



# OIL ANALYSIS REPORT

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



Area  
**Store 9 - Marietta**  
Machine Id  
**JOHN DEERE 544L 1DW544LZVKF695734**  
Component  
**Rear Axle**  
Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (5 GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>LEC0043402</b>  | LEC0038221  | LEC0037160  |
| Sample Date    |     | Client Info |           | <b>17 Aug 2023</b> | 06 Apr 2023 | 20 Dec 2022 |
| Machine Age    | hrs | Client Info |           | <b>6864</b>        | 6347        | 5934        |
| Oil Age        | hrs | Client Info |           | <b>517</b>         | 413         | 5934        |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>Not Chngd</b>   | Changed     | Changed     |
| Filter Changed |     | Client Info |           | <b>None</b>        | N/A         | N/A         |
| Sample Status  |     |             |           | <b>ABNORMAL</b>    | NORMAL      | NORMAL      |

## WEAR

All component wear rates are normal.

| PQ           | UOM    | Method      | Limit/Abn | Current      | History1 | History2 |
|--------------|--------|-------------|-----------|--------------|----------|----------|
| PQ           |        | ASTM D8184  |           | <b>91</b>    | 21       | 56       |
| Iron         | ppm    | ASTM D5185m | >750      | <b>417</b>   | 122      | 430      |
| Chromium     | ppm    | ASTM D5185m | >11       | <b>2</b>     | <1       | 2        |
| Nickel       | ppm    | ASTM D5185m | >10       | <b>3</b>     | <1       | 3        |
| Titanium     | ppm    | ASTM D5185m |           | <b>&lt;1</b> | <1       | <1       |
| Silver       | ppm    | ASTM D5185m |           | <b>0</b>     | 0        | 0        |
| Aluminum     | ppm    | ASTM D5185m | >21       | <b>4</b>     | 0        | 3        |
| Lead         | ppm    | ASTM D5185m | >49       | <b>3</b>     | 1        | 7        |
| Copper       | ppm    | ASTM D5185m | >101      | <b>13</b>    | 7        | 24       |
| Tin          | ppm    | ASTM D5185m | >10       | <b>&lt;1</b> | <1       | 4        |
| Vanadium     | ppm    | ASTM D5185m |           | <b>0</b>     | 0        | <1       |
| White Metal  | scalar | *Visual     | NONE      | <b>NONE</b>  | NONE     | VLITE    |
| Yellow Metal | scalar | *Visual     | NONE      | <b>NONE</b>  | NONE     | NONE     |

