



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

Machine Id  
**HITACHI 190W-6 HCMLBH60V00005009**  
 Component  
**Rear Right Final Drive**  
 Fluid  
**JOHN DEERE GL-5 80W90 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>JR0221955</b>   | JR0209223   | JR0156692   |
| Sample Date    |     | Client Info |           | <b>18 Jun 2024</b> | 10 Apr 2024 | 28 Dec 2022 |
| Machine Age    | hrs | Client Info |           | <b>5563</b>        | 5019        | 2553        |
| Oil Age        | hrs | Client Info |           | <b>544</b>         | 0           | 2553        |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>Not Changd</b>  | Changed     | Not Changd  |
| Filter Changed |     | Client Info |           | <b>None</b>        | None        | N/A         |
| Sample Status  |     |             |           | <b>NORMAL</b>      | ABNORMAL    | NORMAL      |

### WEAR

All component wear rates are normal.

| PQ           | UOM    | Method      | Limit/Abn | Current     | History1 | History2 |
|--------------|--------|-------------|-----------|-------------|----------|----------|
| PQ           |        | ASTM D8184  |           | <b>13</b>   | 3056     | 43       |
| Iron         | ppm    | ASTM D5185m | >500      | <b>1</b>    | ▲ 1006   | 124      |
| Chromium     | ppm    | ASTM D5185m | >10       | <b>0</b>    | 4        | 1        |
| Nickel       | ppm    | ASTM D5185m | >10       | <b>0</b>    | <1       | 0        |
| Titanium     | ppm    | ASTM D5185m |           | <b>0</b>    | <1       | 0        |
| Silver       | ppm    | ASTM D5185m |           | <b>0</b>    | 0        | 0        |
| Aluminum     | ppm    | ASTM D5185m | >25       | <b>0</b>    | 17       | 0        |
| Lead         | ppm    | ASTM D5185m | >25       | <b>0</b>    | 0        | 0        |
| Copper       | ppm    | ASTM D5185m | >50       | <b>0</b>    | 6        | 3        |
| Tin          | ppm    | ASTM D5185m | >10       | <b>0</b>    | 0        | 0        |
| Vanadium     | ppm    | ASTM D5185m |           | <b>0</b>    | 0        | 0        |
| White Metal  | scalar | *Visual     | NONE      | <b>NONE</b> | MODER    | NONE     |
| Yellow Metal | scalar | *Visual     | NONE      | <b>NONE</b> | NONE     | MODER    |

### CONTAMINATION

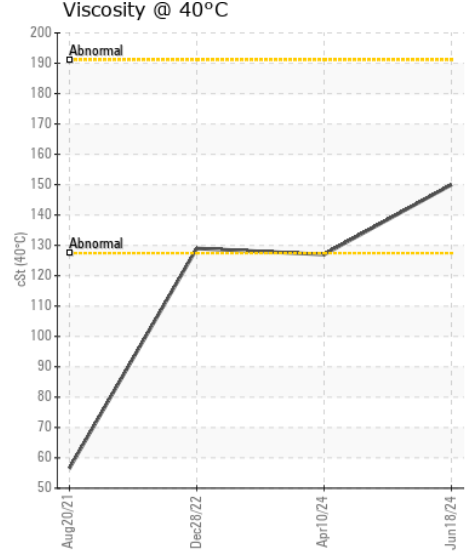
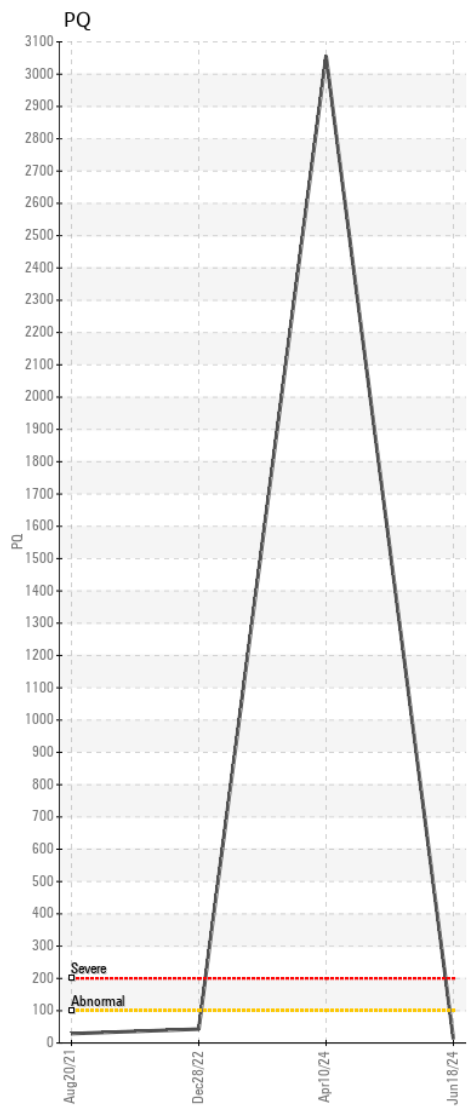
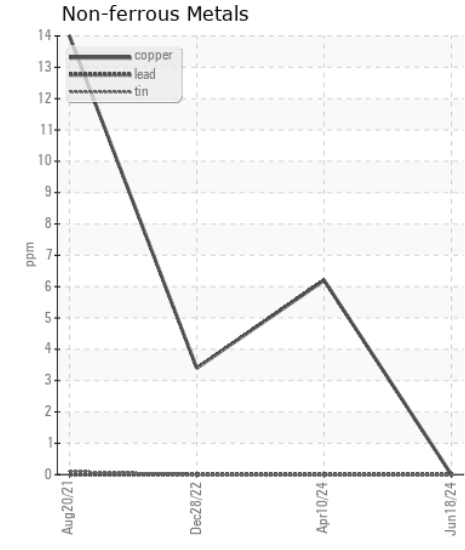
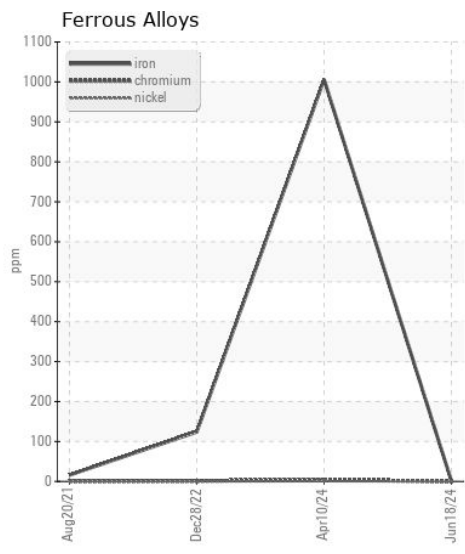
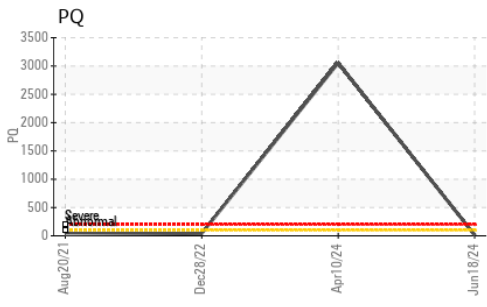
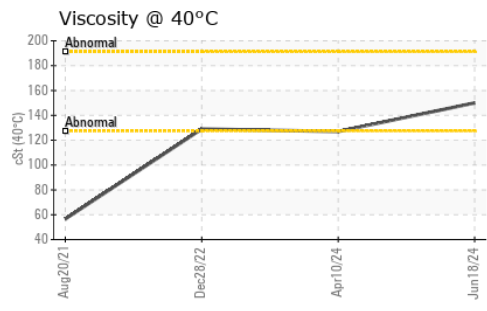
There is no indication of any contamination in the oil.

|                  |        |             |       |              |       |       |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon          | ppm    | ASTM D5185m | >75   | <b>2</b>     | 57    | 2     |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>0</b>     | 8     | <1    |
| Water            |        | WC Method   | >0.2  | <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     | >0.2  | <b>NEG</b>   | NEG   | NEG   |

### FLUID CONDITION

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

|             |     |             |  |              |       |       |
|-------------|-----|-------------|--|--------------|-------|-------|
| Sodium      | ppm | ASTM D5185m |  | <b>1</b>     | 8     | 1     |
| Boron       | ppm | ASTM D5185m |  | <b>5</b>     | 2     | 556   |
| Barium      | ppm | ASTM D5185m |  | <b>0</b>     | 3     | 3     |
| Molybdenum  | ppm | ASTM D5185m |  | <b>0</b>     | <1    | <1    |
| Manganese   | ppm | ASTM D5185m |  | <b>&lt;1</b> | 9     | 2     |
| Magnesium   | ppm | ASTM D5185m |  | <b>&lt;1</b> | 5     | 2     |
| Calcium     | ppm | ASTM D5185m |  | <b>62</b>    | 183   | 156   |
| Phosphorus  | ppm | ASTM D5185m |  | <b>2201</b>  | 293   | 267   |
| Zinc        | ppm | ASTM D5185m |  | <b>19</b>    | 76    | 106   |
| Sulfur      | ppm | ASTM D5185m |  | <b>30548</b> | 20519 | 19486 |
| Visc @ 40°C | cSt | ASTM D445   |  | <b>150</b>   | 127   | 129   |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0221955 **Received** : 20 Jun 2024  
**Lab Number** : 06216003 **Tested** : 22 Jun 2024  
**Unique Number** : 11088867 **Diagnosed** : 23 Jun 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - GARNER**  
 4161 AUBURN CHURCH RD  
 GARNER, NC  
 US 27529  
 Contact: RALEIGH SHOP  
 sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.com  
 T: (919)614-2260  
 F: (919)779-5432

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)