WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

Machine Ic

JOHN DEERE 1023E 1LV1023EEGG100563

Component Diesel Engine

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

| JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (- | QTS) | | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------|----------------------------|-----------|--------------|----------|----------|
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| | Sample Number | | Client Info | | JR0209771 | | |
| Resample at the next service interval to monitor. | Sample Date | | Client Info | | 29 Feb 2024 | | |
| | Machine Age | hrs | Client Info | | 478 | | |
| | Oil Age | hrs | Client Info | | 0 | | |
| | Filter Age | hrs | Client Info | | 0 | | |
| | Oil Changed | | Client Info | | Not Changd | | |
| | Filter Changed | | Client Info | | Not Changd | | |
| | Sample Status | | | | NORMAL | | |
| WEAR | Iron | ppm | ASTM D5185m | <u></u> | 17 | | |
| Metal levels are typical for a new component breaking in. | Chromium | ppm | ASTM D5185m | | <1 | | |
| | Nickel | | ASTM D5185m | | <1 | | |
| | Titanium | ppm | ASTM D5185m | 75 | 0 | | |
| | Silver | ppm | ASTM D5185m | ~3 | 0 | | |
| | Aluminum | ppm | ASTM D5185m | | 5 | | |
| | Lead | | ASTM D5185m | | <1 | | |
| | Copper | ppm | ASTM D5185m | | 2 | | |
| | Tin | ppm | ASTM D5185m | | <1 | | |
| | Vanadium | ppm | ASTM D5185m | 74 | 0 | | |
| | White Metal | ppm scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | | *Visual | NONE | NONE | | |
| | Tellow Metal | scalar | VISUAI | INOINE | INONE | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >22 | 10 | | |
| There is no indication of any contamination in the oil. | Potassium | ppm | ASTM D5185m | >20 | 2 | | |
| | Fuel | | WC Method | >2.1 | <1.0 | | |
| | Water | | WC Method | >0.21 | NEG | | |
| | Glycol | | WC Method | | NEG | | |
| | Soot % | % | *ASTM D7844 | >3 | 0.3 | | |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 9.9 | | |
| | Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 22.3 | | |
| | 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 | O - alliana | | AOTA DE LOS | 04 | _ | | |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | >31 | 1 | | |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. | Boron | ppm | ASTM D5185m | | 207 | | |
| | Barium | ppm | ASTM D5185m | | 0 | | |
| | Molybdenum | ppm | ASTM D5185m | | 232 | | |
| | Manganese | ppm | ASTM D5185m | | <1 | | |
| | Magnesium | ppm | ASTM D5185m | | 820 | | |
| | Calcium | ppm | ASTM D5185m | | 1389 | | |
| | Phosphorus | ppm | ASTM D5185m ASTM D5185m | | 849 1053 | | |
| | Zinc Sulfur | ppm | ASTM D5185m | | 1053 | | |
| | Oxidation | ppm Abc/ 1mm | | - 2E | 2790 17.0 | | |
| | | Abs/.1mm | *ASTM D7414 ASTM D2896 | | 17.0 8.8 | | |
| | Base Number (BN) Visc @ 100°C | cSt | ASTM D2896 ASTM D445 | | | | |
| | visc @ 100-C | UOL | MOTIVI D445 | 13.4 | 14.9 | | |





Laboratory Sample No.

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

: JR0209771 Lab Number : 06105911

Unique Number : 10909408

Test Package: MOBCE (Additional Tests: TBN)

Received : 01 Mar 2024 **Tested** : 04 Mar 2024 Diagnosed

: 04 Mar 2024 - Wes Davis

Contact: BUTCH JANES bjanes@jamesriverequipment.com

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JRE - WILKESBORO

WILKESBORO, NC

288 WESTGATE DRIVE

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)

US 28697