



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

Area

[05W44443]

Machine Id

JOHN DEERE 000478

Component

Pump Drive

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0199072 | JR0190335 | JR0176136 |
| Sample Date | | Client Info | | 17 Jan 2024 | 05 Oct 2023 | 17 Jul 2023 |
| Machine Age | hrs | Client Info | | 1434 | 939 | 472 |
| Oil Age | hrs | Client Info | | 495 | 939 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Not Changd | Changed | Not Changd |
| Filter Changed | | Client Info | | N/A | None | N/A |
| Sample Status | | | | NORMAL | ABNORMAL | ABNORMAL |

WEAR

All component wear rates are normal.

| PQ | UOM | Method | Limit/Abn | Current | History1 | History2 |
|--------------|--------|-------------|-----------|--------------|----------|----------|
| PQ | | ASTM D8184 | | 15 | 18 | 16 |
| Iron | ppm | ASTM D5185m | >151 | 30 | 100 | 59 |
| Chromium | ppm | ASTM D5185m | >11 | <1 | 2 | 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 | 3 | 2 |
| Lead | ppm | ASTM D5185m | >51 | 0 | <1 | 0 |
| Copper | ppm | ASTM D5185m | >51 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >4 | 0 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

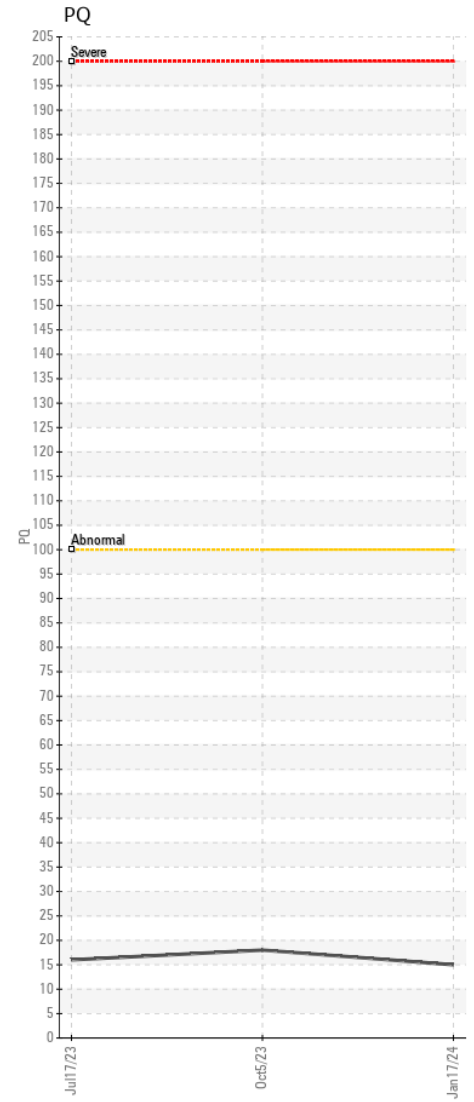
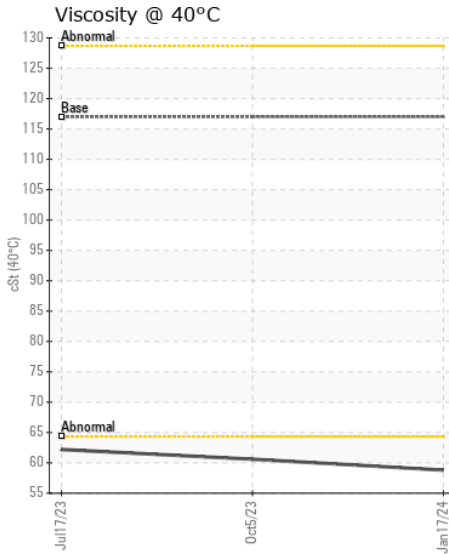
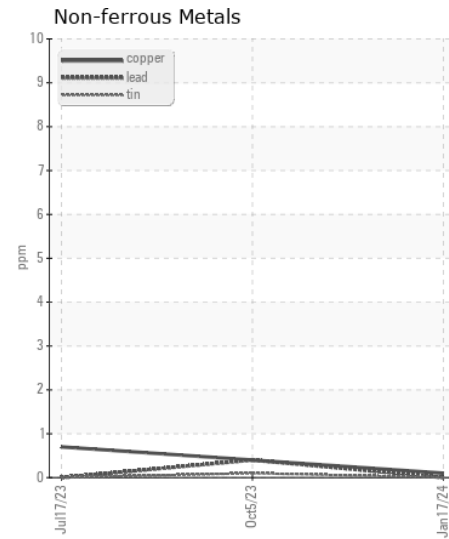
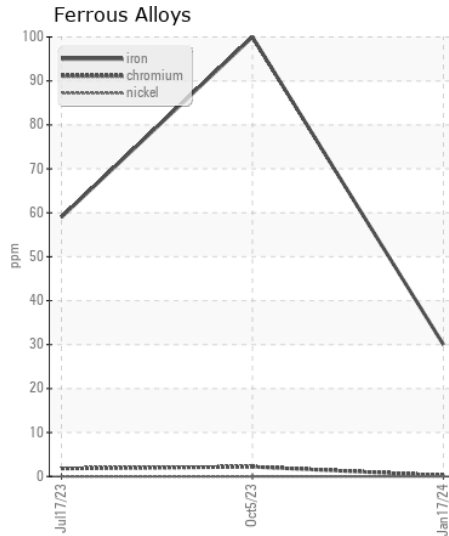
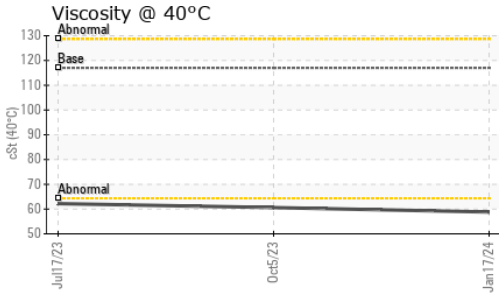
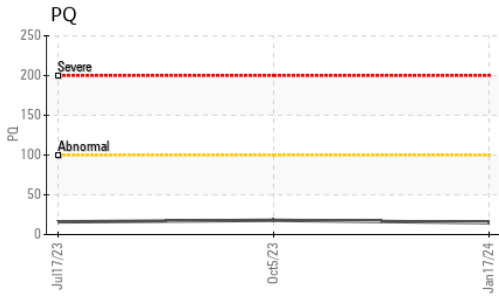
