



# OIL ANALYSIS REPORT

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

Area  
**Mobile Fleet**  
 Machine Id  
**6417 6417**  
 Component  
**Hydraulic System**  
 Fluid  
**MOBIL MOBILFLUID 424 (23 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>WC0947886</b>   | WC0937895   | WC0867107   |
| Sample Date    |     | Client Info |           | <b>24 Jun 2024</b> | 29 Apr 2024 | 13 Nov 2023 |
| Machine Age    | hrs | Client Info |           | <b>14522</b>       | 14142       | 13423       |
| Oil Age        | hrs | Client Info |           | <b>1099</b>        | 719         | 941         |
| Filter Age     | hrs | Client Info |           | <b>1099</b>        | 719         | 941         |
| Oil Changed    |     | Client Info |           | <b>Changed</b>     | Not Changd  | Changed     |
| Filter Changed |     | Client Info |           | <b>Changed</b>     | Not Changd  | Changed     |
| Sample Status  |     |             |           | <b>NORMAL</b>      | ATTENTION   | ABNORMAL    |

## WEAR

All component wear rates are normal.

|              |        |             |      |              |      |      |
|--------------|--------|-------------|------|--------------|------|------|
| Iron         | ppm    | ASTM D5185m | >20  | <b>&lt;1</b> | 2    | 2    |
| Chromium     | ppm    | ASTM D5185m | >10  | <b>0</b>     | 0    | 0    |
| 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>     | 0    | 0    |
| Aluminum     | ppm    | ASTM D5185m | >10  | <b>1</b>     | <1   | <1   |
| Lead         | ppm    | ASTM D5185m | >10  | <b>0</b>     | 0    | <1   |
| 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

