WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

[WNC HARDSCAPE]

## **JOHN DEERE 50G 1FF050GXTKH291973**

**Hydraulic System** 

HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)

| RECOMMENDATION  | Test             | UOM      | Method       | Limit/Abn | Current     | History1    | History2 |
|---|------------------|----------|--------------|-----------|-------------|-------------|----------|
| 1200 mm ENDATION  | Sample Number    |          | Client Info  |           | JR0201346   | JR0082919   |          |
| Resample at the next service interval to monitor.   | Sample Date      |          | Client Info  |           | 07 Jun 2024 | 19 Mar 2021 |          |
|   | Machine Age      | hrs      | Client Info  |           | 2934        | 444         |          |
|   | Oil Age          | hrs      | Client Info  |           | 0           | 444         |          |
|   | Filter Age       | hrs      | Client Info  |           | 0           | 444         |          |
|   | Oil Changed      |          | Client Info  |           | Not Changd  | Not Changd  |          |
|   | Filter Changed   |          | Client Info  |           | Changed     | Changed     |          |
|   | Sample Status    |          |              |           | NORMAL      | NORMAL      |          |
| WEAR  | PQ               |          | ASTM D8184   | >50       | 14          | 14          |          |
|   | Iron             | ppm      | ASTM D5185m  |           | 3           | 3           |          |
| All component wear rates are normal.  | Chromium         | ppm      | ASTM D5185m  |           | <1          | 0           |          |
|   | Nickel           | ppm      | ASTM D5185m  |           | 0           | <1          |          |
|   | Titanium         | ppm      | ASTM D5185m  | , 0       | 0           | 0           |          |
|   | Silver           | ppm      | ASTM D5185m  |           | 0           | 0           |          |
|   | Aluminum         | ppm      | ASTM D5185m  | >9        | <1          | 0           |          |
|   | Lead             | ppm      | ASTM D5185m  |           | 0           | 0           |          |
|   | Copper           | ppm      | ASTM D5185m  |           | <1          | 3           |          |
|   | Tin              | ppm      | ASTM D5185m  |           | 0           | 0           |          |
|   | Vanadium         | ppm      | ASTM D5185m  |           | <1          | 0           |          |
|   | White Metal      | scalar   | *Visual      | NONE      | NONE        | NONE        |          |
|   | Yellow Metal     | scalar   | *Visual      | NONE      | NONE        | NONE        |          |
| CONTAMINATION   | Silicon          | ppm      | ASTM D5185m  | >11       | 1           | 1           |          |
|   | Potassium        | ppm      | ASTM D5185m  |           | <1          | 0           |          |
| The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. | Water            | pp       | WC Method    |           | NEG         | NEG         |          |
|   | Particles >4µm   |          | ASTM D7647   |           | 3906        | 3114        |          |
|   | Particles >6µm   |          | ASTM D7647   |           | 736         | 432         |          |
|   | Particles >14µm  |          | ASTM D7647   |           | 50          | 19          |          |
|   | Particles >21µm  |          | ASTM D7647   |           | 11          | 5           |          |
|   | Particles >38µm  |          | ASTM D7647   |           | 0           | 0           |          |
|   | Particles >71µm  |          | ASTM D7647   |           | 0           | 0           |          |
|   | Oil Cleanliness  |          | ISO 4406 (c) |           | 19/17/13    | 19/16/11    |          |
|   | Silt             | scalar   | *Visual      | NONE      | NONE        | NONE        |          |
|   | Debris           | scalar   | *Visual      | NONE      | NONE        | NONE        |          |
|   | Sand/Dirt        | scalar   | *Visual      | NONE      | NONE        | NONE        |          |
|   | Appearance       | scalar   | *Visual      | NORML     | NORML       | NORML       |          |
|   | Odor             | scalar   | *Visual      | NORML     | NORML       | NORML       |          |
|   | Emulsified Water |          | *Visual      | >0.075    | NEG         | NEG         |          |
| THE CONDITION   | 015              |          | AOTM DEADE   | 04        |             | 4           |          |
| FLUID CONDITION   | Sodium           | ppm      | ASTM D5185m  | >८।       | <1          | <1          |          |
| The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.                            | Boron            | ppm      | ASTM D5185m  |           | 0           | <1          |          |
|   | Barium           | ppm      | ASTM D5185m  |           | 0           | <1          |          |
|   | Molybdenum       | ppm      | ASTM D5185m  |           | 0           | <1          |          |
|   | Manganese        | ppm      | ASTM D5185m  |           | 0           | <1          |          |
|   | Magnesium        | ppm      | ASTM D5185m  |           | 0           | 3           |          |
|   | Calcium          | ppm      | ASTM D5185m  | 00=       | 5           | 5           |          |
|   | Phosphorus       | ppm      | ASTM D5185m  |           | 467         | 420         |          |
|   | Zinc             | ppm      | ASTM D5185m  |           | 57          | 59          |          |
|   | Sulfur           | ppm      | ASTM D5185m  |           | 603         | 873         |          |
|   | Acid Number (AN) | mg KOH/g | ASTM D8045   |           | 0.16        | 0.144       |          |
|   | Visc @ 40°C      | cSt      | ASTM D445    | 47        | 46.1        | 46.7        |          |





Certificate L2367

Laboratory Sample No. Lab Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0201346 : 06209994

Received **Tested** Unique Number: 11082858 Diagnosed Test Package : CONST ( Additional Tests: PQ )

: 17 Jun 2024

: 14 Jun 2024

: 17 Jun 2024 - Wes Davis

US 28806 Contact: Randy Warren randy.warren@jamesriverequipment.com

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)

T: (528)667-0176 F: (828)667-4865

JRE - ASHEVILLE

101 BRUCE DRIVE

ASHEVILLE, NC