



# VOLVO

## OIL ANALYSIS REPORT

WEAR  
CONTAMINATION  
FLUID CONDITION

**ATTENTION**  
**SEVERE**  
**NORMAL**

Area

[363]

Machine Id

**JOHN DEERE 814432**

Component

**Front Left Final Drive**

Fluid

**DRYDENE LIMITED SLIP GEAR 80W90 (--- GAL)**

### RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil 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 |           | VCP397839   | VCP310967   | ---      |
| Sample Date    |     | Client Info |           | 10 May 2024 | 05 Apr 2021 | ---      |
| Machine Age    | hrs | Client Info |           | 6701        | 1507        | ---      |
| Oil Age        | hrs | Client Info |           | 1000        | 1507        | ---      |
| Filter Age     | hrs | Client Info |           | 0           | 0           | ---      |
| Oil Changed    |     | Client Info |           | Changed     | Changed     | ---      |
| Filter Changed |     | Client Info |           | Not Changed | N/A         | ---      |
| Sample Status  |     |             |           | SEVERE      | NORMAL      | ---      |

### WEAR

All component wear rates are normal.

|              |        |             |      |      |      |     |
|--------------|--------|-------------|------|------|------|-----|
| Iron         | ppm    | ASTM D5185m | >750 | 731  | 280  | --- |
| Chromium     | ppm    | ASTM D5185m | >9   | 8    | 5    | --- |
| Nickel       | ppm    | ASTM D5185m | >10  | <1   | <1   | --- |
| Titanium     | ppm    | ASTM D5185m |      | 7    | <1   | --- |
| Silver       | ppm    | ASTM D5185m |      | 0    | <1   | --- |
| Aluminum     | ppm    | ASTM D5185m | >40  | 101  | 6    | --- |
| Lead         | ppm    | ASTM D5185m | >15  | 0    | 0    | --- |
| Copper       | ppm    | ASTM D5185m | >40  | 1    | <1   | --- |
| Tin          | ppm    | ASTM D5185m | >10  | 0    | <1   | --- |
| Vanadium     | ppm    | ASTM D5185m |      | 0    | <1   | --- |
| White Metal  | scalar | *Visual     | NONE | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual     | NONE | NONE | NONE | --- |