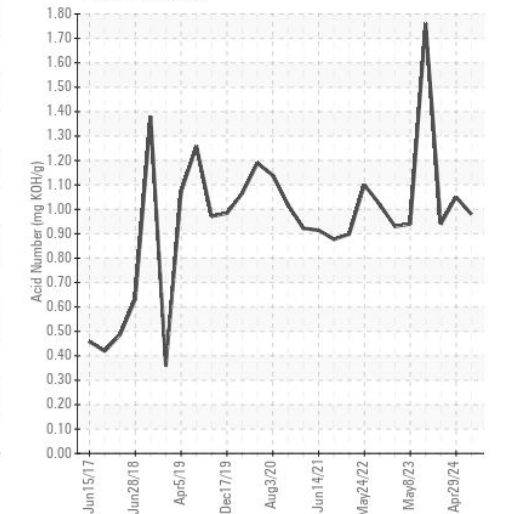
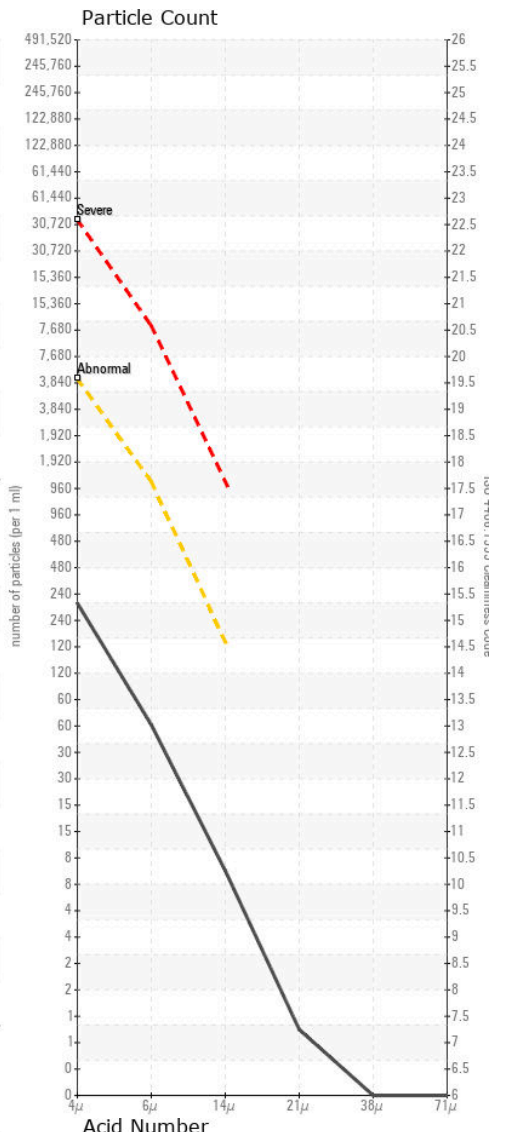
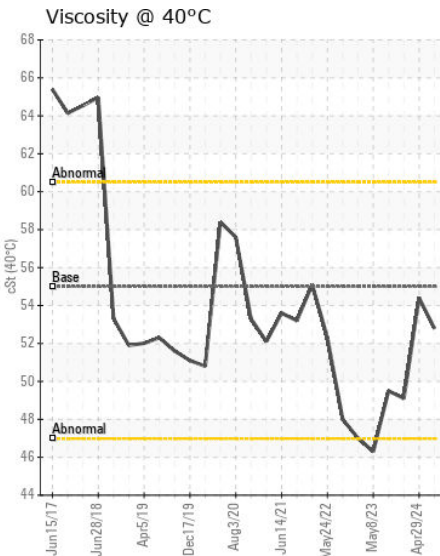
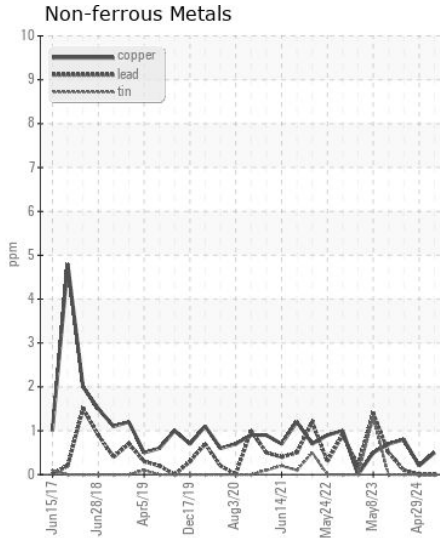
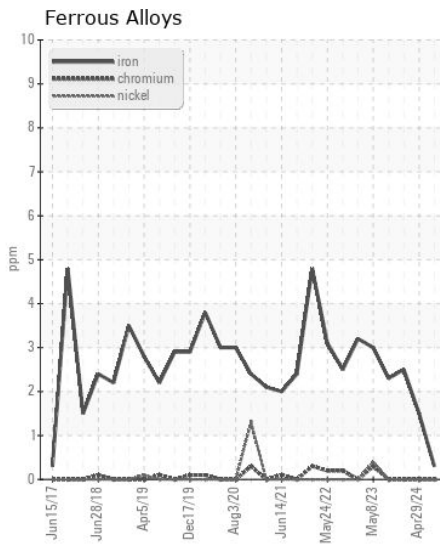
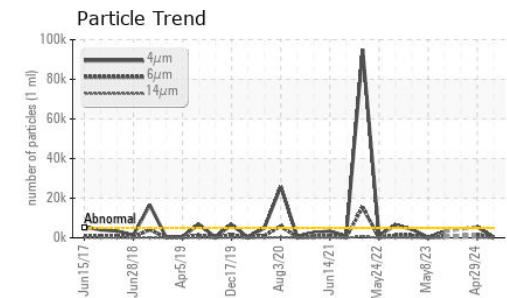
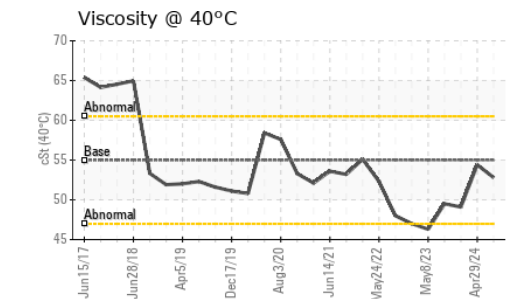
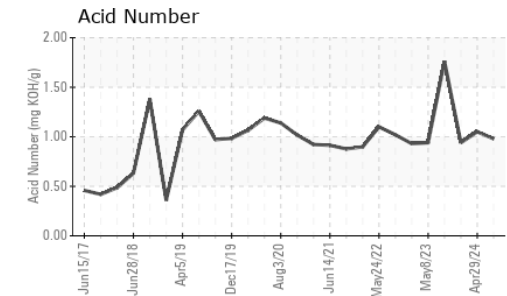
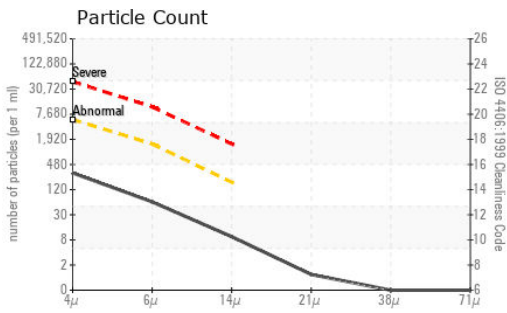
There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable.

