WEAR CONTAMINATION **FLUID CONDITION**

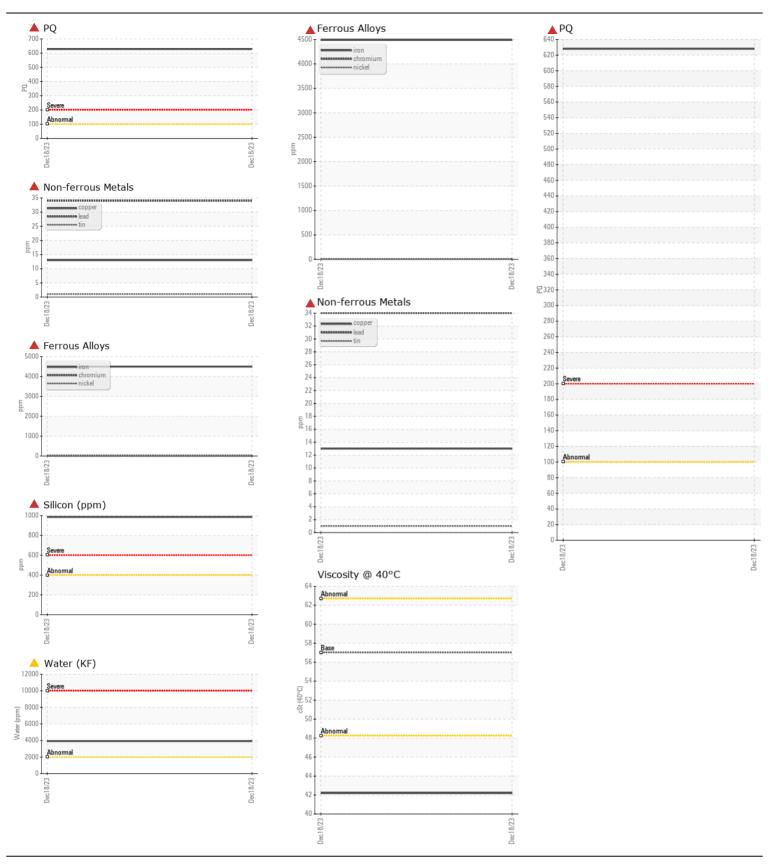
SEVERE SEVERE NORMAL

Machine Id

JOHN DEERE 711759

Component **Brake**

| JOHN DEERE HY-GARD HYD/TRANS (1 QTS) | | | | | | | |
|--|-----------------------|------------|--------------------------|-----------|---------------|----------|----------|
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. The fluid change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. | Sample Number | | Client Info | | JR0193583 | | |
| | Sample Date | | Client Info | | 18 Dec 2023 | | |
| | Machine Age | hrs | Client Info | | 4351 | | |
| | Oil Age | hrs | Client Info | | 4351 | | |
| | Filter Age | hrs | Client Info | | 0 | | |
| | Oil Changed | | Client Info | | Changed | | |
| | Filter Changed | | Client Info | | N/A | | |
| | Sample Status | | | | SEVERE | | |
| WEAR | PQ | | ASTM D8184 | | ▲ 628 | | |
| | Iron | ppm | ASTM D5185m | >350 | ▲ 4490 | | |
| The iron level is severe. The lead level is severe. | Chromium | ppm | ASTM D5185m | | 8 | | |
| | Nickel | ppm | ASTM D5185m | | 5 | | |
| | Titanium | ppm | ASTM D5185m | | 7 | | |
| | Silver | ppm | ASTM D5185m | | 0 | | |
| | Aluminum | ppm | ASTM D5185m | >8 | <u>25</u> | | |
| | Lead | ppm | ASTM D5185m | | ▲ 34 | | |
| | Copper | ppm | ASTM D5185m | | 13 | | |
| | Tin | ppm | ASTM D5185m | | 1 | | |
| | Vanadium | ppm | ASTM D5185m | , 0 | <1 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | | | | | | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >400 | 4 985 | | |
| Elemental levels of silicon (Si) and aluminum (Al) indicate alumina- silicate (coarse dirt) ingress. There is a moderate concentration of water present in the fluid. | Potassium | ppm | ASTM D5185m | >20 | 23 | | |
| | Water | % | ASTM D6304 | >0.2 | <u> </u> | | |
| | ppm Water | ppm | ASTM D6304 | >2000 | 4 3920 | | |
| | 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 | >0.2 | 0.2% | | |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | | 118 | | |
| The fluid is no longer serviceable due to the presence of contaminants. | Boron | ppm | ASTM D5185m | 6 | 15 | | |
| | Barium | ppm | ASTM D5185m | 0 | 0 | | |
| | Molybdenum | ppm | ASTM D5185m | 0 | 178 | | |
| | Manganese | ppm | ASTM D5185m | | 31 | | |
| | Magnesium | ppm | ASTM D5185m | 145 | 142 | | |
| | Calcium | ppm | ASTM D5185m | 3570 | 542 | | |
| | Phosphorus | ppm | ASTM D5185m | 1290 | 545 | | |
| | Zinc | ppm | ASTM D5185m | 1640 | 257 | | |
| | | | | | | | |
| | Sulfur | ppm | ASTM D5185m | | 1944 | | |
| | Sulfur Visc @ 40°C | ppm cSt | ASTM D5185m ASTM D445 | 57.0 | 1944 42.2 | | |





Laboratory Sample No.

: JR0193583 Lab Number : 06040732 Unique Number : 10795961

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

Diagnosed Test Package : CONST (Additional Tests: KF, PQ)

: 21 Dec 2023 : 22 Dec 2023 - Jonathan Hester

: 20 Dec 2023

US 28526 Contact: Service Manager

MILLS BROTHERS LOGGING

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)

1035 BIDDLE RD

DOVER, NC

T: F: