



# OIL ANALYSIS REPORT

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



Area  
**Mobile Fleet**  
Machine Id  
**5207 5207**  
Component  
**Rear Differential**  
Fluid  
**MOBIL MOBILTRANS HD 30 (--- 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 |           | WC0939251   | WC0867074   | WC0809021   |
| Sample Date    |     | Client Info |           | 20 May 2024 | 26 Oct 2023 | 05 Jun 2023 |
| Machine Age    | hrs | Client Info |           | 15141       | 14680       | 14186       |
| Oil Age        | hrs | Client Info |           | 955         | 494         | 1431        |
| Filter Age     | hrs | Client Info |           | 955         | 494         | 0           |
| Oil Changed    |     | Client Info |           | Changed     | Not Changd  | Changed     |
| Filter Changed |     | Client Info |           | Changed     | Not Changd  | Not Changd  |
| Sample Status  |     |             |           | ATTENTION   | NORMAL      | NORMAL      |

## WEAR

All component wear rates are normal.

|              |        |             |      |      |      |      |
|--------------|--------|-------------|------|------|------|------|
| Iron         | ppm    | ASTM D5185m | >500 | 64   | 42   | 62   |
| Chromium     | ppm    | ASTM D5185m | >3   | <1   | <1   | <1   |
| Nickel       | ppm    | ASTM D5185m | >3   | 0    | 0    | <1   |
| Titanium     | ppm    | ASTM D5185m | >2   | 0    | <1   | <1   |
| Silver       | ppm    | ASTM D5185m | >2   | 0    | 0    | <1   |
| Aluminum     | ppm    | ASTM D5185m | >30  | 3    | 2    | 1    |
| Lead         | ppm    | ASTM D5185m | >13  | 0    | 0    | 0    |
| Copper       | ppm    | ASTM D5185m | >103 | 11   | 6    | 9    |
| Tin          | ppm    | ASTM D5185m | >5   | <1   | <1   | <1   |
| Vanadium     | ppm    | ASTM D5185m |      | 0    | 0    | <1   |
| White Metal  | scalar | *Visual     | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | NONE | NONE | NONE |