|                  |        |              |           |                 |          |       |
|------------------|--------|--------------|-----------|-----------------|----------|-------|
| Silicon          | ppm    | ASTM D5185m  | >20       | <b>15</b>       | 10       | 9     |
| Potassium        | ppm    | ASTM D5185m  | >20       | <b>&lt;1</b>    | 0        | 2     |
| Water            |        | WC Method    | >0.1      | <b>NEG</b>      | NEG      | NEG   |
| Particles >4µm   |        | ASTM D7647   | >5000     | <b>265</b>      | 5530     | ---   |
| Particles >6µm   |        | ASTM D7647   | >1300     | <b>54</b>       | 1646     | ---   |
| Particles >14µm  |        | ASTM D7647   | >160      | <b>8</b>        | 90       | ---   |
| Particles >21µm  |        | ASTM D7647   | >40       | <b>1</b>        | 18       | ---   |
| Particles >38µm  |        | ASTM D7647   | >10       | <b>0</b>        | 1        | ---   |
| Particles >71µm  |        | ASTM D7647   | >3        | <b>0</b>        | 0        | ---   |
| Oil Cleanliness  |        | ISO 4406 (c) | >19/17/14 | <b>15/13/10</b> | 20/18/14 | ---   |
| Silt             | scalar | *Visual      | NONE      | <b>NONE</b>     | NONE     | NONE  |
| Debris           | scalar | *Visual      | NONE      | <b>NONE</b>     | NONE     | HEAVY |
| 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>      | 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 |    | <b>&lt;1</b> | 1    | 0    |
| Boron            | ppm      | ASTM D5185m |    | <b>110</b>   | 111  | 102  |
| Barium           | ppm      | ASTM D5185m |    | <b>0</b>     | 0    | 7    |
| Molybdenum       | ppm      | ASTM D5185m |    | <b>20</b>    | 23   | 14   |
| Manganese        | ppm      | ASTM D5185m |    | <b>&lt;1</b> | 0    | 0    |
| Magnesium        | ppm      | ASTM D5185m |    | <b>56</b>    | 72   | 139  |
| Calcium          | ppm      | ASTM D5185m |    | <b>3410</b>  | 3314 | 2624 |
| Phosphorus       | ppm      | ASTM D5185m |    | <b>1161</b>  | 1114 | 1004 |
| Zinc             | ppm      | ASTM D5185m |    | <b>1423</b>  | 1345 | 1248 |
| Sulfur           | ppm      | ASTM D5185m |    | <b>9060</b>  | 8670 | 8020 |
| Acid Number (AN) | mg KOH/g | ASTM D8045  |    | <b>0.98</b>  | 1.05 | 0.94 |
| Visc @ 40°C      | cSt      | ASTM D445   | 55 | <b>52.8</b>  | 54.4 | 49.1 |



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0947886  
**Lab Number** : 06221073  
**Unique Number** : 11099270  
**Test Package** : CONST  
**Received** : 26 Jun 2024  
**Tested** : 27 Jun 2024  
**Diagnosed** : 27 Jun 2024 - Don Baldrige

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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)