTM D7647   | >3        | <b>0</b>        | 0        | 0        |
| Oil Cleanliness  |        | ISO 4406 (c) | >19/17/14 | <b>18/16/12</b> | 18/16/13 | 19/17/13 |
| Silt             | scalar | *Visual      | NONE      | <b>NONE</b>     | NONE     | NONE     |
| Debris           | scalar | *Visual      | NONE      | <b>NONE</b>     | NONE     | NONE     |
| Sand/Dirt        | scalar | *Visual      | NONE      | <b>NONE</b>     | NONE     | NONE     |
| Appearance       | scalar | *Visual      | NORML     | <b>NORML</b>    | NORML    | NORML    |
| Odor             | scalar | *Visual      | NORML     | <b>NORML</b>    | NORML    | NORML    |
| Emulsified Water | scalar | *Visual      | >0.1      | <b>NEG</b>      | 0.2%     | 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 |    | <b>&lt;1</b> | 0    | 0    |
| Boron            | ppm      | ASTM D5185m |    | <b>141</b>   | 106  | 134  |
| Barium           | ppm      | ASTM D5185m |    | <b>0</b>     | 0    | 0    |
| Molybdenum       | ppm      | ASTM D5185m |    | <b>28</b>    | 14   | 16   |
| Manganese        | ppm      | ASTM D5185m |    | <b>&lt;1</b> | <1   | 0    |
| Magnesium        | ppm      | ASTM D5185m |    | <b>35</b>    | 55   | 55   |
| Calcium          | ppm      | ASTM D5185m |    | <b>3445</b>  | 3338 | 3565 |
| Phosphorus       | ppm      | ASTM D5185m |    | <b>1154</b>  | 1042 | 1070 |
| Zinc             | ppm      | ASTM D5185m |    | <b>1424</b>  | 1401 | 1471 |
| Sulfur           | ppm      | ASTM D5185m |    | <b>8735</b>  | 7138 | 8340 |
| Acid Number (AN) | mg KOH/g | ASTM D8045  |    | <b>0.98</b>  | 1.01 | 1.03 |
| Visc @ 40°C      | cSt      | ASTM D445   | 55 | <b>50.3</b>  | 51.4 | 50.6 |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : WC0939247

**Lab Number** : 06187529

**Unique Number** : 11044281

**Test Package** : CONST

**Received** : 22 May 2024

**Tested** : 23 May 2024

**Diagnosed** : 24 May 2024 - Don Baldrige

**CAROLINA SUNROCK**

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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)