



# OIL ANALYSIS REPORT

|                 |          |
|-----------------|----------|
| WEAR            | NORMAL   |
| CONTAMINATION   | ABNORMAL |
| FLUID CONDITION | NORMAL   |



Area  
**Mobile Fleet**  
Machine Id  
**5213 5213**  
Component  
**Hydraulic System**  
Fluid  
**MOBIL HYDRAULIC 10W (50 GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number  |     | Client Info |           | <b>WC0919053</b>   | WC0596452   | ---      |
| Sample Date    |     | Client Info |           | <b>15 Apr 2024</b> | 08 Jul 2021 | ---      |
| Machine Age    | hrs | Client Info |           | <b>6538</b>        | 3480        | ---      |
| Oil Age        | hrs | Client Info |           | <b>1698</b>        | 1087        | ---      |
| Filter Age     | hrs | Client Info |           | <b>1698</b>        | 1087        | ---      |
| Oil Changed    |     | Client Info |           | <b>Not Changed</b> | Not Changed | ---      |
| Filter Changed |     | Client Info |           | <b>Changed</b>     | Changed     | ---      |
| Sample Status  |     |             |           | <b>ABNORMAL</b>    | NORMAL      | ---      |

## WEAR

All component wear rates are normal.

|              |        |             |      |              |      |     |
|--------------|--------|-------------|------|--------------|------|-----|
| Iron         | ppm    | ASTM D5185m | >20  | <b>11</b>    | 7    | --- |
| Chromium     | ppm    | ASTM D5185m | >10  | <b>0</b>     | 1    | --- |
| Nickel       | ppm    | ASTM D5185m | >10  | <b>0</b>     | 0    | --- |
| Titanium     | ppm    | ASTM D5185m |      | <b>0</b>     | <1   | --- |
| Silver       | ppm    | ASTM D5185m |      | <b>0</b>     | <1   | --- |
| Aluminum     | ppm    | ASTM D5185m | >10  | <b>0</b>     | 0    | --- |
| Lead         | ppm    | ASTM D5185m | >10  | <b>0</b>     | <1   | --- |
| Copper       | ppm    | ASTM D5185m | >75  | <b>6</b>     | 14   | --- |
| Tin          | ppm    | ASTM D5185m | >10  | <b>0</b>     | <1   | --- |
| Vanadium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | --- |
| White Metal  | scalar | *Visual     | NONE | <b>LIGHT</b> | NONE | --- |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | --- |

## CONTAMINATION

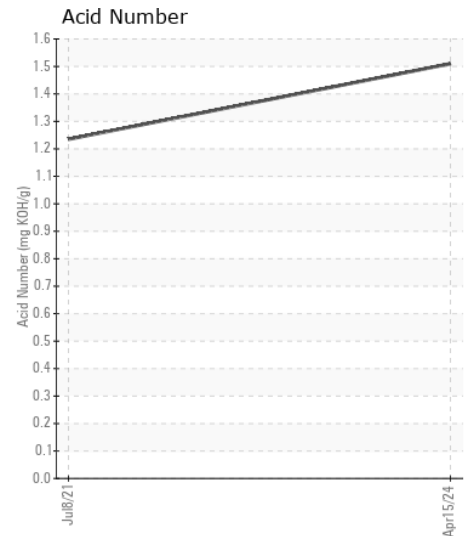
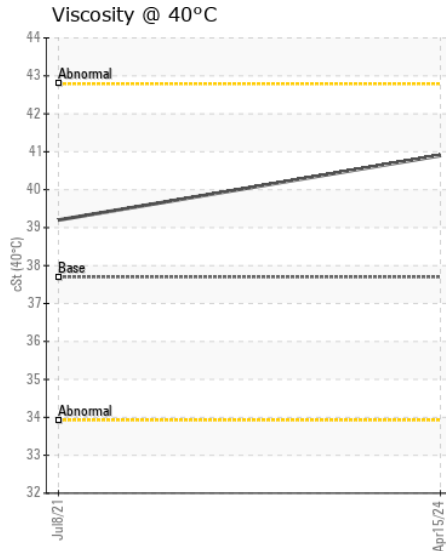
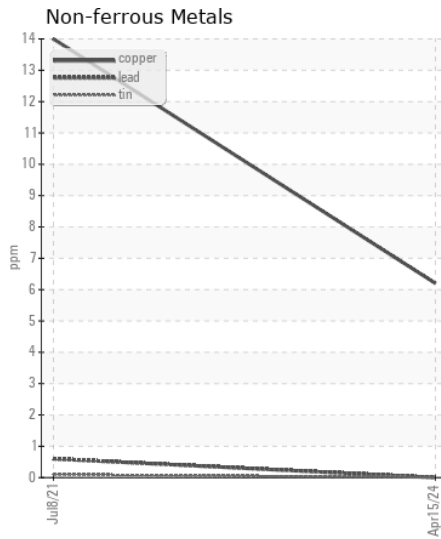
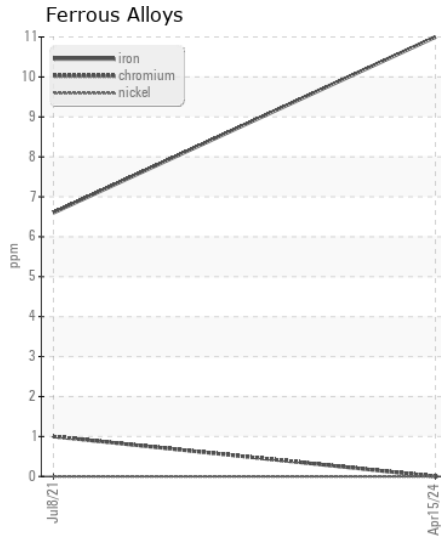
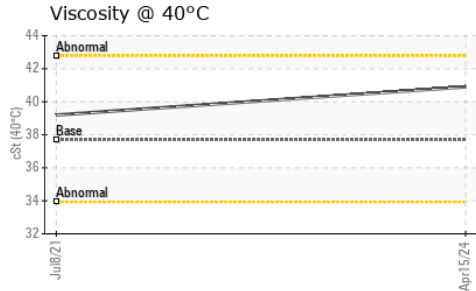
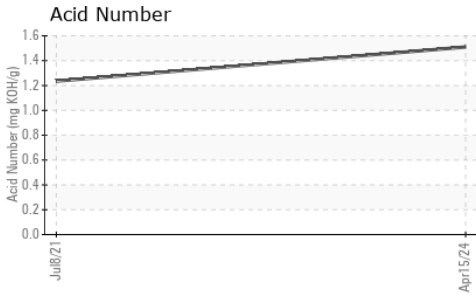
Moderate concentration of visible dirt/debris present in the oil.