## CONTAMINATION

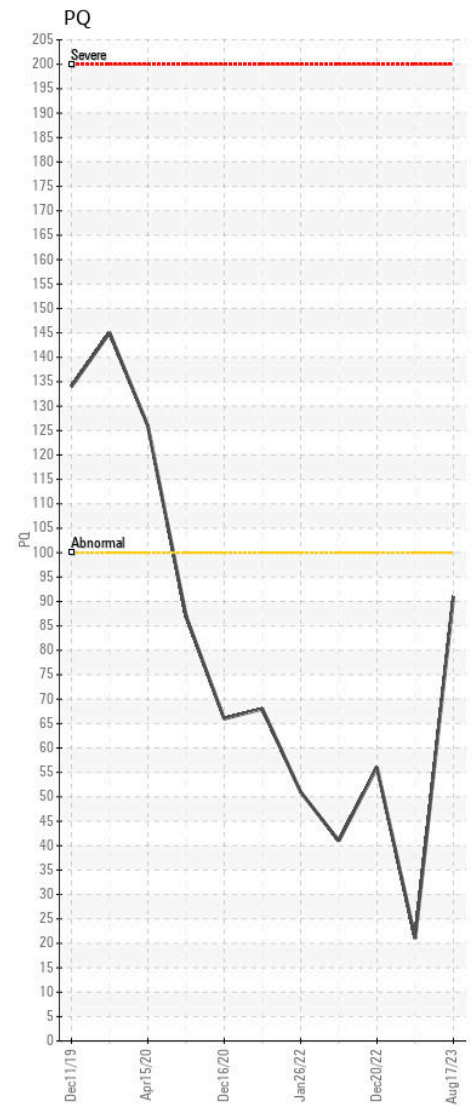
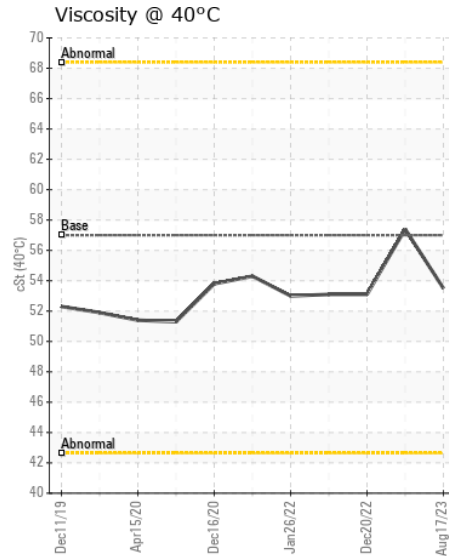
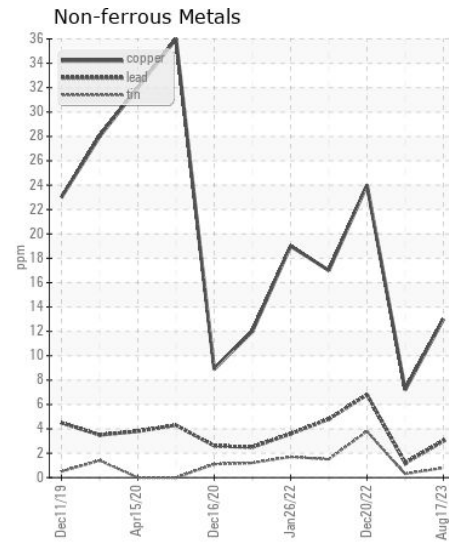
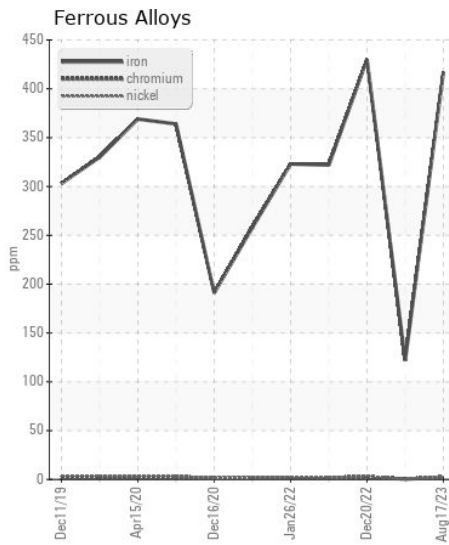
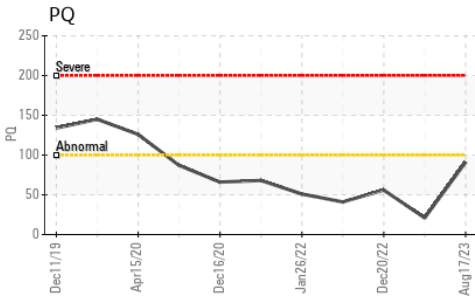
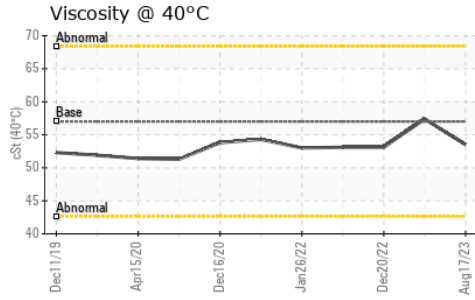
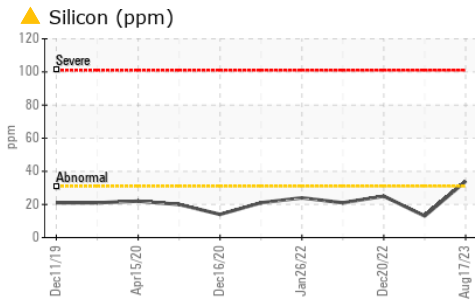
Elemental level of silicon (Si) above normal.

|                  |        |             |       |              |       |       |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon          | ppm    | ASTM D5185m | >31   | <b>▲ 34</b>  | 13    | 25    |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>2</b>     | 2     | <1    |
| Water            |        | WC Method   | >0.1  | <b>NEG</b>   | NEG   | NEG   |
| Silt             | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Debris           | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | VLITE |
| 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     | >0.1  | <b>NEG</b>   | NEG   | NEG   |

## FLUID CONDITION

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

|             |     |             |      |             |      |      |
|-------------|-----|-------------|------|-------------|------|------|
| Sodium      | ppm | ASTM D5185m | >51  | <b>2</b>    | 0    | 4    |
| Boron       | ppm | ASTM D5185m | 6    | <b>10</b>   | 3    | 15   |
| Barium      | ppm | ASTM D5185m | 0    | <b>0</b>    | 0    | 0    |
| Molybdenum  | ppm | ASTM D5185m | 0    | <b>7</b>    | 4    | 10   |
| Manganese   | ppm | ASTM D5185m |      | <b>5</b>    | 2    | 6    |
| Magnesium   | ppm | ASTM D5185m | 145  | <b>119</b>  | 110  | 120  |
| Calcium     | ppm | ASTM D5185m | 3570 | <b>3563</b> | 3641 | 3222 |
| Phosphorus  | ppm | ASTM D5185m | 1290 | <b>1082</b> | 1052 | 1021 |
| Zinc        | ppm | ASTM D5185m | 1640 | <b>1287</b> | 1289 | 1194 |
| Sulfur      | ppm | ASTM D5185m |      | <b>4700</b> | 3628 | 3896 |
| Visc @ 40°C | cSt | ASTM D445   | 57.0 | <b>53.5</b> | 57.4 | 53.1 |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0043402 **Received** : 22 Aug 2023  
**Lab Number** : 05930998 **Tested** : 23 Aug 2023  
**Unique Number** : 10616269 **Diagnosed** : 24 Aug 2023 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**LESLIE EQUIPMENT COMPANY**  
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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)