**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL ATTENTION** 

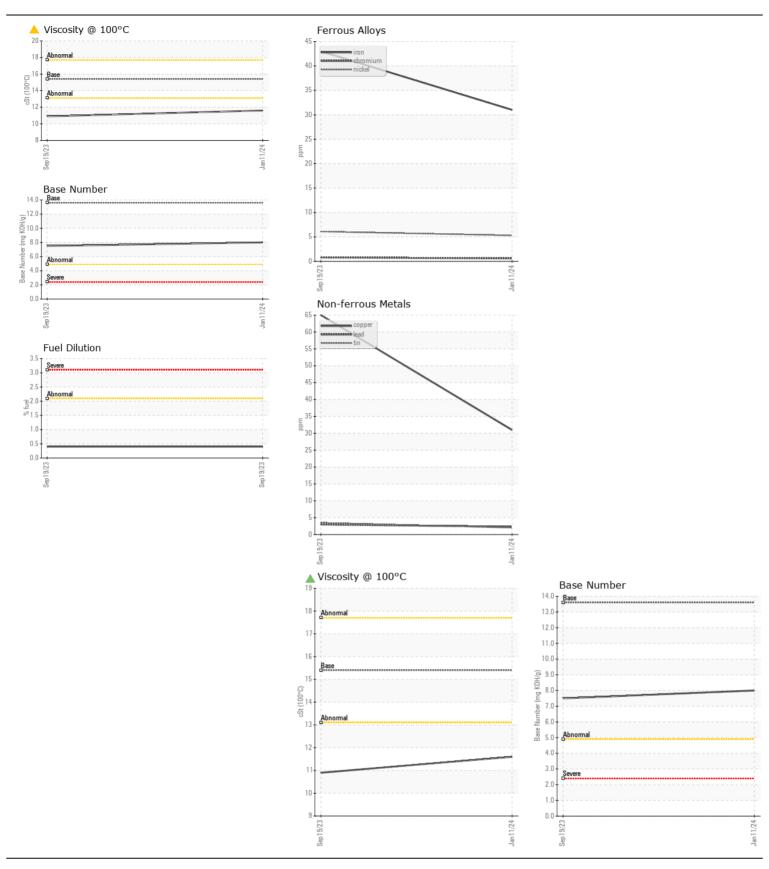
[44293]

## **JOHN DEERE 350P 1FF350PACPF000732**

Component Diesel Engine

IOHN DEERE ENGINE OIL PLUS 50 IL 15W40 (--- GAL)

| JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (-   | GAL)             |          |             |           |             |             |          |
|---|------------------|----------|-------------|-----------|-------------|-------------|----------|
| RECOMMENDATION  | Test             | UOM      | Method      | Limit/Abn | Current     | History1    | History2 |
|   | Sample Number    |          | Client Info |           | JR0199181   | JR0187467   | ,        |
| Resample at the next service interval to monitor.   | Sample Date      |          | Client Info |           | 11 Jan 2024 | 19 Sep 2023 |          |
|   | Machine Age      | hrs      | Client Info |           | 955         | 454         |          |
|   | Oil Age          | hrs      | Client Info |           | 501         | 0           |          |
|   | Filter Age       | hrs      | Client Info |           | 0           | 0           |          |
|   | Oil Changed      |          | Client Info |           | N/A         | Changed     |          |
|   | Filter Changed   |          | Client Info |           | N/A         | Changed     |          |
|   | Sample Status    |          |             |           | ATTENTION   | ATTENTION   |          |
| WEAR  | Iron             | ppm      | ASTM D5185m | >51       | 31          | 43          |          |
|   | Chromium         | ppm      | ASTM D5185m |           | <1          | <1          |          |
| All component wear rates are normal.  | Nickel           | ppm      | ASTM D5185m |           | 5           | 6           |          |
|   | Titanium         | ppm      | ASTM D5185m |           | 0           | <1          |          |
|   | Silver           | ppm      | ASTM D5185m | >3        | <1          | 2           |          |
|   | Aluminum         | ppm      | ASTM D5185m |           | 4           | 3           |          |
|   | Lead             | ppm      | ASTM D5185m |           | 2           | 3           |          |
|   | Copper           | ppm      | ASTM D5185m |           | 31          | 65          |          |
|   | Tin              | ppm      | ASTM D5185m |           | 2           | 4           |          |
|   | Vanadium         | ppm      | ASTM D5185m |           | 0           | <1          |          |
|   | White Metal      | scalar   | *Visual     | NONE      | NONE        | NONE        |          |
|   | Yellow Metal     | scalar   | *Visual     | NONE      | NONE        | NONE        |          |
| CONTAMINATION   | Ciliana          |          | ACTM DE10E  | 00        |             | 10          |          |
| CONTAMINATION   | Silicon          | ppm      | ASTM D5185m |           | 8           | 13          |          |
| There is no indication of any contamination in the oil.   | Potassium        | ppm      | ASTM D5185m |           | 1           | 8           |          |
|   | Fuel             | %        | ASTM D3524  |           | <1.0        | 0.4         |          |
|   | Water            |          | WC Method   | >0.21     | NEG<br>NEG  | NEG<br>NEG  |          |
|   | Glycol<br>Soot % | %        | *ASTM D7844 | . 0       |             |             |          |
|   | Nitration        |          | *ASTM D7624 |           | 0.3<br>8.2  | 0.3<br>8.6  |          |
|   | Sulfation        | Abs/.1mm | *ASTM D7024 |           | 23.5        | 24.2        |          |
|   | Silt             | scalar   | *Visual     | NONE      | NONE        | NONE        |          |
|   | Debris           | scalar   | *Visual     | NONE      | NONE        | NONE        |          |
|   | Sand/Dirt        | scalar   | *Visual     | NONE      | NONE        | NONE        |          |
|   | Appearance       | scalar   | *Visual     | NORML     | NORML       | NORML       |          |
|   | Odor             | scalar   | *Visual     | NORML     | NORML       | NORML       |          |
|   | Emulsified Water |          | *Visual     | >0.21     | NEG         | NEG         |          |
|   |                  |          |             |           |             |             |          |
| FLUID CONDITION   | Sodium           | ppm      | ASTM D5185m | >31       | 3           | 10          |          |
|   | Boron            | ppm      | ASTM D5185m |           | 135         | 204         |          |
| The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type. | Barium           | ppm      | ASTM D5185m |           | 0           | 1           |          |
|   | Molybdenum       | ppm      | ASTM D5185m |           | 178         | 241         |          |
|   | Manganese        | ppm      | ASTM D5185m |           | <1          | 2           |          |
|   | Magnesium        | ppm      | ASTM D5185m |           | 624         | 827         |          |
|   | Calcium          | ppm      | ASTM D5185m |           | 1981        | 1501        |          |
|   | Phosphorus       | ppm      | ASTM D5185m |           | 954         | 836         |          |
|   | Zinc             | ppm      | ASTM D5185m |           | 1131        | 1036        |          |
|   | Sulfur           | ppm      | ASTM D5185m |           | 2949        | 3291        |          |
|   | Oxidation        | Abs/.1mm | *ASTM D7414 |           | 17.9        | 20.6        |          |
|   | Base Number (BN) |          | ASTM D2896  |           | 8.0         | 7.5         |          |
|   | Visc @ 100°C     | cSt      | ASTM D445   | 15.4      | 11.6        | ▲ 10.9      |          |







Laboratory Sample No. Lab Number **Unique Number** 

: JR0199181 : 06063291 : 10834673

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

: 19 Jan 2024 Diagnostician : Don Baldridge

: 17 Jan 2024

**Test Package**: CONST (Additional Tests: FuelDilution, TBN) 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.

**B & S SITE DEVLEOPMENT** 

7800 PINEY BRANCH LANE BRISTOW, VA US 20136

> Contact: DANNY HUFF dhuff@bandssite.com T: (540)270-3203

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (703)753-0605