## CONTAMINATION

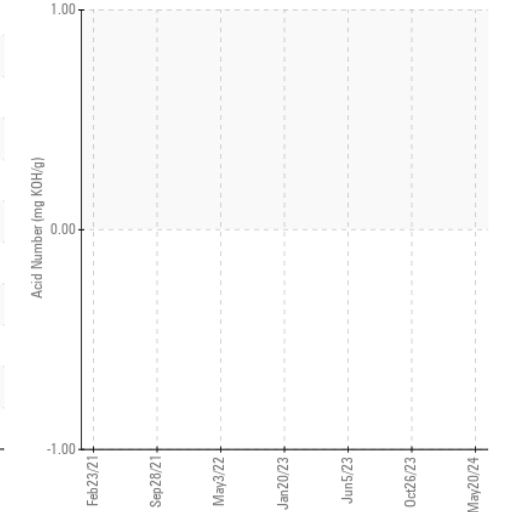
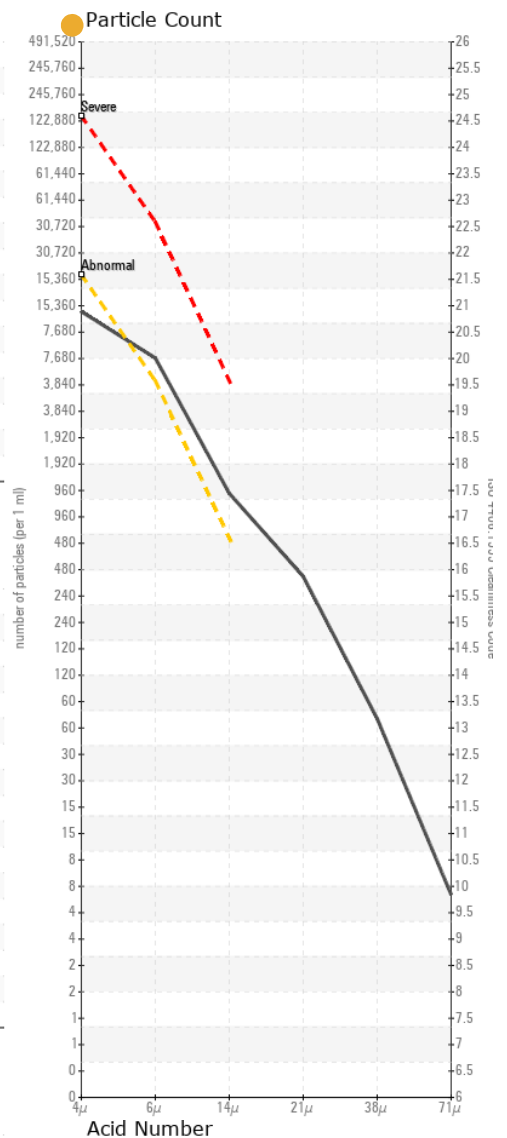
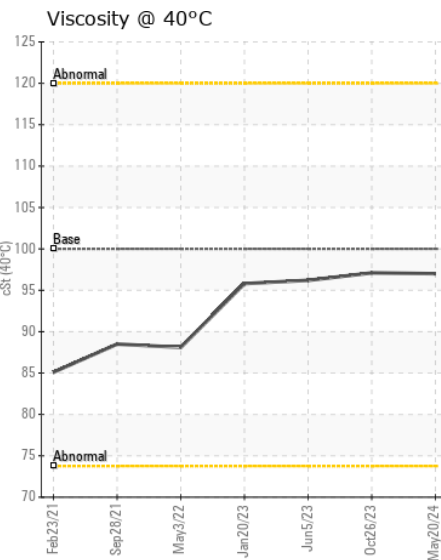
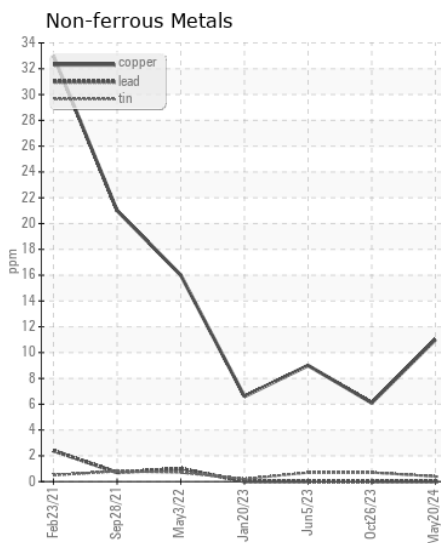
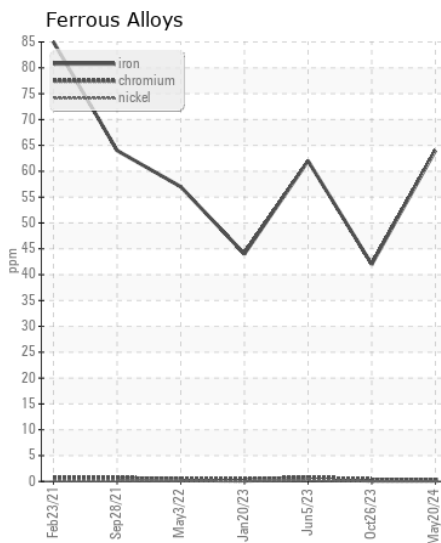
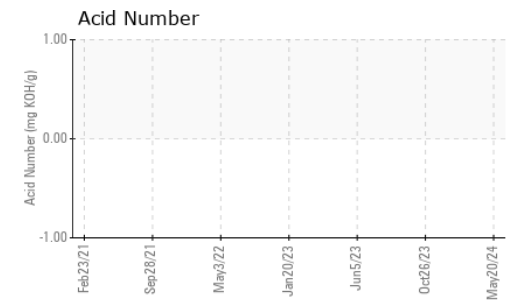
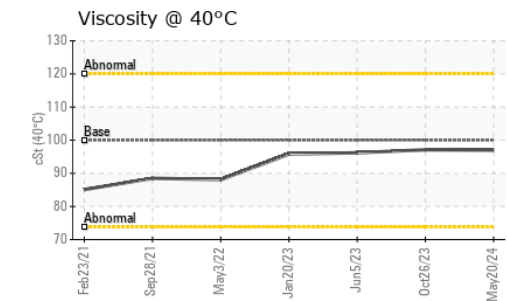
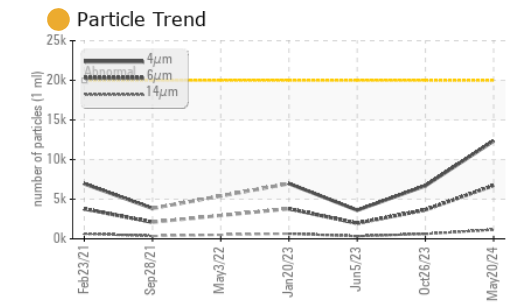
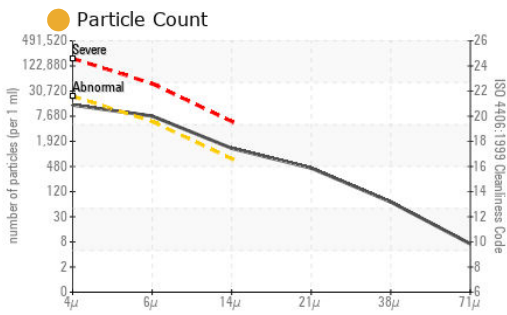
There is a moderate amount of particulates present in the oil.

