



# OIL ANALYSIS REPORT

|                 |               |
|-----------------|---------------|
| WEAR            | <b>NORMAL</b> |
| CONTAMINATION   | <b>NORMAL</b> |
| FLUID CONDITION | <b>NORMAL</b> |

Machine Id  
**314**  
 Component  
**Front Differential**  
 Fluid  
**GEAR OIL SAE 75W90 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>DC0036183</b>   | DC0024356   | DC0013946   |
| Sample Date    |     | Client Info |           | <b>12 Apr 2024</b> | 04 Oct 2022 | 01 Sep 2021 |
| Machine Age    | mls | Client Info |           | <b>198594</b>      | 160953      | 116026      |
| Oil Age        | mls | Client Info |           | <b>30000</b>       | 0           | 0           |
| Filter Age     | mls | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>Changed</b>     | Changed     | Changed     |
| Filter Changed |     | Client Info |           | <b>N/A</b>         | N/A         | Not Changed |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## WEAR

All component wear rates are normal.

|              |        |             |      |              |      |      |
|--------------|--------|-------------|------|--------------|------|------|
| Iron         | ppm    | ASTM D5185m | >500 | <b>118</b>   | 199  | 127  |
| Chromium     | ppm    | ASTM D5185m | >10  | <b>&lt;1</b> | 2    | <1   |
| Nickel       | ppm    | ASTM D5185m | >10  | <b>&lt;1</b> | 0    | 1    |
| Titanium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | <1   | 0    |
| Silver       | ppm    | ASTM D5185m |      | <b>0</b>     | <1   | 0    |
| Aluminum     | ppm    | ASTM D5185m | >25  | <b>2</b>     | 1    | <1   |
| Lead         | ppm    | ASTM D5185m | >25  | <b>&lt;1</b> | 0    | 4    |
| Copper       | ppm    | ASTM D5185m | >100 | <b>2</b>     | 4    | 5    |
| Tin          | ppm    | ASTM D5185m | >10  | <b>&lt;1</b> | <1   | 0    |
| Vanadium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | 1    | 0    |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |

## CONTAMINATION

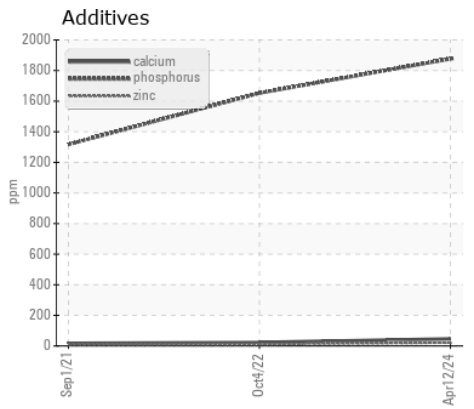
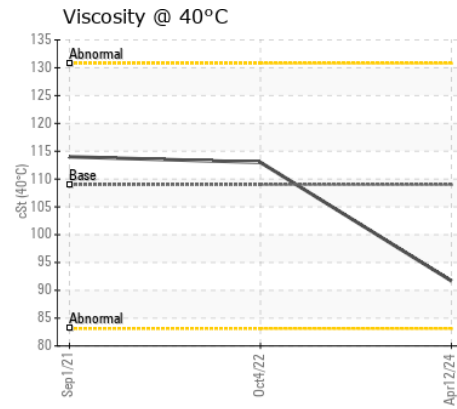
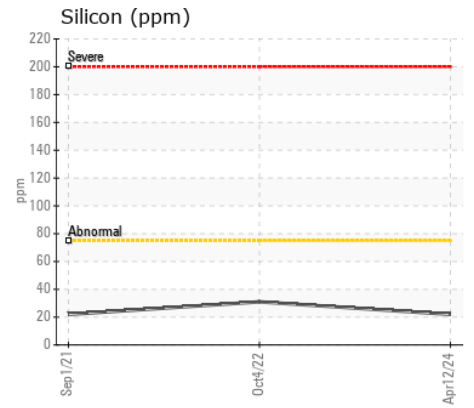
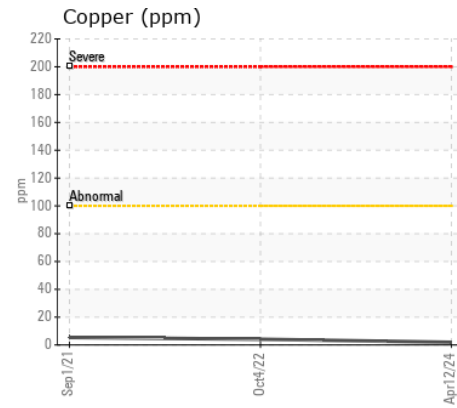
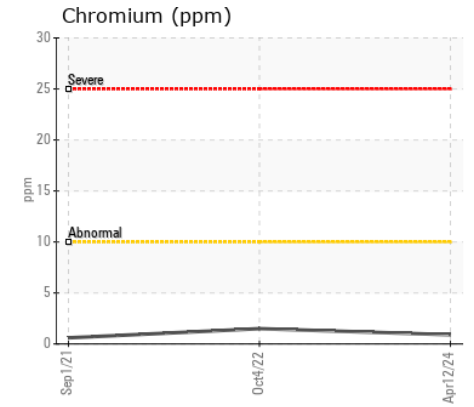
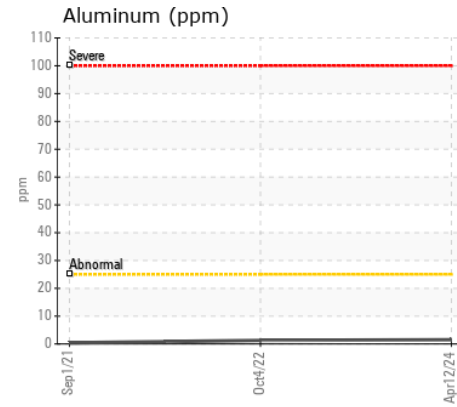
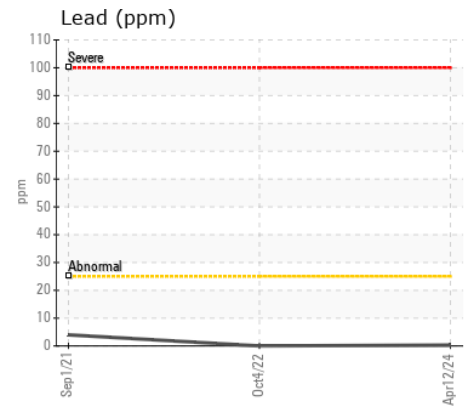
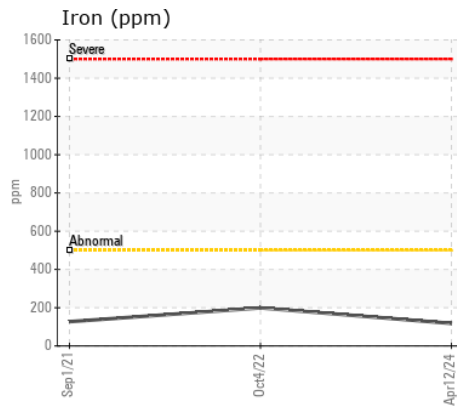
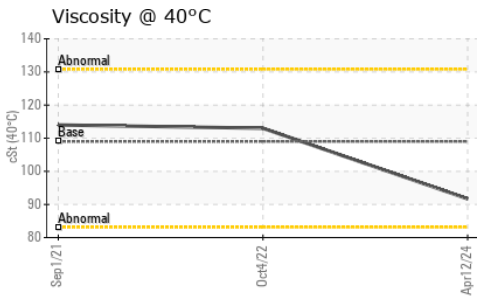
There is no indication of any contamination in the oil.

