



OIL ANALYSIS REPORT

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

Mobile Fleet

Machine Id
6444 6444

Component
Front Differential

Fluid
MOBIL DELVAC 1 SYNTHETIC GEAR SAE 75W90 (5 GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0919047 | WC0819056 | WC0710609 |
| Sample Date | | Client Info | | 15 Apr 2024 | 09 Jun 2023 | 29 Jun 2022 |
| Machine Age | hrs | Client Info | | 8262 | 6440 | 4273 |
| Oil Age | hrs | Client Info | | 3995 | 2173 | 1954 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Not Changed | Changed |
| Filter Changed | | Client Info | | Not Changed | N/A | Changed |
| Sample Status | | | | ABNORMAL | NORMAL | ABNORMAL |

WEAR

The copper level is abnormal. All other component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|-------|
| Iron | ppm | ASTM D5185m | >500 | 79 | 60 | 90 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 2 |
| Aluminum | ppm | ASTM D5185m | >25 | 2 | 2 | 2 |
| Lead | ppm | ASTM D5185m | >25 | <1 | 0 | 1 |
| Copper | ppm | ASTM D5185m | >100 | ▲ 169 | 66 | 45 |
| Tin | ppm | ASTM D5185m | >10 | <1 | <1 | 1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | LIGHT |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

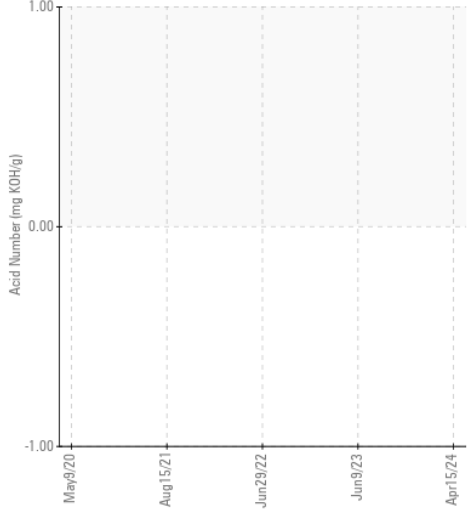
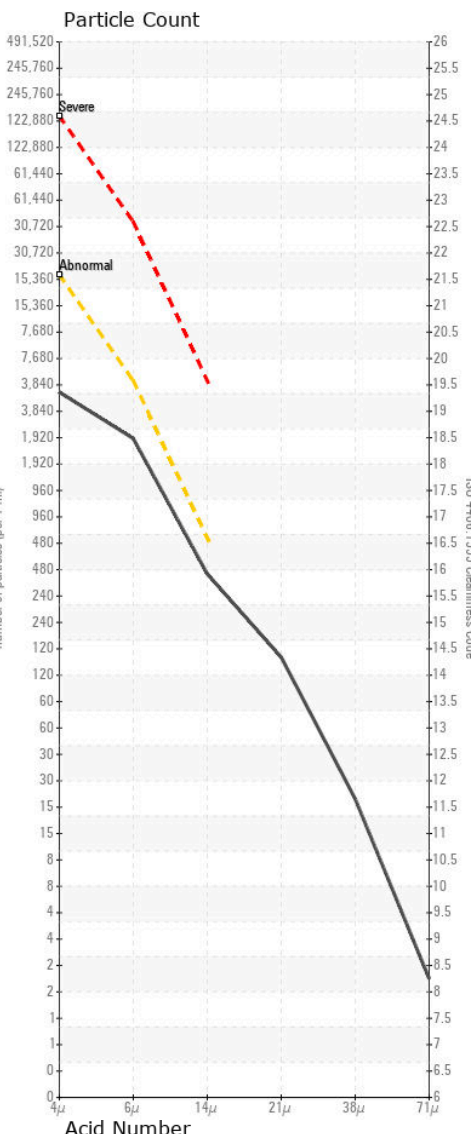
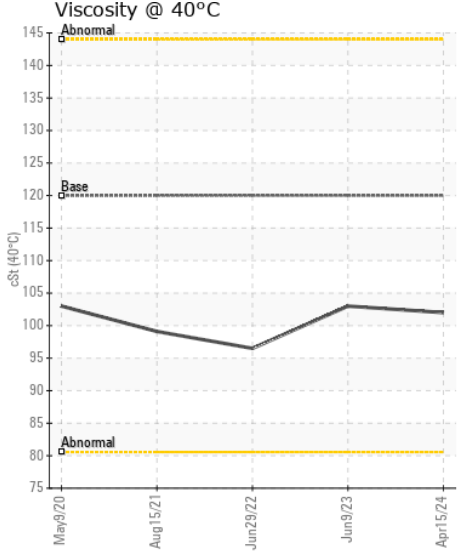
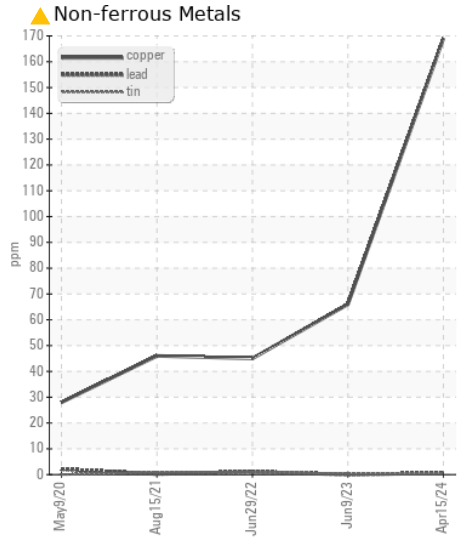
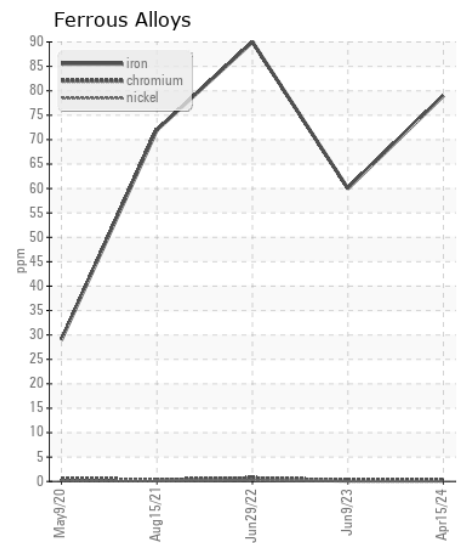
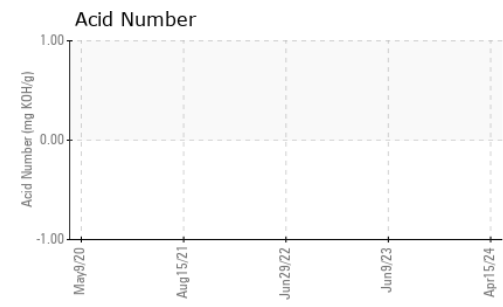
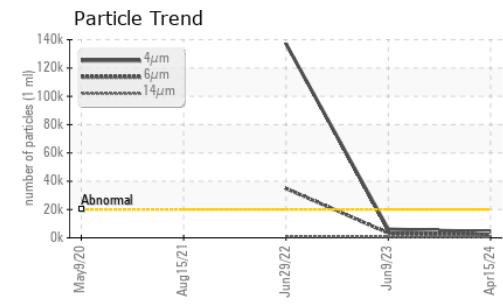
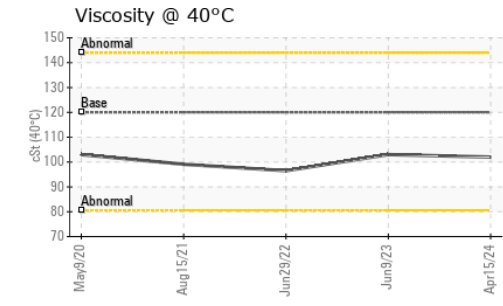
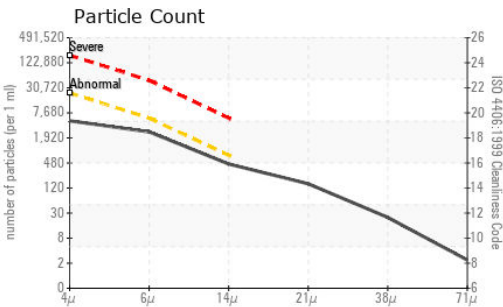
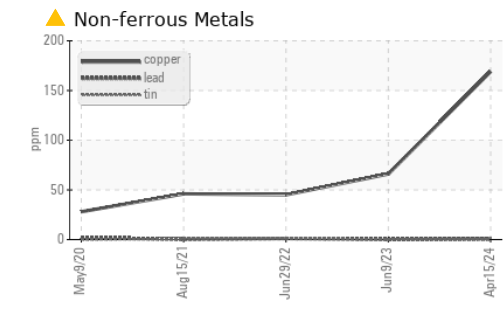
Moderate concentration of visible dirt/debris present in the oil. The amount and size of particulates present in the system are acceptable.

