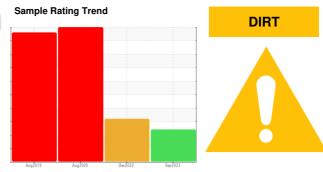


PROBLEM SUMMARY

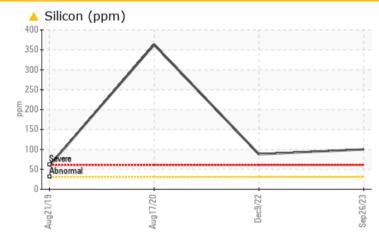


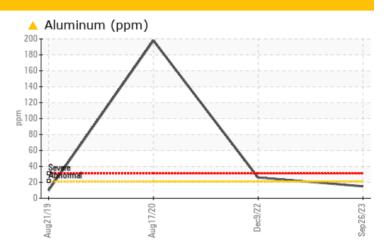
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)



COMPONENT CONDITION SUMMARY

Fluic





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. Resample at the next service interval to monitor.

| PROBLEMATIC 1 | PROBLEMATIC TEST RESULTS | | | | | | | |
|---------------|--------------------------|-------------|-----|----------|----------|-------------|--|--|
| Sample Status | | | | ABNORMAL | ABNORMAL | SEVERE | | |
| Aluminum | ppm | ASTM D5185m | >21 | <u> </u> | <u> </u> | 1 98 | | |
| Silicon | ppm | ASTM D5185m | >31 | <u> </u> | <u> </u> | 9363 | | |

Customer Id: JAMASH Sample No.: JR0179316 Lab Number: 05966603 Test Package: CONST



To discuss the diagnosis or test data: Sean Felton +1 919-379-4092 sfelton@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

| RECOMMENDED ACTIONS | | | | | | |
|---------------------|--------|------|---------|---|--|--|
| Action | Status | Date | Done By | Description | | |
| Check Dirt Access | | | ? | We advise that you check all areas where dirt can enter the system. | | |

HISTORICAL DIAGNOSIS

09 Dec 2022 Diag: Jonathan Hester



We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.



view report

17 Aug 2020 Diag: Don Baldridge





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.Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.



21 Aug 2019 Diag: Don Baldridge

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. High concentration of visible metal present. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (AI) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.











OIL ANALYSIS REPORT

Sample Rating Trend

DIRT



Machine Id JOHN DEERE 350G 1FF350GXVCE808679 Component Pump Drive Fluid

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

| PLUS 50 II 15W40 | (GAL) | Aug201 | 9 Aug2020 | Dec2022 S | ep2023 | |
|------------------|--------|-------------|------------|-------------|-------------|-------------|
| SAMPLE INFOR | | method | limit/base | current | history1 | history |
| Sample Number | | Client Info | | JR0179316 | JR0148242 | JR0060371 |
| Sample Date | | Client Info | | 26 Sep 2023 | 09 Dec 2022 | 17 Aug 202 |
| Machine Age | hrs | Client Info | | 8979 | 8350 | 6969 |
| Oil Age | hrs | Client Info | | 0 | 0 | 1000 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | ABNORMAL | ABNORMAL | SEVERE |
| WEAR METALS | | method | limit/base | current | history1 | history |
| PQ | | ASTM D8184 | | 240 | 172 | 317 |
| Iron | ppm | ASTM D5185m | >151 | 605 | ▲ 635 | 647 |
| Chromium | ppm | ASTM D5185m | >11 | 7 | 8 | 9 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | 2 |
| Titanium | ppm | ASTM D5185m | | 2 | 1 | 7 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >21 | 1 5 | 2 6 | 1 98 |
| Lead | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Copper | ppm | ASTM D5185m | >51 | 1 | <1 | 1 |
| Tin | ppm | ASTM D5185m | >4 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185m | >5 | | | 4 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history |
| Boron | ppm | ASTM D5185m | | 333 | 306 | 297 |
| Barium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Molybdenum | ppm | ASTM D5185m | | 232 | 222 | 259 |
| Manganese | ppm | ASTM D5185m | | 6 | 7 | 8 |
| Magnesium | ppm | ASTM D5185m | | 805 | 788 | 973 |
| Calcium | ppm | ASTM D5185m | | 1435 | 1479 | 1679 |
| Phosphorus | | ASTM D5185m | | 946 | 900 | 1079 |
| Zinc | ppm | ASTM D5185m | | 1059 | 1045 | 1166 |
| Sulfur | ppm | | | 3493 | 4033 | |
| | ppm | ASTM D5185m | | | | 3230 |
| CONTAMINANT | | method | limit/base | | history1 | history |
| Silicon | ppm | ASTM D5185m | | <u> </u> | ▲ 88 | • 363 |
| Sodium | ppm | ASTM D5185m | | 2 | 0 | 6 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 1 | 37 |
| VISUAL | | method | limit/base | current | history1 | history |
| White Metal | scalar | *Visual | NONE | NONE | LIGHT | LIGHT |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| 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 |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| | | | | | | |

DIAGNOSIS

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. Resample at the next service interval to monitor.

🔺 Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

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



OIL ANALYSIS REPORT



Contact/Location: DAVID ZIEG - JAMASH

Sep 26/23