



# OIL ANALYSIS REPORT

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



Area  
**Mobile Fleet**  
Machine Id  
**5214 5214**  
Component  
**Front Differential**  
Fluid  
**MOBIL MOBILTRANS HD 50 (15 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current     | History1    | History2    |
|----------------|-----|-------------|-----------|-------------|-------------|-------------|
| Sample Number  |     | Client Info |           | WC0918993   | WC0861922   | WC0867200   |
| Sample Date    |     | Client Info |           | 15 Mar 2024 | 05 Jan 2024 | 20 Oct 2023 |
| Machine Age    | hrs | Client Info |           | 11984       | 11449       | 10920       |
| Oil Age        | hrs | Client Info |           | 1064        | 529         | 2002        |
| Filter Age     | hrs | Client Info |           | 1064        | 529         | 0           |
| Oil Changed    |     | Client Info |           | Changed     | Not Changd  | Changed     |
| Filter Changed |     | Client Info |           | Not Changd  | Not Changd  | Not Changd  |
| Sample Status  |     |             |           | NORMAL      | NORMAL      | ABNORMAL    |

## WEAR

All component wear rates are normal.

|              |        |             |      |      |      |      |
|--------------|--------|-------------|------|------|------|------|
| Iron         | ppm    | ASTM D5185m | >500 | 79   | 47   | 73   |
| Chromium     | ppm    | ASTM D5185m | >3   | 0    | 0    | <1   |
| Nickel       | ppm    | ASTM D5185m | >3   | 0    | 0    | <1   |
| Titanium     | ppm    | ASTM D5185m | >2   | 0    | 0    | <1   |
| Silver       | ppm    | ASTM D5185m | >2   | 0    | 0    | 0    |
| Aluminum     | ppm    | ASTM D5185m | >30  | 2    | 1    | 2    |
| Lead         | ppm    | ASTM D5185m | >13  | 0    | 0    | <1   |
| Copper       | ppm    | ASTM D5185m | >103 | 5    | 3    | 6    |
| Tin          | ppm    | ASTM D5185m | >5   | <1   | 0    | <1   |
| Vanadium     | ppm    | ASTM D5185m |      | 0    | 0    | 0    |
| White Metal  | scalar | *Visual     | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | NONE | NONE | NONE |