| | | | | | | |
|------------------|--------|--------------|-----------|-----------------|----------|------------|
| Silicon | ppm | ASTM D5185m | >75 | 39 | 29 | 28 |
| Potassium | ppm | ASTM D5185m | >20 | 9 | 4 | 5 |
| Water | | WC Method | >.2 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | >20000 | 4306 | 6125 | ▲ 137120 |
| Particles >6µm | | ASTM D7647 | >5000 | 2346 | 3336 | ▲ 34877 |
| Particles >14µm | | ASTM D7647 | >640 | 399 | 568 | ▲ 874 |
| Particles >21µm | | ASTM D7647 | >160 | 134 | 191 | 134 |
| Particles >38µm | | ASTM D7647 | >40 | 21 | 30 | 2 |
| Particles >71µm | | ASTM D7647 | >10 | 2 | 3 | 1 |
| Oil Cleanliness | | ISO 4406 (c) | >21/19/16 | 19/18/16 | 20/19/16 | ▲ 24/22/17 |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | ▲ MODER | 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 | >.2 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|-------------|-----|-------------|-----|--------------|-------|-------|
| Sodium | ppm | ASTM D5185m | | 5 | 4 | 11 |
| Boron | ppm | ASTM D5185m | | 78 | 107 | 241 |
| Barium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185m | | <1 | 1 | <1 |
| Manganese | ppm | ASTM D5185m | | 4 | 4 | 15 |
| Magnesium | ppm | ASTM D5185m | | 6 | 14 | 4 |
| Calcium | ppm | ASTM D5185m | | 28 | 36 | 11 |
| Phosphorus | ppm | ASTM D5185m | | 767 | 876 | 1348 |
| Zinc | ppm | ASTM D5185m | | 18 | 22 | 27 |
| Sulfur | ppm | ASTM D5185m | | 20325 | 25056 | 25056 |
| Visc @ 40°C | cSt | ASTM D445 | 120 | 102 | 103 | 96.5 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0919047 **Received** : 17 Apr 2024
Lab Number : 06151853 **Tested** : 19 Apr 2024
Unique Number : 10981931 **Diagnosed** : 19 Apr 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PrtCount)

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

Certificate L2367
 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)