WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

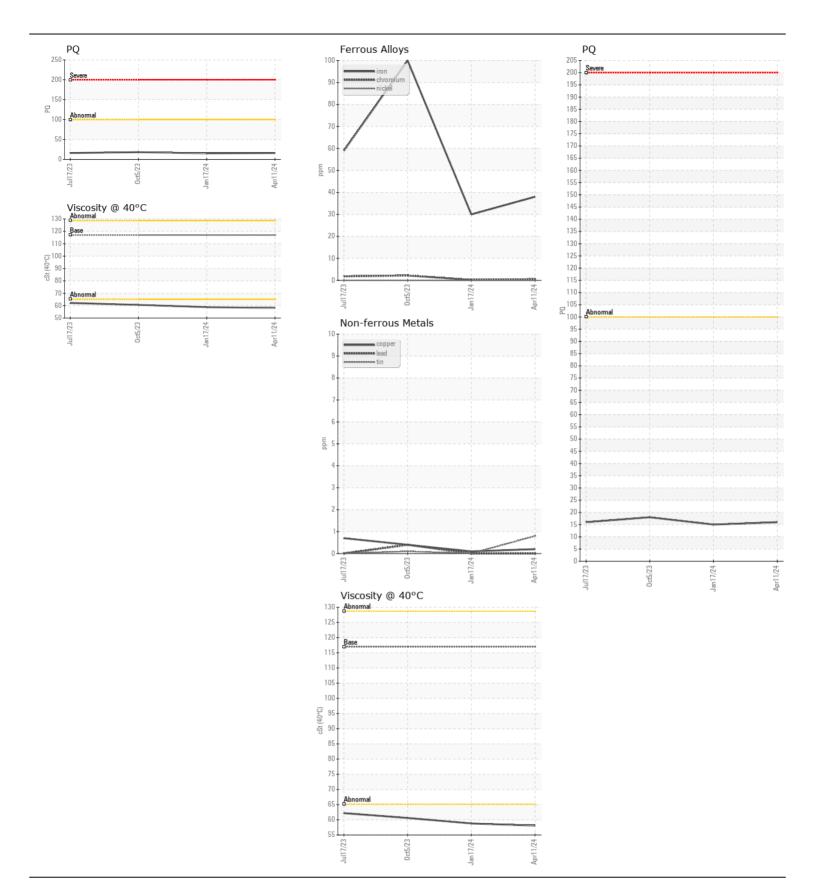
Machine Id

JOHN DEERE 000478

Pump Drive

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (2 QTS)

| | 2 QTS) | | | | | | |
|---|------------------|--------|-------------|-----------|-------------|-------------|-----------------|
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| Resample at the next service interval to monitor. | Sample Number | | Client Info | | JR0211353 | JR0199072 | JR019033 |
| | Sample Date | | Client Info | | 11 Apr 2024 | 17 Jan 2024 | 05 Oct 202 |
| | Machine Age | hrs | Client Info | | 1970 | 1434 | 939 |
| | Oil Age | hrs | Client Info | | 1475 | 495 | 939 |
| | Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| | Oil Changed | | Client Info | | Changed | Not Changd | Changed |
| | Filter Changed | | Client Info | | None | N/A | None |
| | Sample Status | | | | NORMAL | NORMAL | ABNORM <i>A</i> |
| WEAR | PQ | | ASTM D8184 | | 16 | 15 | 18 |
| All component wear rates are normal. | Iron | ppm | ASTM D5185m | >151 | 38 | 30 | 100 |
| All component wear rates are normal. | Chromium | ppm | ASTM D5185m | >11 | <1 | <1 | 2 |
| | Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| | Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | Aluminum | ppm | ASTM D5185m | >21 | 2 | 2 | 3 |
| | Lead | ppm | ASTM D5185m | >51 | 0 | 0 | <1 |
| | Copper | ppm | ASTM D5185m | >51 | <1 | <1 | <1 |
| | Tin | ppm | ASTM D5185m | >4 | <1 | 0 | <1 |
| | Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >31 | 14 | 12 | ▲ 57 |
| There is no indication of any contamination in the oil. | Potassium | ppm | ASTM D5185m | >20 | 0 | 2 | 0 |
| | Water | | WC Method | >0.1 | NEG | NEG | NEG |
| | Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Appearance | scalar | *Visual | NORML | NORML | NORML | NORN |
| | Odor | scalar | *Visual | NORML | NORML | NORML | NORM |
| | Emulsified Water | scalar | *Visual | >0.1 | NEG | NEG | NEG |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | >51 | 3 | 0 | 5 |
| The condition of the oil is acceptable for the time in service. | Boron | ppm | ASTM D5185m | | 126 | 135 | 67 |
| | Barium | ppm | ASTM D5185m | | <1 | 1 | 0 |
| | Molybdenum | ppm | ASTM D5185m | | 99 | 120 | 111 |
| | Manganese | ppm | ASTM D5185m | | 1 | <1 | 5 |
| | Magnesium | ppm | ASTM D5185m | | 348 | 395 | 15 |
| | Calcium | ppm | ASTM D5185m | | 2336 | 2416 | 4096 |
| | Phosphorus | ppm | ASTM D5185m | | 864 | 997 | 1212 |
| | Zinc | ppm | ASTM D5185m | | 932 | 1103 | 1420 |
| | Sulfur | ppm | ASTM D5185m | | 3593 | 3724 | 8595 |
| | Visc @ 40°C | cSt | ASTM D445 | 117 | 58.1 | 58.8 | 60.6 |







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Lab Number : 06149664 Unique Number : 10979742

: JR0211353 Test Package : CONST (Additional Tests: PQ)

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received : 15 Apr 2024 **Tested** Diagnosed

: 16 Apr 2024

: 18 Apr 2024 - Jonathan Hester

BRISTOW, VA US 20136 Contact: DANNY HUFF dhuff@bandssite.com T: (540)270-3203 F: (703)753-0605

B & S SITE DEVLEOPMENT

7800 PINEY BRANCH LANE

* - 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)