## CONTAMINATION

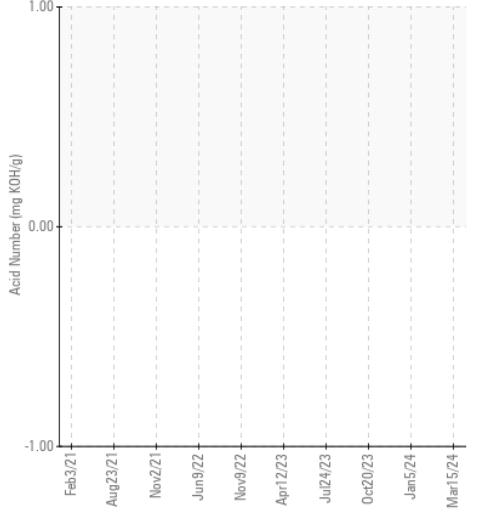
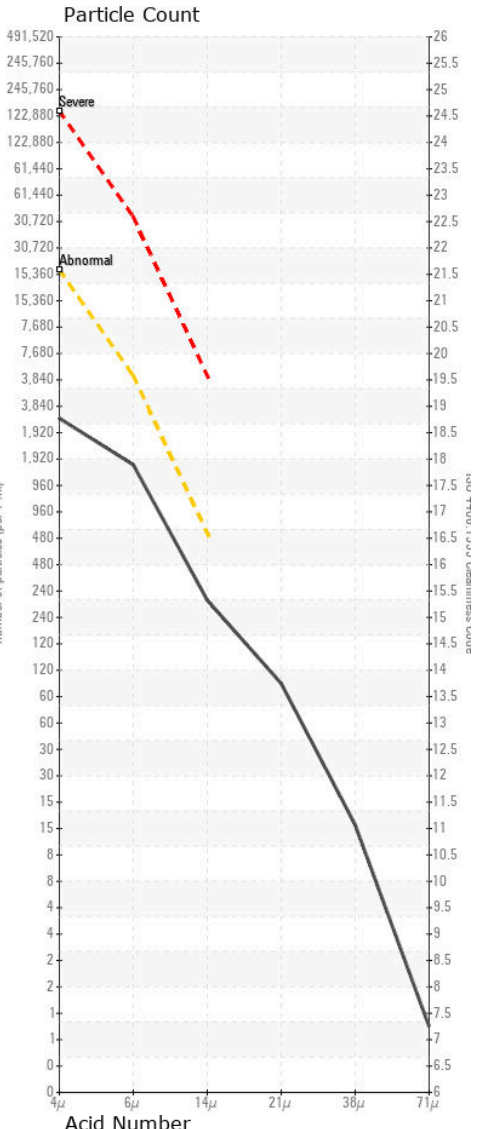
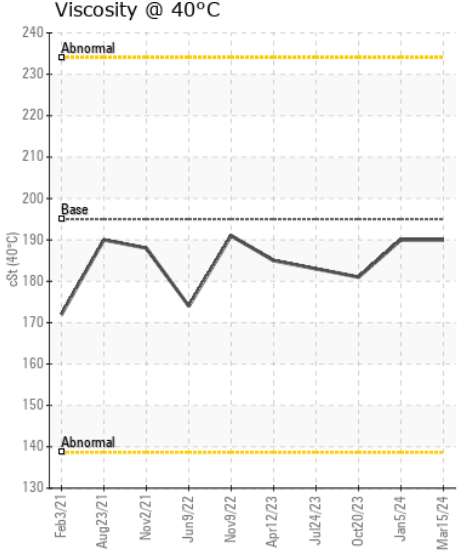
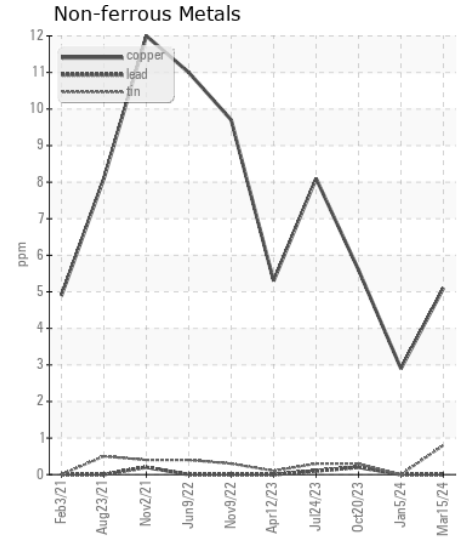
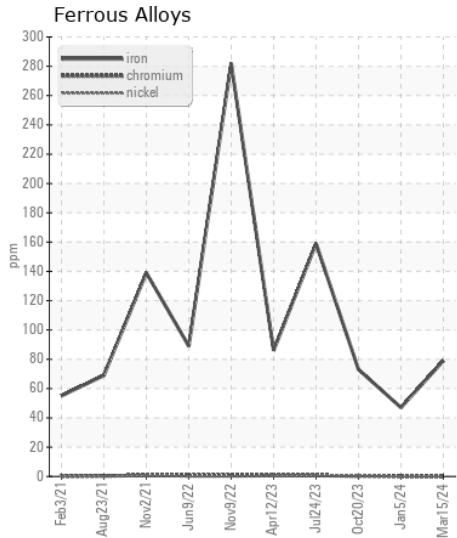
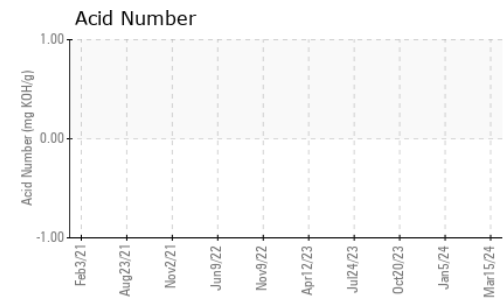
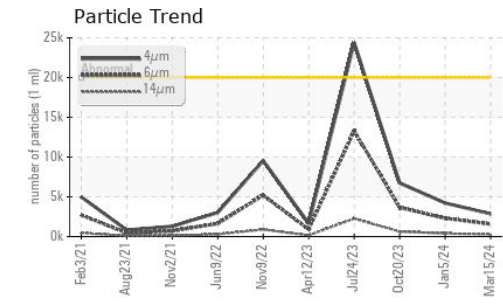
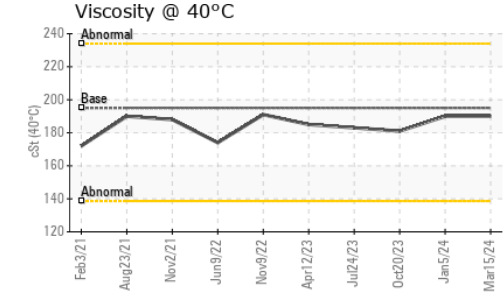
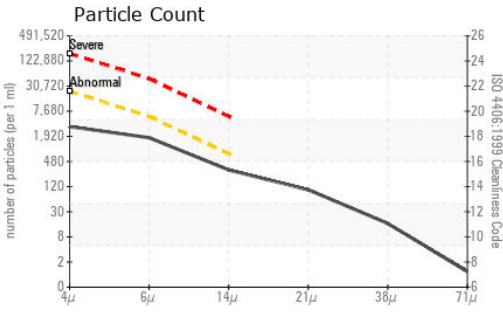
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

