

## [16W15833] Machine Id JOHN DEERE 350P 1FF350PALPF000976

## Component Diesel Engine

## JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (7 GAL)

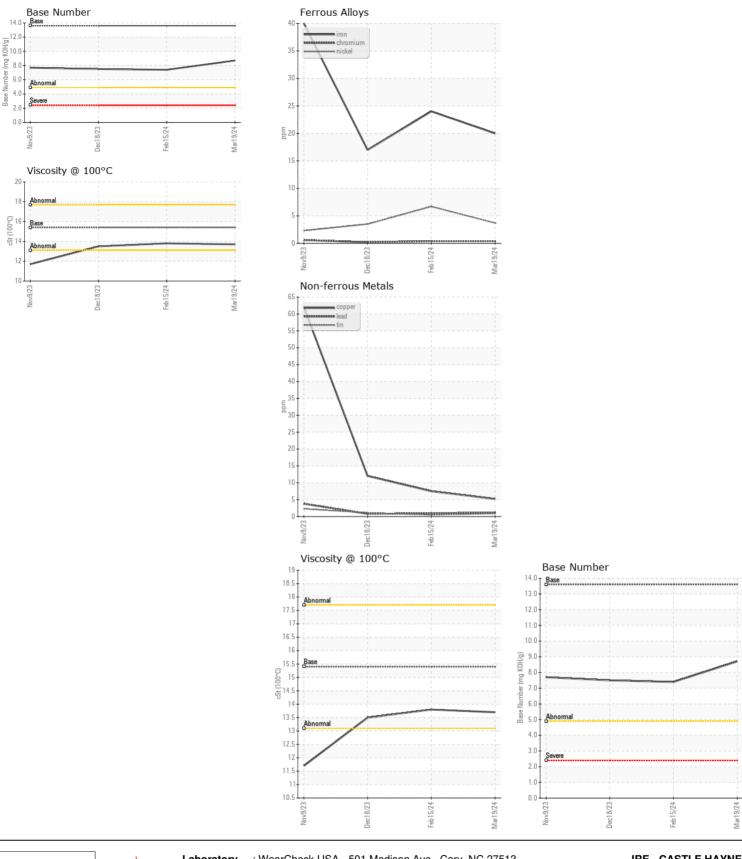
| JOHN DEERE ENGINE OIL PL03 50 II 15W40 (  | I GAL)           |          |               |             |             |             |             |
|---|------------------|----------|---------------|-------------|-------------|-------------|-------------|
| RECOMMENDATION  | Test             | UOM      | Method        | Limit/Abn   | Current     | History1    | History2    |
| Resample at the next service interval to monitor. ( Customer Sample Comment: 16W15833 )   | Sample Number    |          | Client Info   |             | JR0206959   | JR0202503   | JR0194081   |
|   | Sample Date      |          | Client Info   |             | 19 Mar 2024 | 15 Feb 2024 | 18 Dec 2023 |
|   | Machine Age      | hrs      | Client Info   |             | 1991        | 1609        | 1031        |
|   | Oil Age          | hrs      | Client Info   |             | 382         | 578         | 299         |
|   | Filter Age       | hrs      | Client Info   |             | 382         | 0           | 0           |
|   | Oil Changed      |          | Client Info   |             | Changed     | Not Changd  | Changed     |
|   | Filter Changed   |          | Client Info   |             | Changed     | Changed     | Changed     |
|   | Sample Status    |          |               |             | NORMAL      | NORMAL      | NORMAL      |
| WEAR  | Iron             | ppm      | ASTM D5185m   | >51         | 20          | 24          | 17          |
| WEAR  | Chromium         | ppm      | ASTM D5185m   |             | <1          | <1          | <1          |
| All component wear rates are normal.  | Nickel           | ppm      | ASTM D5185m   |             | 4           | 7           | 4           |
|   | Titanium         | ppm      | ASTM D5185m   | 20          | <1          | 0           | 0           |
|   | Silver           | ppm      | ASTM D5185m   | >3          | <1          | 0           | <1          |
|   | Aluminum         | ppm      | ASTM D5185m   |             | 4           | 3           | 4           |
|   | Lead             | ppm      | ASTM D5185m   |             | 1           | <1          | <1          |
|   | Copper           | ppm      | ASTM D5185m   |             | 5           | 8           | 12          |
|   | Tin              | ppm      | ASTM D5185m   |             | ہ<br><1     | <1          | 1           |
|   | Vanadium         | ppm      | ASTM D5185m   | ~ 1         | <1          | <1          | <1          |
|   | White Metal      | scalar   | *Visual       | NONE        | NONE        | NONE        | NONE        |
|   | Yellow Metal     | scalar   | *Visual       | NONE        | NONE        | NONE        | NONE        |
| CONTAMINATION   | Silicon          |          | ASTM D5185m   |             | 9           | 9           | 8           |
| CONTAMINATION   | Potassium        | ppm      | ASTM D5185m   |             | 4           | 0           | 2           |
