



OIL ANALYSIS REPORT

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



Area
Mobile Fleet
Machine Id
5215 5215
Component
Hydraulic System
Fluid
MOBIL HYDRAULIC 10W (38 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0919030 | WC0861904 | WC0867234 |
| Sample Date | | Client Info | | 09 Apr 2024 | 29 Dec 2023 | 18 Oct 2023 |
| Machine Age | hrs | Client Info | | 12329 | 11759 | 11234 |
| Oil Age | hrs | Client Info | | 2268 | 1698 | 1173 |
| Filter Age | hrs | Client Info | | 2268 | 1698 | 1173 |
| Oil Changed | | Client Info | | Changed | Not Changd | Not Changd |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | SEVERE | SEVERE | SEVERE |

WEAR

The iron level has decreased, but is still severe. All other component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|-------------|------|------|
| Iron | ppm | ASTM D5185m | >20 | ▲ 67 | ▲ 79 | ▲ 72 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | 1 | 2 | 2 |
| Lead | ppm | ASTM D5185m | >10 | 1 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >75 | 6 | 6 | 5 |
| Tin | ppm | ASTM D5185m | >10 | 1 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

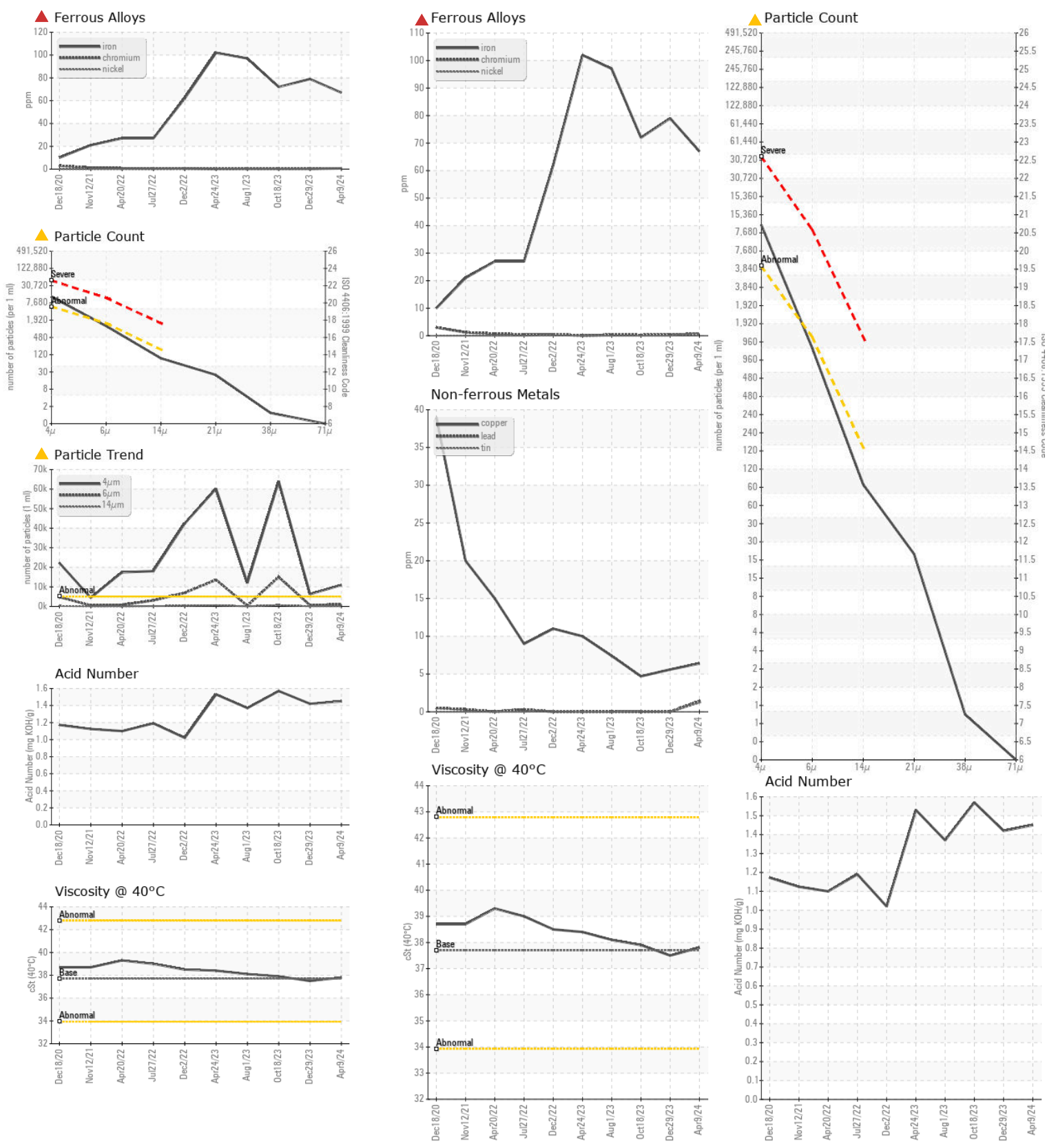
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

| | | | | | | |
|------------------|--------|--------------|-----------|-------------------|------------|------------|
| Silicon | ppm | ASTM D5185m | >20 | 6 | 6 | 7 |
| Potassium | ppm | ASTM D5185m | >20 | 1 | <1 | 0 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | >5000 | ▲ 10948 | ● 6276 | ▲ 63999 |
| Particles >6µm | | ASTM D7647 | >1300 | 1055 | 571 | ▲ 15024 |
| Particles >14µm | | ASTM D7647 | >160 | 79 | 63 | ▲ 668 |
| Particles >21µm | | ASTM D7647 | >40 | 21 | 16 | ▲ 128 |
| Particles >38µm | | ASTM D7647 | >10 | 1 | 0 | 4 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | ▲ 21/17/13 | ● 20/16/13 | ▲ 23/21/17 |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.1 | NEG | NEG | NEG |

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

| | | | | | | |
|------------------|----------|-------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Boron | ppm | ASTM D5185m | | 1 | 1 | 3 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 3 | 2 | 2 |
| Manganese | ppm | ASTM D5185m | | 2 | <1 | 1 |
| Magnesium | ppm | ASTM D5185m | | 582 | 697 | 642 |
| Calcium | ppm | ASTM D5185m | | 128 | 96 | 86 |
| Phosphorus | ppm | ASTM D5185m | | 1116 | 1085 | 1002 |
| Zinc | ppm | ASTM D5185m | | 1181 | 1279 | 1216 |
| Sulfur | ppm | ASTM D5185m | | 6674 | 7627 | 6202 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 1.45 | 1.42 | 1.57 |
| Visc @ 40°C | cSt | ASTM D445 | 37.7 | 37.8 | 37.5 | 37.9 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0919030
Lab Number : 06146515
Unique Number : 10976593
Test Package : CONST

CAROLINA SUNROCK
 PO BOX 25
 BUTNER, NC
 US 27509
 Contact: Leigh Dennis
 rdennis@thesunrockgroup.com
 T: (919)575-4505
 F: (919)575-0162

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)