WEAR CONTAMINATION FLUID CONDITION

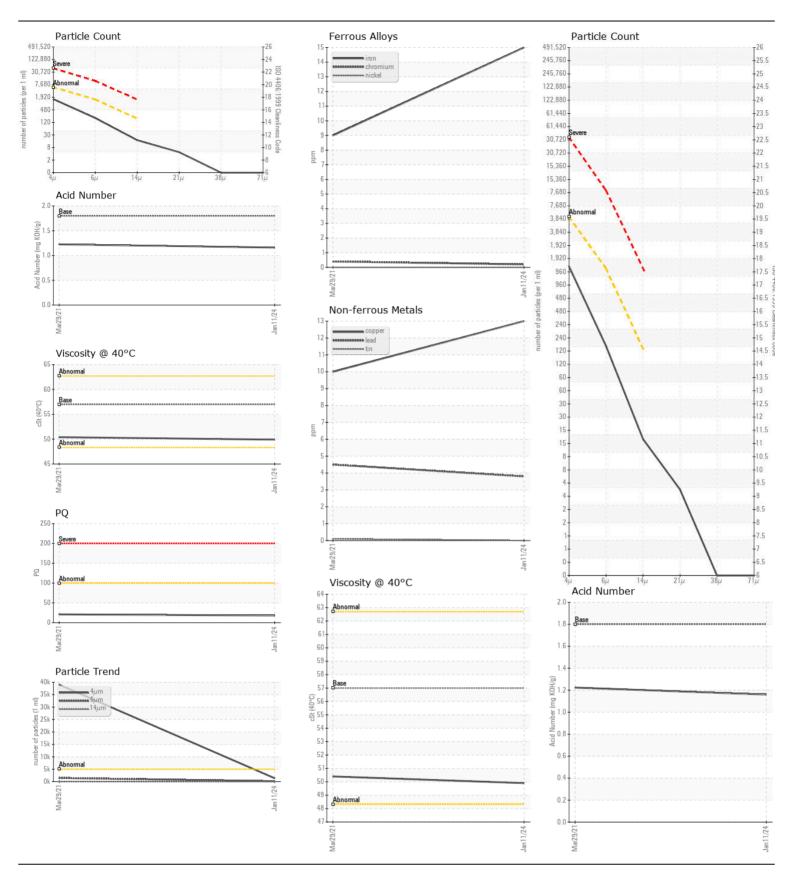
NORMAL NORMAL NORMAL

[W20635-WINDY HILL]

JOHN DEERE \$780 1H0\$780\$KKT805788

Hydraulic System

| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|----------------------|------------------|----------------------------|-----------|------------------|-------------------|----------|
| Resample at the next service interval to monitor. | Sample Number | | Client Info | | JR0196593 | JR0082084 | |
| | Sample Date | | Client Info | | 11 Jan 2024 | 29 Mar 2021 | |
| | Machine Age | hrs | Client Info | | 978 | 554 | |
| | Oil Age | hrs | Client Info | | 978 | 554 | |
| | Filter Age | hrs | Client Info | | 978 | 554 | |
| | Oil Changed | | Client Info | | Not Changd | Not Changd | |
| | Filter Changed | | Client Info | | Not Changd | Changed | |
| | Sample Status | | | | NORMAL | ABNORMAL | |
| WEAR | PQ | | ASTM D8184 | | 18 | 21 | |
| VEAIL | Iron | ppm | ASTM D5185m | >20 | 15 | 9 | |
| All component wear rates are normal. | Chromium | ppm | ASTM D5185m | | <1 | <1 | |
| | Nickel | ppm | ASTM D5185m | | 0 | 0 | |
| | Titanium | ppm | ASTM D5185m | >10 | 0 | <1 | |
| | Silver | ppm | ASTM D5185m | | 0 | <1 | |
| | Aluminum | ppm | ASTM D5185m | >10 | 2 | <1 | |
| | Lead | ppm | ASTM D5185m | | 4 | 4 | |
| | Copper | ppm | ASTM D5185m | | 13 | 10 | |
| | Tin | ppm | ASTM D5185m | | 0 | <1 | |
| | Vanadium | ppm | ASTM D5185m | >10 | 0 | 0 | |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | |
| CONTAMINATION | Ciliaan | | ACTM DE10Em | . 00 | | 10 | |
| CONTAMINATION | Silicon Potassium | ppm | ASTM D5185m ASTM D5185m | | 8 5 | 13 3 | |
| The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. | Water | ppm | WC Method | | NEG | NEG | |
| | Particles >4µm | | ASTM D7647 | | 1372 | ▲ 39028 | |
| | Particles >6μm | | ASTM D7647 | | 171 | ▲ 1484 | |
| | Particles >14µm | | ASTM D7647 | | 15 | 16 | |
| | Particles >21µm | | ASTM D7647 | | 4 | 6 | |
| | Particles >38µm | | ASTM D7647 | | 0 | 0 | |
| | Particles >71µm | | ASTM D7647 | | 0 | 0 | |
| | Oil Cleanliness | | ISO 4406 (c) | | - | <u>^</u> 22/18/11 | |
| | Silt | coolor | *Visual | NONE | 18/15/11 NONE | NONE | |
| | Debris | scalar scalar | *Visual | NONE | NONE | NONE | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | |
| | | | *Visual | NORML | NORML | NORML | |
| | Appearance Odor | scalar scalar | *Visual | NORML | NORML | NORML | |
| | Emulsified Water | | *Visual | >0.1 | NEG | NEG | |
| <u></u> | Liliuisilleu vvalei | Scalai | Visuai | >0.1 | NEG | INLG | |
| LUID CONDITION | Sodium | ppm | ASTM D5185m | | 0 | 4 | |
| | Boron | ppm | ASTM D5185m | 6 | 2 | 6 | |
| The AN level is acceptable for this fluid. The condition of the oil is suitable for further service. | Barium | ppm | ASTM D5185m | | 0 | 0 | |
| | Molybdenum | ppm | ASTM D5185m | 0 | <1 | 1 | |
| | Manganese | ppm | ASTM D5185m | | <1 | <1 | |
| | Magnesium | ppm | ASTM D5185m | 145 | 109 | 100 | |
| | Calcium | ppm | ASTM D5185m | 3570 | 3727 | 3396 | |
| | Phosphorus | ppm | ASTM D5185m | 1290 | 1040 | 930 | |
| | Zinc | ppm | ASTM D5185m | 1640 | 1381 | 1186 | |
| | Sulfur | ppm | ASTM D5185m | | 3902 | 2976 | |
| | Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.8 | 1.16 | 1.224 | |
| | Visc @ 40°C | cSt | ASTM D445 | 57.0 | 49.9 | 50.4 | |





Certificate L2367

Laboratory

Sample No. Lab Number **Unique Number**

: JR0196593 : 06060128 : 10831510

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 12 Jan 2024 Diagnosed : 16 Jan 2024

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

Diagnostician : Don Baldridge Test Package : CONST (Additional Tests: PQ)

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.

JRE - BURKEVILLE 510 WEST COLONIAL DR BURKEVILLE, VA US 23922

Contact: BRANDON BOLLING bbolling@jamesriverequipment.com

T: (434)767-5578 F: (434)767-3774