



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

Machine Id
HITACHI 225LC-3 HCM1U400H00221269

Component
Swing 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 | | JR0200477 | JR0076765 | JRMC461229 |
| Sample Date | | Client Info | | 29 Feb 2024 | 02 Jun 2021 | 29 Jun 2018 |
| Machine Age | hrs | Client Info | | 5951 | 5198 | 4164 |
| Oil Age | hrs | Client Info | | 0 | 0 | 1000 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|-------|------|
| PQ | | ASTM D8184 | | 41 | 27 | 28 |
| Iron | ppm | ASTM D5185m | >400 | 46 | 35 | 36 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | <1 | <1 | <1 |
| Lead | ppm | ASTM D5185m | >50 | 0 | 0 | 1 |
| Copper | ppm | ASTM D5185m | >200 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >10 | <1 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | VLITE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

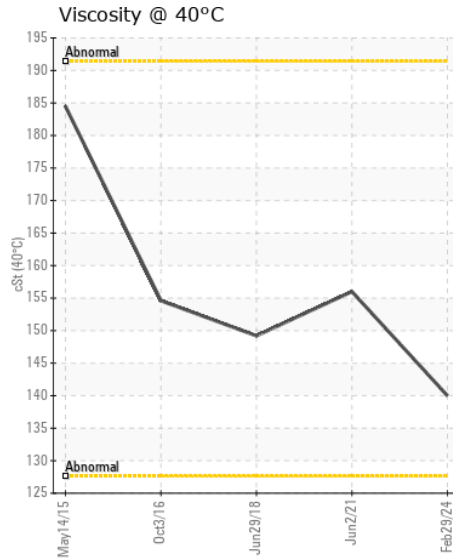
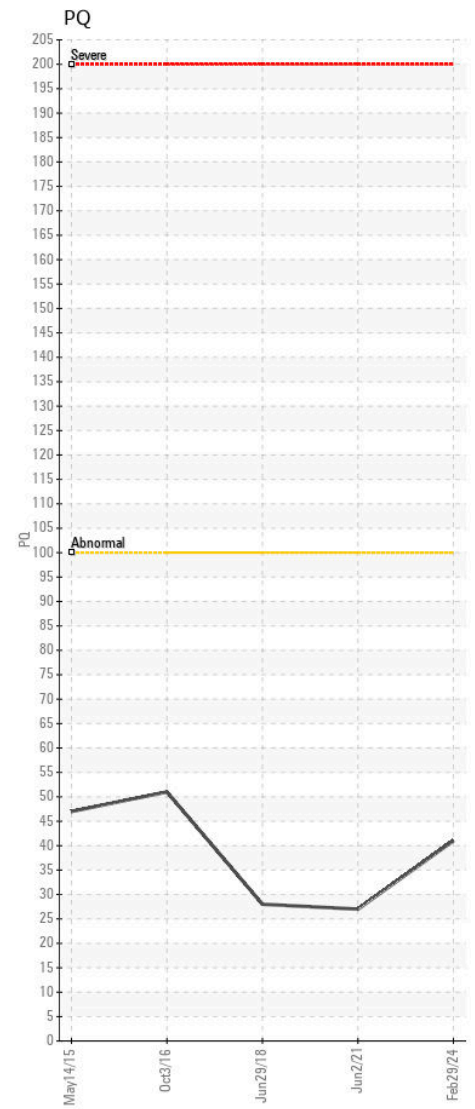
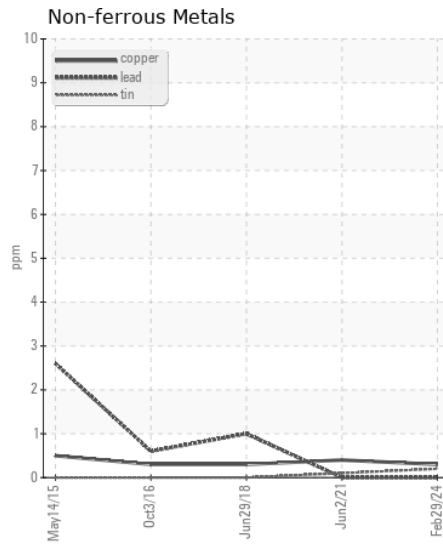
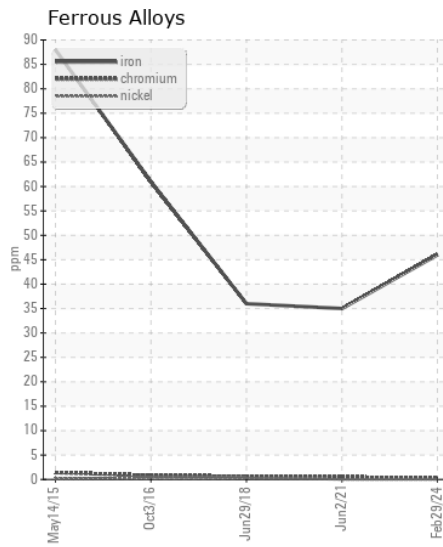
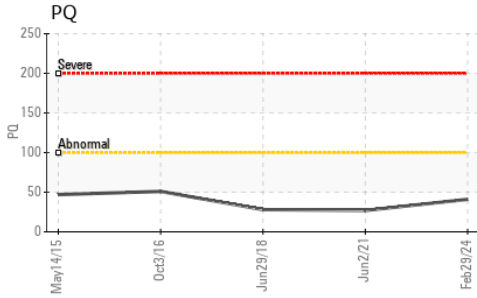
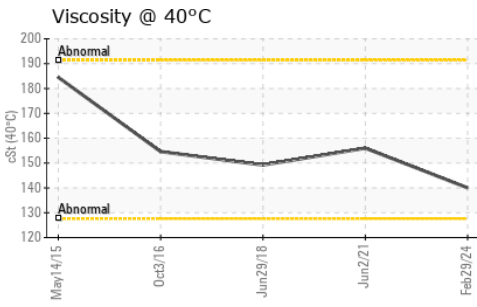
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >50 | 6 | 8 | 10 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 0 | 2 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | VLITE | 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 |

FLUID CONDITION

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

| | | | | | | |
|-------------|-----|-------------|--|--------------|-------|-------|
| Sodium | ppm | ASTM D5185m | | 1 | 2 | 3 |
| Boron | ppm | ASTM D5185m | | 135 | 34 | 14 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 13 | 2 | <1 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | 2 |
| Magnesium | ppm | ASTM D5185m | | 48 | 11 | 0 |
| Calcium | ppm | ASTM D5185m | | 100 | 33 | 40 |
| Phosphorus | ppm | ASTM D5185m | | 1154 | 2232 | 1944 |
| Zinc | ppm | ASTM D5185m | | 66 | 17 | 18 |
| Sulfur | ppm | ASTM D5185m | | 24285 | 24052 | 22369 |
| Visc @ 40°C | cSt | ASTM D445 | | 140 | 156 | 149.2 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0200477 **Received** : 01 Mar 2024
Lab Number : 06106351 **Tested** : 04 Mar 2024
Unique Number : 10909848 **Diagnosed** : 04 Mar 2024 - Wes Davis
Test Package : CONST (Additional Tests: PQ)

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)

JRE - ASHLAND
 11047 LEADBETTER RD
 ASHLAND, VA
 US 23005

Contact: DAVID ZIEG
 dzieg@jamesriverequipment.com

T: (804)798-6001
 F: (804)798-0292