### CONTAMINATION

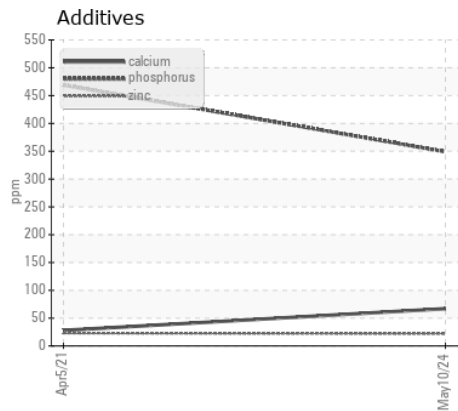
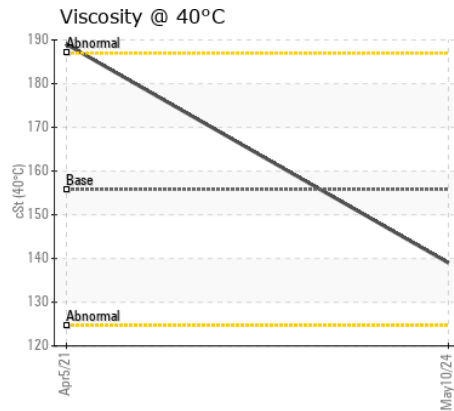
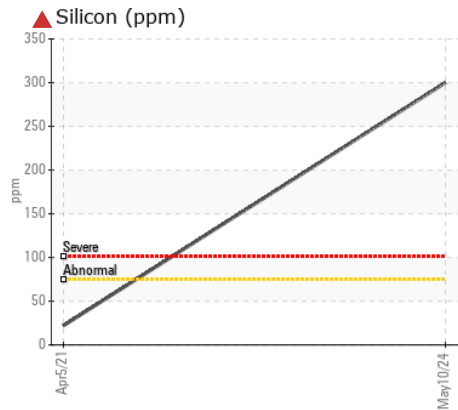
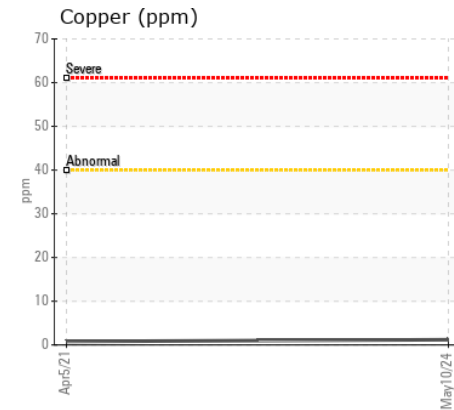
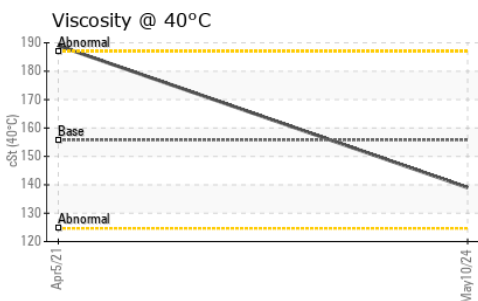
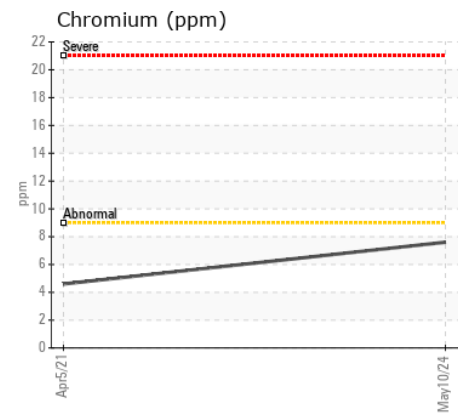
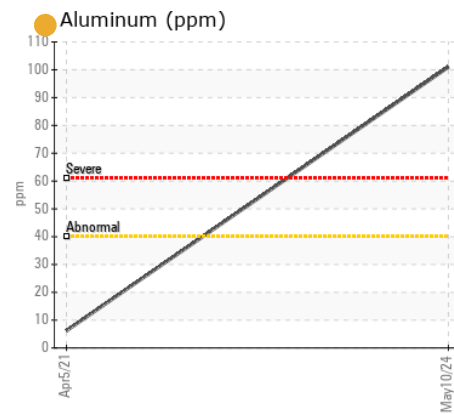
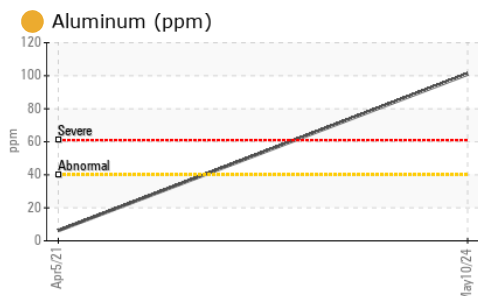
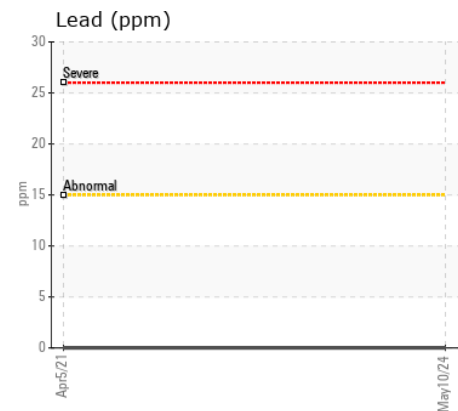
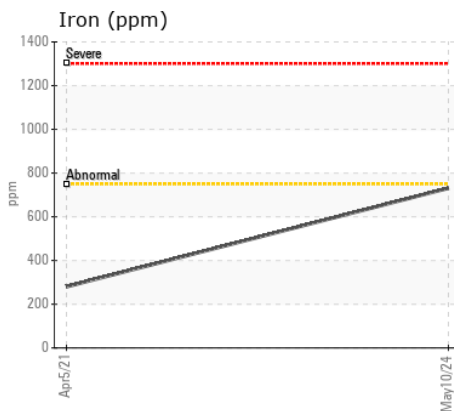
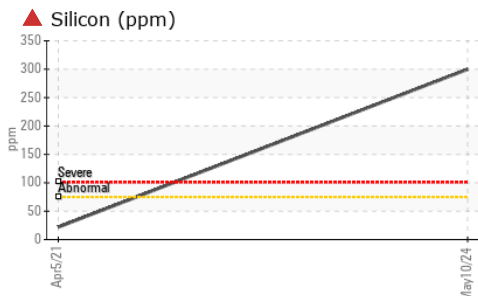
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

|                  |        |             |        |       |       |     |
|------------------|--------|-------------|--------|-------|-------|-----|
| Silicon          | ppm    | ASTM D5185m | >75    | 300   | 22    | --- |
| Potassium        | ppm    | ASTM D5185m | >20    | 17    | <1    | --- |
| Water            |        | WC Method   | >0.075 | NEG   | NEG   | --- |
| Silt             | scalar | *Visual     | NONE   | NONE  | NONE  | --- |
| Debris           | scalar | *Visual     | NONE   | NONE  | NONE  | --- |
| Sand/Dirt        | scalar | *Visual     | NONE   | NONE  | NONE  | --- |
| Appearance       | scalar | *Visual     | NORML  | NORML | NORML | --- |
| Odor             | scalar | *Visual     | NORML  | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual     | >0.075 | NEG   | NEG   | --- |

### FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

|             |     |             |       |       |       |     |
|-------------|-----|-------------|-------|-------|-------|-----|
| Sodium      | ppm | ASTM D5185m | >51   | 6     | 2     | --- |
| Boron       | ppm | ASTM D5185m |       | 15    | 86    | --- |
| Barium      | ppm | ASTM D5185m |       | 0     | 0     | --- |
| Molybdenum  | ppm | ASTM D5185m |       | 0     | <1    | --- |
| Manganese   | ppm | ASTM D5185m |       | 8     | 5     | --- |
| Magnesium   | ppm | ASTM D5185m |       | 16    | 1     | --- |
| Calcium     | ppm | ASTM D5185m |       | 67    | 28    | --- |
| Phosphorus  | ppm | ASTM D5185m |       | 349   | 469   | --- |
| Zinc        | ppm | ASTM D5185m |       | 22    | 23    | --- |
| Sulfur      | ppm | ASTM D5185m |       | 20780 | 13188 | --- |
| Visc @ 40°C | cSt | ASTM D445   | 155.8 | 139   | 189   | --- |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP397839  
**Lab Number** : 06197071  
**Unique Number** : 11059194  
**Test Package** : MOB 1

**Received** : 31 May 2024  
**Tested** : 03 Jun 2024  
**Diagnosed** : 04 Jun 2024 - Don Baldrige

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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)