|                  |        |              |           |          |          |          |
|------------------|--------|--------------|-----------|----------|----------|----------|
| Silicon          | ppm    | ASTM D5185m  | >100      | 14       | 11       | 14       |
| Potassium        | ppm    | ASTM D5185m  | >20       | 0        | 0        | 2        |
| Water            |        | WC Method    | >.2       | NEG      | NEG      | NEG      |
| Particles >4µm   |        | ASTM D7647   | >20000    | 2862     | 4219     | 6742     |
| Particles >6µm   |        | ASTM D7647   | >5000     | 1559     | 2298     | 3673     |
| Particles >14µm  |        | ASTM D7647   | >640      | 265      | 391      | 625      |
| Particles >21µm  |        | ASTM D7647   | >160      | 89       | 132      | 211      |
| Particles >38µm  |        | ASTM D7647   | >40       | 14       | 20       | 33       |
| Particles >71µm  |        | ASTM D7647   | >10       | 1        | 2        | 3        |
| Oil Cleanliness  |        | ISO 4406 (c) | >21/19/16 | 19/18/15 | 19/18/16 | 20/19/16 |
| Silt             | scalar | *Visual      | NONE      | NONE     | NONE     | NONE     |
| Debris           | scalar | *Visual      | NONE      | NONE     | NONE     | ▲ MODER  |
| 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 |     | <1    | <1    | 0     |
| Boron       | ppm | ASTM D5185m |     | 1     | 0     | 5     |
| Barium      | ppm | ASTM D5185m |     | 0     | 0     | 9     |
| Molybdenum  | ppm | ASTM D5185m |     | 2     | <1    | 6     |
| Manganese   | ppm | ASTM D5185m |     | <1    | 0     | <1    |
| Magnesium   | ppm | ASTM D5185m |     | 22    | 17    | 27    |
| Calcium     | ppm | ASTM D5185m |     | 3463  | 3374  | 3357  |
| Phosphorus  | ppm | ASTM D5185m |     | 929   | 940   | 871   |
| Zinc        | ppm | ASTM D5185m |     | 1124  | 988   | 1111  |
| Sulfur      | ppm | ASTM D5185m |     | 13584 | 10724 | 13638 |
| Visc @ 40°C | cSt | ASTM D445   | 195 | 190   | 190   | 181   |



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0918993 **Received** : 20 Mar 2024  
**Lab Number** : 06123528 **Tested** : 25 Mar 2024  
**Unique Number** : 10937679 **Diagnosed** : 25 Mar 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: PrtCount )

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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)