|                  |        |              |           |          |          |          |
|------------------|--------|--------------|-----------|----------|----------|----------|
| Silicon          | ppm    | ASTM D5185m  | >100      | 21       | 15       | 17       |
| Potassium        | ppm    | ASTM D5185m  | >20       | 0        | 0        | 1        |
| Water            |        | WC Method    | >.2       | NEG      | NEG      | NEG      |
| Particles >4µm   |        | ASTM D7647   | >20000    | 12354    | 6699     | 3602     |
| Particles >6µm   |        | ASTM D7647   | >5000     | 6730     | 3649     | 1962     |
| Particles >14µm  |        | ASTM D7647   | >640      | 1145     | 621      | 334      |
| Particles >21µm  |        | ASTM D7647   | >160      | 386      | 209      | 112      |
| Particles >38µm  |        | ASTM D7647   | >40       | 60       | 32       | 17       |
| Particles >71µm  |        | ASTM D7647   | >10       | 6        | 3        | 2        |
| Oil Cleanliness  |        | ISO 4406 (c) | >21/19/16 | 21/20/17 | 20/19/16 | 19/18/16 |
| Silt             | scalar | *Visual      | NONE      | NONE     | NONE     | NONE     |
| Debris           | scalar | *Visual      | NONE      | LIGHT    | 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 |     | 1     | <1    | 0     |
| Boron       | ppm | ASTM D5185m |     | 0     | 6     | 3     |
| Barium      | ppm | ASTM D5185m |     | 0     | 0     | 0     |
| Molybdenum  | ppm | ASTM D5185m |     | 1     | <1    | 2     |
| Manganese   | ppm | ASTM D5185m |     | <1    | <1    | <1    |
| Magnesium   | ppm | ASTM D5185m |     | 5     | 21    | 55    |
| Calcium     | ppm | ASTM D5185m |     | 3582  | 3368  | 3621  |
| Phosphorus  | ppm | ASTM D5185m |     | 919   | 886   | 969   |
| Zinc        | ppm | ASTM D5185m |     | 1109  | 1084  | 1272  |
| Sulfur      | ppm | ASTM D5185m |     | 12102 | 10499 | 13023 |
| Visc @ 40°C | cSt | ASTM D445   | 100 | 97.0  | 97.1  | 96.2  |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0939251 **Received** : 22 May 2024  
**Lab Number** : 06187525 **Tested** : 24 May 2024  
**Unique Number** : 11044277 **Diagnosed** : 24 May 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PrtCount )

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)

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