|                  |        |              |           |              |          |     |
|------------------|--------|--------------|-----------|--------------|----------|-----|
| Silicon          | ppm    | ASTM D5185m  | >20       | <b>3</b>     | 3        | --- |
| Potassium        | ppm    | ASTM D5185m  | >20       | <b>12</b>    | <1       | --- |
| Water            |        | WC Method    | >0.1      | <b>NEG</b>   | NEG      | --- |
| Particles >4µm   |        | ASTM D7647   | >5000     | <b>---</b>   | 1578     | --- |
| Particles >6µm   |        | ASTM D7647   | >1300     | <b>---</b>   | 287      | --- |
| Particles >14µm  |        | ASTM D7647   | >160      | <b>---</b>   | 14       | --- |
| Particles >21µm  |        | ASTM D7647   | >40       | <b>---</b>   | 2        | --- |
| Particles >38µm  |        | ASTM D7647   | >10       | <b>---</b>   | 0        | --- |
| Particles >71µm  |        | ASTM D7647   | >3        | <b>---</b>   | 0        | --- |
| Oil Cleanliness  |        | ISO 4406 (c) | >19/17/14 | <b>---</b>   | 18/15/11 | --- |
| Silt             | scalar | *Visual      | NONE      | <b>NONE</b>  | NONE     | --- |
| Debris           | scalar | *Visual      | NONE      | <b>MODER</b> | NONE     | --- |
| Sand/Dirt        | scalar | *Visual      | NONE      | <b>NONE</b>  | NONE     | --- |
| Appearance       | scalar | *Visual      | NORML     | <b>NORML</b> | NORML    | --- |
| Odor             | scalar | *Visual      | NORML     | <b>NORML</b> | NORML    | --- |
| Emulsified Water | scalar | *Visual      | >0.1      | <b>NEG</b>   | 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>3</b>     | 1     | --- |
| Boron            | ppm      | ASTM D5185m |      | <b>&lt;1</b> | 4     | --- |
| Barium           | ppm      | ASTM D5185m |      | <b>0</b>     | 0     | --- |
| Molybdenum       | ppm      | ASTM D5185m |      | <b>4</b>     | 1     | --- |
| Manganese        | ppm      | ASTM D5185m |      | <b>0</b>     | <1    | --- |
| Magnesium        | ppm      | ASTM D5185m |      | <b>605</b>   | 526   | --- |
| Calcium          | ppm      | ASTM D5185m |      | <b>65</b>    | 101   | --- |
| Phosphorus       | ppm      | ASTM D5185m |      | <b>941</b>   | 910   | --- |
| Zinc             | ppm      | ASTM D5185m |      | <b>1029</b>  | 1077  | --- |
| Sulfur           | ppm      | ASTM D5185m |      | <b>6251</b>  | 4679  | --- |
| Acid Number (AN) | mg KOH/g | ASTM D8045  |      | <b>1.51</b>  | 1.235 | --- |
| Visc @ 40°C      | cSt      | ASTM D445   | 37.7 | <b>40.9</b>  | 39.2  | --- |



Certificate L2367

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

**Sample No.** : WC0919053

**Lab Number** : 06151862

**Unique Number** : 10981940

**Test Package** : CONST

**Received** : 17 Apr 2024

**Tested** : 19 Apr 2024

**Diagnosed** : 19 Apr 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)