

Machine Id **JOHN DEERE 350P 1FF350PAAPF001012 Diesel Engine** JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

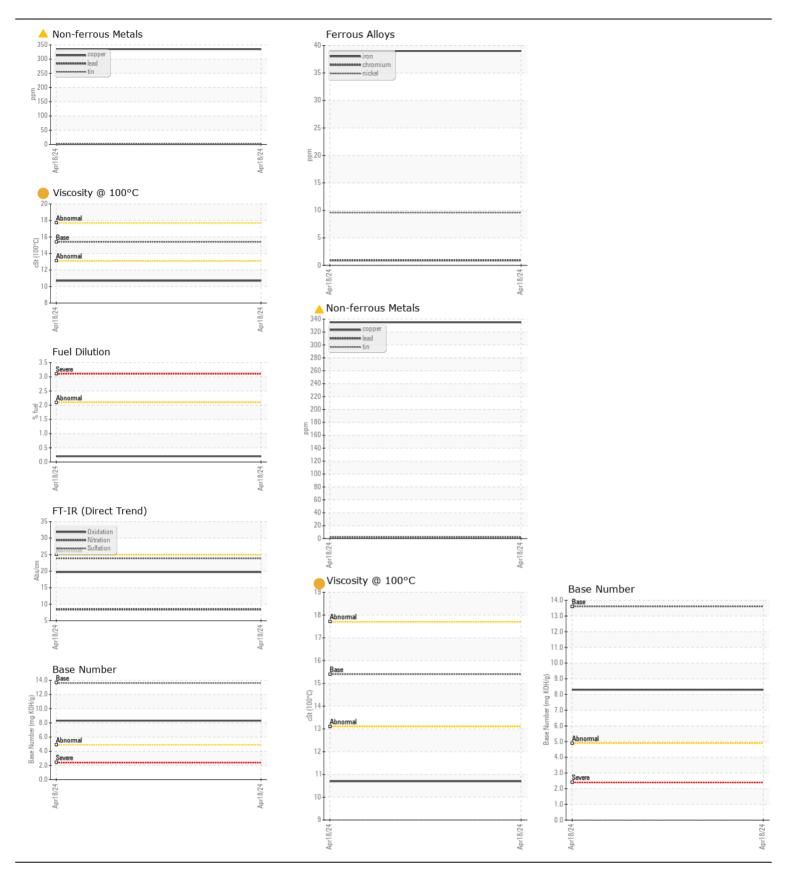
RECOMMENDATION

| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|--|------------------|-----------|-------------|-----------|--------------|----------|----------|
| Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. | Sample Number | | Client Info | | JR0211558 | | |
| | Sample Date | | Client Info | | 18 Apr 2024 | | |
| | Machine Age | hrs | Client Info | | 436 | | |
| | Oil Age | hrs | Client Info | | 0 | | |
| | Filter Age | hrs | Client Info | | 0 | | |
| | Oil Changed | | Client Info | | Changed | | |
| | Filter Changed | | Client Info | | Changed | | |
| | Sample Status | | | | ABNORMAL | | |
| WEAR The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in. | Iron | ppm | ASTM D5185m | >51 | 39 | | |
| | Chromium | ppm | ASTM D5185m | >11 | <1 | | |
| | Nickel | ppm | ASTM D5185m | >5 | 10 | | |
| | Titanium | ppm | ASTM D5185m | | 0 | | |
| | Silver | ppm | ASTM D5185m | >3 | 2 | | |
| | Aluminum | ppm | ASTM D5185m | >31 | 6 | | |
| | Lead | ppm | ASTM D5185m | >26 | 1 | | |
| | Copper | ppm | ASTM D5185m | >26 | A 335 | | |
| | Tin | ppm | ASTM D5185m | >4 | 2 | | |
| | Vanadium | ppm | ASTM D5185m | | 0 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | | | | | | | |
| CONTAMINATION Fuel content negligible. There is no indication of any contamination in the oil. | Silicon | ppm | ASTM D5185m | >22 | 10 | | |
| | Potassium | ppm | ASTM D5185m | >20 | 9 | | |
| | Fuel | % | ASTM D3524 | >2.1 | 0.2 | | |
| | Water | | WC Method | >0.21 | NEG | | |
| | Glycol | | WC Method | | NEG | | |
| | Soot % | % | *ASTM D7844 | >3 | 0.2 | | |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 8.4 | | |
| | Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 23.8 | | |
| | Silt | scalar | *Visual | NONE | NONE | | |
| | Debris | scalar | *Visual | NONE | NONE | | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| | Appearance | scalar | *Visual | NORML | NORML | | |
| | Odor | scalar | *Visual | NORML | NORML | | |
| | Emulsified Water | scalar | *Visual | >0.21 | NEG | | |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | >31 | 7 | | |
| | Boron | ppm | ASTM D5185m | | 273 | | |
| 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 | | 4 | | |
| | Molybdenum | ppm | ASTM D5185m | | 223 | | |
| | Manganese | ppm | ASTM D5185m | | 3 | | |
| | Magnesium | ppm | ASTM D5185m | | 786 | | |
| | Calcium | ppm | ASTM D5185m | | 1452 | | |
| | Phosphorus | ppm | ASTM D5185m | | 905 | | |
| | Zinc | ppm | ASTM D5185m | | 1035 | | |
| | Sulfur | ppm | ASTM D5185m | | 3271 | | |
| | Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 19.7 | | |
| | Base Number (BN) | | | | 8.3 | | |
| | | gittering | | | - · · · - | | |

ASTM D445 15.4

Visc @ 100°C cSt

10.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **JRE - ASHLAND** Sample No. : JR0211558 Received 11047 LEADBETTER RD : 22 Apr 2024 Lab Number : 06155664 Tested : 25 Apr 2024 ASHLAND, VA Unique Number : 10991087 : 25 Apr 2024 - Don Baldridge US 23005 Diagnosed Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN) Contact: DAVID ZIEG Certificate L2367 dzieg@jamesriverequipment.com 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. T: (804)798-6001 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (804)798-0292

Contact/Location: DAVID ZIEG - JAMASH Page 2 of 2