| There is no indication of any contamination in the oil.   | Fuel             | ppm      | WC Method     |             | 4<br><1.0   | <1.0        | <1.0        |
|   | Water            |          | WC Method     |             | NEG         | NEG         | NEG         |
|   | Glycol           |          | WC Method     | 20.21       | NEG         | NEG         | NEG         |
|   | Soot %           | %        | *ASTM D7844   | 13          | 0.3         | 0.4         | 0.2         |
|   | Nitration        | Abs/cm   | *ASTM D7624   | >20         | 8.4         | 8.4         | 8.3         |
|   | Sulfation        | Abs/.1mm | *ASTM D7024   |             | 22.4        | 23.5        | 21.9        |
|   | 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 |          | *Visual       | >0.21       | NEG         | NEG         | NEG         |
| FLUID CONDITION   | Sodium           | ppm      | ASTM D5185m   | <u>\</u> 31 | 0           | 2           | 2           |
|   | Boron            | ppm      | ASTM D5185m   | 201         | 215         | 183         | 210         |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. | Barium           | ppm      | ASTM D5185m   |             | 3           | 0           | 0           |
|   | Molybdenum       | ppm      | ASTM D5185m   |             | 269         | 250         | 248         |
|   | Manganese        | ppm      | ASTM D5185m   |             | <1          | <1          | <1          |
|   | Magnesium        | ppm      | ASTM D5185m   |             | 797         | 856         | 814         |
|   | Calcium          | ppm      | ASTM D5185m   |             | 1534        | 1445        | 1352        |
|   | Phosphorus       | ppm      | ASTM D5185m   |             | 890         | 876         | 848         |
|   | Zinc             | ppm      | ASTM D5185m   |             | 1081        | 1072        | 1060        |
|   | Sulfur           | ppm      | ASTM D5185m   |             | 3175        | 2720        | 2807        |
|   | Oxidation        | Abs/.1mm | *ASTM D310311 | >25         | 17.2        | 18.6        | 17.3        |
|   | Base Number (BN) |          | ASTM D2896    |             | 8.7         | 7.4         | 7.5         |
|   |                  | - Ot     |               | 45.4        | 40 -        | 10.0        | 10.5        |

Visc @ 100°C cSt ASTM D445 15.4

13.5

13.8

13.7



: WearCheck USA - 501 Madison Ave., Cary, NC 27513 **JRE - CASTLE HAYNE** Laboratory Sample No. : JR0206959 Received : 21 Mar 2024 113 CROWATAN ROAD Lab Number : 06124757 Tested : 22 Mar 2024 CASTLE HAYNE, NC Unique Number : 10938908 Diagnosed : 24 Mar 2024 - Don Baldridge US 28429-5819 Test Package : CONST (Additional Tests: TBN) Contact: WILMINGTON SHOP Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. todd.simmons@jamesriverequipment.com;canastasio@wearcheck.com;canastasio@we \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (910)675-9211 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

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