There is no indication of any contamination in the fluid.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >31 | 12 | ▲ 57 | ▲ 48 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 0 | 1 |
| 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 | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.1 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|-------------|-----|-------------|-----|--------------|------|-------|
| Sodium | ppm | ASTM D5185m | >51 | 0 | 5 | 3 |
| Boron | ppm | ASTM D5185m | | 135 | 67 | 47 |
| Barium | ppm | ASTM D5185m | | 1 | 0 | 6 |
| Molybdenum | ppm | ASTM D5185m | | 120 | 111 | 108 |
| Manganese | ppm | ASTM D5185m | | <1 | 5 | 5 |
| Magnesium | ppm | ASTM D5185m | | 395 | 15 | 15 |
| Calcium | ppm | ASTM D5185m | | 2416 | 4096 | 4299 |
| Phosphorus | ppm | ASTM D5185m | | 997 | 1212 | 1228 |
| Zinc | ppm | ASTM D5185m | | 1103 | 1420 | 1429 |
| Sulfur | ppm | ASTM D5185m | | 3724 | 8595 | 10318 |
| Visc @ 40°C | cSt | ASTM D445 | 117 | 58.8 | 60.6 | 62.2 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0199072 **Received** : 18 Jan 2024
Lab Number : 06065143 **Diagnosed** : 22 Jan 2024
Unique Number : 10836525 **Diagnostician** : Sean Felton
Test Package : CONST (Additional Tests: PQ)

B & S SITE DEVELOPMENT
 7800 PINEY BRANCH LANE
 BRISTOW, VA
 US 20136
 Contact: DANNY HUFF
 dhuff@bandssite.com
 T: (540)270-3203
 F: (703)753-0605

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)