

## Machine Id **1102740 (S/N 1FF210GXPNF530719)** Component

## Hydraulic System

## JOHN DEERE ZINC-FREE HYDRAULIC OIL 46 (--- QTS)

|  |                  |            |              |           | ( )         |          |          |
|--|------------------|------------|--------------|-----------|-------------|----------|----------|
| RECOMMENDATION   | Test             | UOM        | Method       | Limit/Abn | Current     | History1 | History2 |
| Description of the most second second terms of the most filler                                       | Sample Number    |            | Client Info  |           | JR0225404   |          |          |
| Resample at the next service interval to monitor.  | Sample Date      |            | Client Info  |           | 01 Jul 2024 |          |          |
|  | Machine Age      | hrs        | Client Info  |           | 1082        |          |          |
|  | Oil Age          | hrs        | Client Info  |           | 1082        |          |          |
|  | Filter Age       | hrs        | Client Info  |           | 0           |          |          |
|  | Oil Changed      |            | Client Info  |           | Not Changd  |          |          |
|  | Filter Changed   |            | Client Info  |           | Changed     |          |          |
|  | Sample Status    |            |              |           | NORMAL      |          |          |
|  |                  |            |              |           |             |          |          |
| WEAR   | PQ               |            | ASTM D8184   |           | 15          |          |          |
| All component wear rates are normal.   | Iron             | ppm        | ASTM D5185m  |           | 3           |          |          |
|  | Chromium         | ppm        | ASTM D5185m  |           | 0           |          |          |
|  | Nickel           | ppm        | ASTM D5185m  | >10       | 0           |          |          |
|  | Titanium         | ppm        | ASTM D5185m  |           | 0           |          |          |
|  | Silver           | ppm        | ASTM D5185m  |           | 0           |          |          |
|  | Aluminum         | ppm        | ASTM D5185m  |           | 0           |          |          |
|  | Lead             | ppm        | ASTM D5185m  |           | 0           |          |          |
|  | Copper           | ppm        | ASTM D5185m  |           | 1           |          |          |
|  | Tin              | ppm        | ASTM D5185m  | >10       | 0           |          |          |
|  | Vanadium         | ppm        | ASTM D5185m  |           | 0           |          |          |
|  | White Metal      | scalar     | *Visual      | NONE      | NONE        |          |          |
|  | Yellow Metal     | scalar     | *Visual      | NONE      | NONE        |          |          |
|  |                  |            |              |           | 4           |          |          |
| CONTAMINATION  | Silicon          | ppm        | ASTM D5185m  |           | <1          |          |          |
| The amount and size of particulates present in the system are  | Potassium        | ppm        | ASTM D5185m  |           | <1          |          |          |
| acceptable. There is no indication of any contamination in the oil.                                  | Water            |            | WC Method    |           | NEG         |          |          |
|  | Particles >4µm   |            | ASTM D7647   |           | 1343        |          |          |
|  | Particles >6µm   |            | ASTM D7647   |           | 233         |          |          |
|  | Particles >14µm  |            | ASTM D7647   |           | 22          |          |          |
|  | Particles >21µm  |            | ASTM D7647   |           | 5           |          |          |
|  | Particles >38µm  |            | ASTM D7647   |           | 0           |          |          |
|  | Particles >71µm  |            | ASTM D7647   |           | 0           |          |          |
|  | Oil Cleanliness  |            | ISO 4406 (c) |           | 18/15/12    |          |          |
|  | 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      | >0.1      | NEG         |          |          |
| FLUID CONDITION  | Sodium           | ppm        | ASTM D5185m  |           | <1          |          |          |
| TEOD CONDITION   | Boron            | ppm        | ASTM D5185m  |           | 0           |          |          |
| The AN level is acceptable for this fluid. The condition of the oil is suitable for further service. | Barium           | ppm        | ASTM D5185m  |           | 0           |          |          |
|  | Molybdenum       | ppm        | ASTM D5185m  |           | 0           |          |          |
|  | Manganese        | ppm        | ASTM D5185m  |           | 0           |          |          |
|  | Magnesium        | ppm        | ASTM D5185m  |           | 0           |          |          |
|  | Calcium          | ppm        | ASTM D5185m  |           | 2           |          |          |
|  | Phosphorus       |            | ASTM D5185m  |           | 518         |          |          |
|  | Zinc             | ppm<br>ppm | ASTM D5185m  |           | 32          |          |          |
|  |                  | ррп        |              |           | 52          |          |          |

Sulfur

128

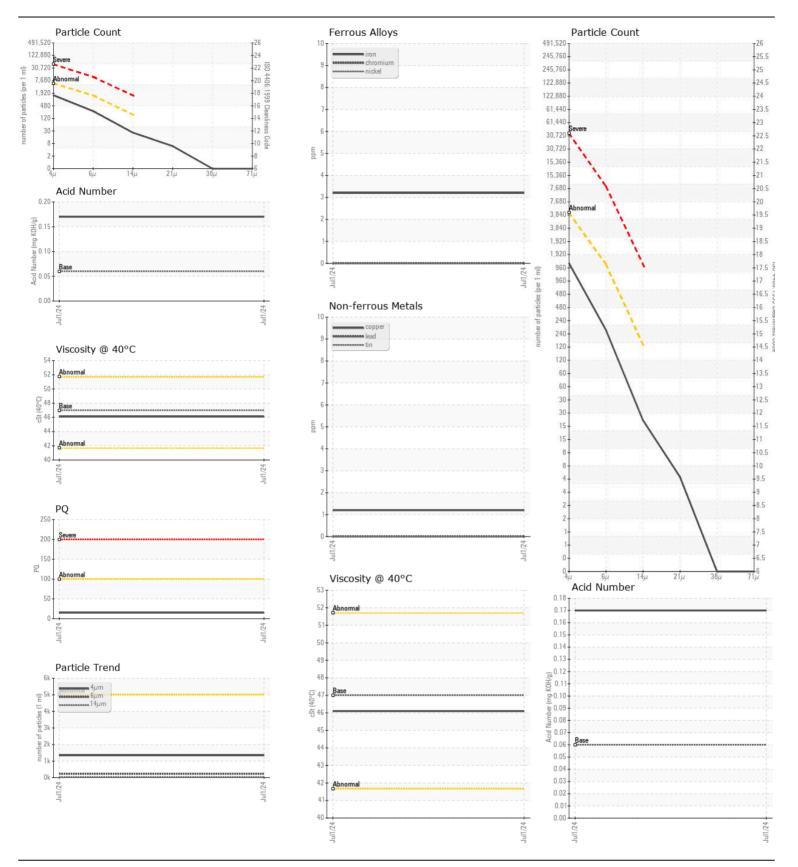
0.17

46.1

ppm ASTM D5185m

Acid Number (AN) mg KOH/g ASTM D8045 0.06

Visc @ 40°C cSt ASTM D445 47



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **JRE - MANASSAS PARK** Sample No. : JR0225404 9107 OWENS DRIVE Received : 03 Jul 2024 Lab Number : 06227327 MANASSAS PARK, VA Tested : 05 Jul 2024 : 06 Jul 2024 - Don Baldridge US 20111 Unique Number : 11110820 Diagnosed Test Package : CONST (Additional Tests: PQ) Contact: TECHNICIAN ACCOUNT Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. catherine.anastasio@wearcheck.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (703)631-4715

Submitted By: TECHNICIAN ACCOUNT Page 2 of 2