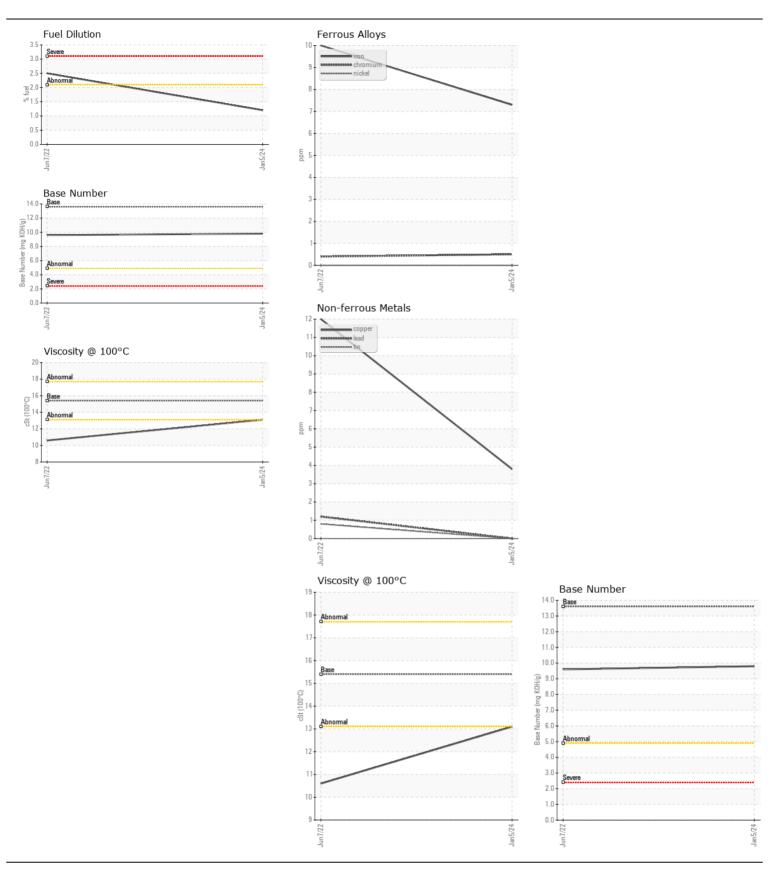
WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

[W20730-EDWARDS]

JOHN DEERE 1023E 1LV1023ETLL138539

| Component Diesel Engine | 33 | | | | | | |
|--|------------------------------|----------|--------------|-----------|-------------------|-------------------|----------|
| JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (| GAL) | | | | | | |
| RECOMMENDATION | | UOM | Method | Limit/Abn | Current | Liston/1 | Linton |
| RECOMMENDATION | Test | UOIVI | | Limit/Abn | | History1 | History2 |
| The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. | Sample Number | | Client Info | | JR0196657 | | |
| | Sample Date Machine Age | bro | Client Info | | 05 Jan 2024 56 | 07 Jun 2022 29 | |
| | • | hrs | Client Info | | 56 | | |
| | Oil Age Filter Age | hrs | Client Info | | 56 | 0 | |
| | Oil Changed | hrs | Client Info | | | - | |
| | _ | | Client Info | | Changed | Changed Changed | |
| | Filter Changed Sample Status | | Chefft IIIIo | | Changed NORMAL | ABNORMAL | |
| WEAR | Iron | nnm | ASTM D5185m | . 51 | 7 | 10 | |
| WEAR | | ppm | | | | | |
| Metal levels are typical for a new component breaking in. | Chromium | ppm | ASTM D5185m | | <1 | <1 | |
| | Nickel | ppm | ASTM D5185m | >5 | 0 | 0 | |
| | Titanium | ppm | ASTM D5185m | . 0 | 0 | <1 | |
| | Silver | ppm | ASTM D5185m | | 0 | <1 | |
| | Aluminum | ppm | ASTM D5185m | | 3 | 3 | |
| | Lead | ppm | ASTM D5185m | | 0 | 1 | |
| | Copper | ppm | ASTM D5185m | | 4 | 12 | |
| | Tin | ppm | ASTM D5185m | >4 | 0 | <1 | |
| | Vanadium | ppm | ASTM D5185m | NONE | <1 | <1 NONE | |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | |
| CONTAMINATION Light fuel dilution occurring. No other contaminants were detected in the oil. | Silicon | ppm | ASTM D5185m | >22 | 20 | 60 | |
| | Potassium | ppm | ASTM D5185m | | <1 | 2 | |
| | Fuel | % | ASTM D3524 | | 1.2 | <u>^</u> 2.5 | |
| | Water | | WC Method | | NEG | NEG | |
| | Glycol | | WC Method | | NEG | NEG | |
| | Soot % | % | *ASTM D7844 | >3 | 0.1 | 0.1 | |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 6.0 | 6.1 | |
| | Sulfation | Abs/.1mm | *ASTM D7415 | | 18.9 | 18.0 | |
| | Silt | scalar | *Visual | NONE | NONE | NONE | |
| | Debris | scalar | *Visual | NONE | NONE | NONE | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | |
| | Appearance | scalar | | NORML | NORML | NORML | |
| | Odor | scalar | | NORML | NORML | NORML | |
| | Emulsified Water | | | >0.21 | NEG | NEG | |
| | | | | | | | |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | >31 | 3 | 11 | |
| The DN yearst indicates that there is quitable alkalinity remaining in the | Boron | ppm | ASTM D5185m | | 250 | 227 | |
| 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 | | 0 | 9 | |
| | Molybdenum | ppm | ASTM D5185m | | 240 | 185 | |
| | Manganese | ppm | ASTM D5185m | | <1 | 2 | |
| | Magnesium | ppm | ASTM D5185m | | 756 | 518 | |
| | Calcium | ppm | ASTM D5185m | | 1539 | 2025 | |
| | Phosphorus | ppm | ASTM D5185m | | 863 | 908 | |
| | Zinc | ppm | ASTM D5185m | | 1049 | 1052 | |
| | Sulfur | ppm | ASTM D5185m | | 3102 | 3901 | |
| | Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 14.2 | 13.2 | |
| | Base Number (BN) | mg KOH/g | ASTM D2896 | 13.6 | 9.8 | 9.6 | |
| | Visc @ 100°C | cSt | ASTM D445 | 15.4 | 13.1 | <u></u> 10.6 | |
| | | | | | | | |







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

: JR0196657 : 06060047 : 10831429

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 12 Jan 2024 Diagnosed Diagnostician : Wes Davis

: 16 Jan 2024

Test Package: CONST (Additional Tests: PercentFuel, 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. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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