|                  |        |             |       |              |       |       |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon          | ppm    | ASTM D5185m | >75   | <b>22</b>    | 31    | 22    |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>1</b>     | <1    | 8     |
| Water            |        | WC Method   | >.2   | <b>NEG</b>   | NEG   | NEG   |
| Silt             | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Debris           | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Sand/Dirt        | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Appearance       | scalar | *Visual     | NORML | <b>NORML</b> | NORML | NORML |
| Odor             | scalar | *Visual     | NORML | <b>NORML</b> | NORML | NORML |
| Emulsified Water | scalar | *Visual     | >.2   | <b>NEG</b>   | NEG   | NEG   |

## FLUID CONDITION

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

|             |     |             |       |              |       |       |
|-------------|-----|-------------|-------|--------------|-------|-------|
| Sodium      | ppm | ASTM D5185m |       | <b>2</b>     | 5     | 2     |
| Boron       | ppm | ASTM D5185m | 400   | <b>254</b>   | 261   | 280   |
| Barium      | ppm | ASTM D5185m | 200   | <b>0</b>     | 0     | 0     |
| Molybdenum  | ppm | ASTM D5185m | 12    | <b>&lt;1</b> | 1     | 2     |
| Manganese   | ppm | ASTM D5185m |       | <b>4</b>     | 8     | 10    |
| Magnesium   | ppm | ASTM D5185m | 12    | <b>6</b>     | 11    | 2     |
| Calcium     | ppm | ASTM D5185m | 150   | <b>46</b>    | 23    | 17    |
| Phosphorus  | ppm | ASTM D5185m | 1650  | <b>1877</b>  | 1653  | 1317  |
| Zinc        | ppm | ASTM D5185m | 125   | <b>21</b>    | 11    | 8     |
| Sulfur      | ppm | ASTM D5185m | 22500 | <b>23831</b> | 25056 | 20958 |
| Visc @ 40°C | cSt | ASTM D445   | 109   | <b>91.7</b>  | 113   | 114   |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0036183  
**Lab Number** : 06158579  
**Unique Number** : 10994002  
**Test Package** : MOB 1  
**Received** : 23 Apr 2024  
**Tested** : 25 Apr 2024  
**Diagnosed** : 25 Apr 2024 - Wes Davis

**FRANCIS O DAY**  
 14900 SOUTHLAWN LN  
 ROCKVILLE, MD  
 US 20850  
 Contact: JAMIE FORESTER

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)

T:  
F: