



| | |
|-----------------|---------------|
| WEAR | SEVERE |
| CONTAMINATION | SEVERE |
| FLUID CONDITION | NORMAL |

Machine Id
HITACHI 345LC-6 HCMDD560T00010281

Component
Right Final Drive

Fluid
JOHN DEERE GL-5 80W90 (10 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 advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

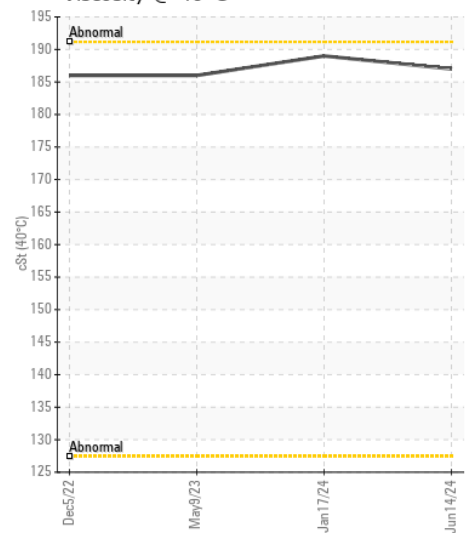
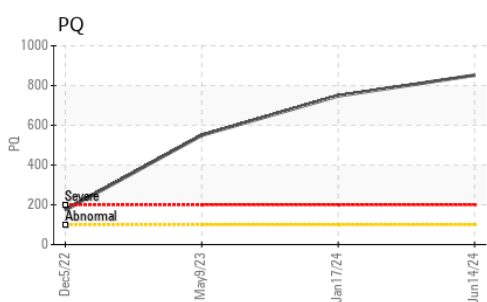
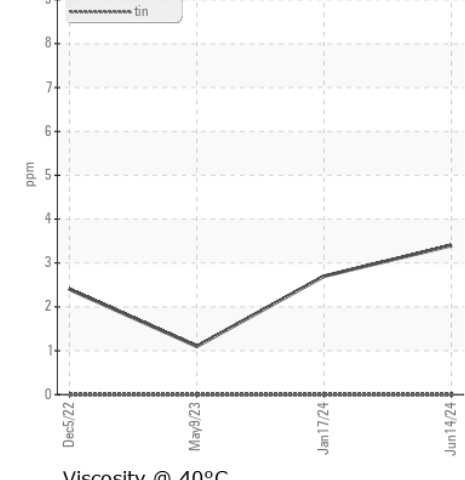
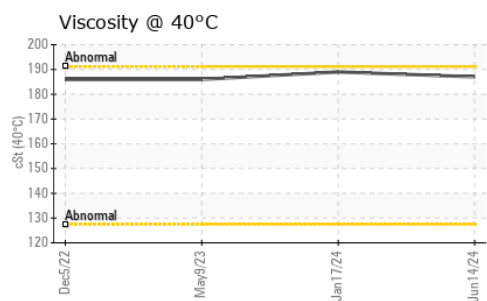
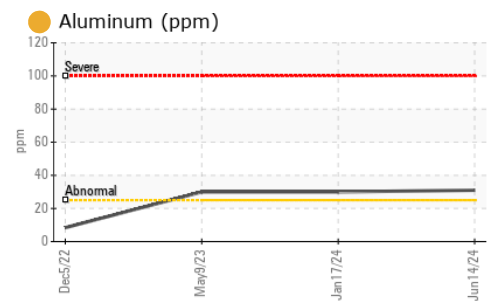
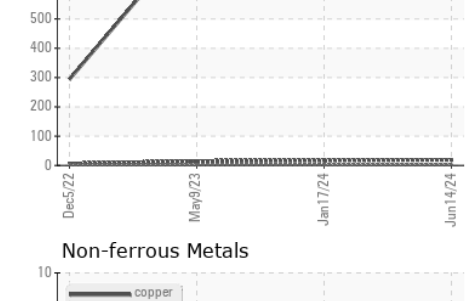
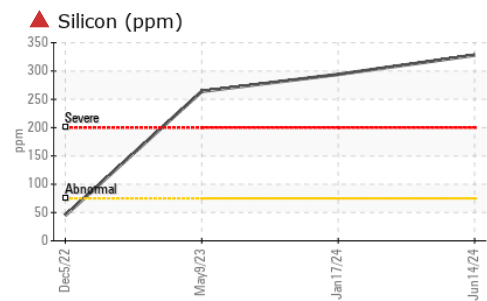
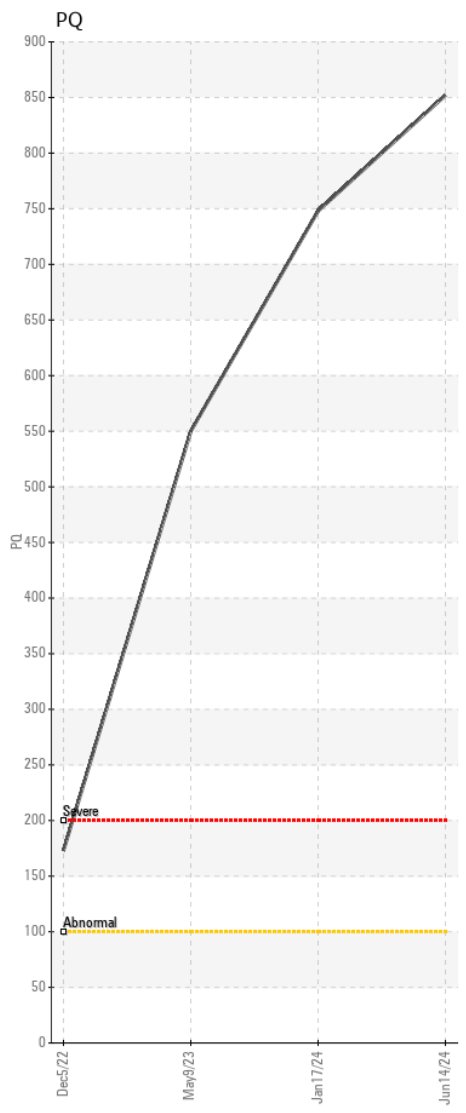
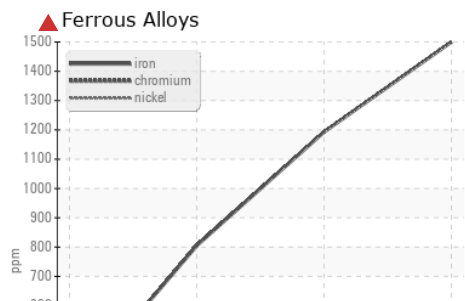
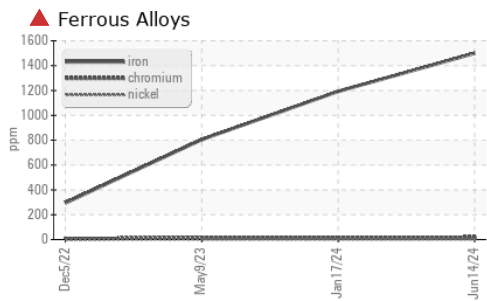
CONTAMINATION

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

FLUID CONDITION

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

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|------------------|--------|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0218295 | JR0200768 | JR0172763 |
| Sample Date | | Client Info | | 14 Jun 2024 | 17 Jan 2024 | 09 May 2023 |
| Machine Age | hrs | Client Info | | 1967 | 1458 | 966 |
| Oil Age | hrs | Client Info | | 1967 | 1458 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Not Changd | Not Changd |
| Filter Changed | | Client Info | | None | N/A | Not Changd |
| Sample Status | | | | SEVERE | ABNORMAL | ABNORMAL |
| PQ | | ASTM D8184 | | 852 | 748 | 550 |
| Iron | ppm | ASTM D5185m | >500 | ▲ 1500 | ▲ 1193 | ▲ 805 |
| Chromium | ppm | ASTM D5185m | >10 | ▲ 19 | ▲ 17 | ▲ 15 |
| Nickel | ppm | ASTM D5185m | >10 | 2 | 2 | 2 |
| Titanium | ppm | ASTM D5185m | | 5 | 5 | 5 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | ● 31 | ● 30 | ● 30 |
| Lead | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >50 | 3 | 3 | 1 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | MODER |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silicon | ppm | ASTM D5185m | >75 | ▲ 328 | ▲ 294 | ▲ 264 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 3 | 2 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | NONE | NONE | MODER |
| Debris | scalar | *Visual | NONE | NONE | 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 | >0.2 | NEG | NEG | NEG |
| Sodium | ppm | ASTM D5185m | | 0 | 0 | 1 |
| Boron | ppm | ASTM D5185m | | 70 | 75 | 77 |
| Barium | ppm | ASTM D5185m | | 2 | 2 | 1 |
| Molybdenum | ppm | ASTM D5185m | | <1 | <1 | 1 |
| Manganese | ppm | ASTM D5185m | | 20 | 16 | 14 |
| Magnesium | ppm | ASTM D5185m | | 2 | 5 | 1 |
| Calcium | ppm | ASTM D5185m | | 14 | 27 | 44 |
| Phosphorus | ppm | ASTM D5185m | | 458 | 546 | 520 |
| Zinc | ppm | ASTM D5185m | | 20 | 3 | 16 |
| Sulfur | ppm | ASTM D5185m | | 12796 | 16777 | 18305 |
| Visc @ 40°C | cSt | ASTM D445 | | 187 | 189 | 186 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0218295 **Received** : 18 Jun 2024
Lab Number : 06213806 **Tested** : 20 Jun 2024
Unique Number : 11086670 **Diagnosed** : 20 Jun 2024 - Sean Felton
Test Package : CONST (Additional Tests: PQ)

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Certificate L2367
 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)