WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

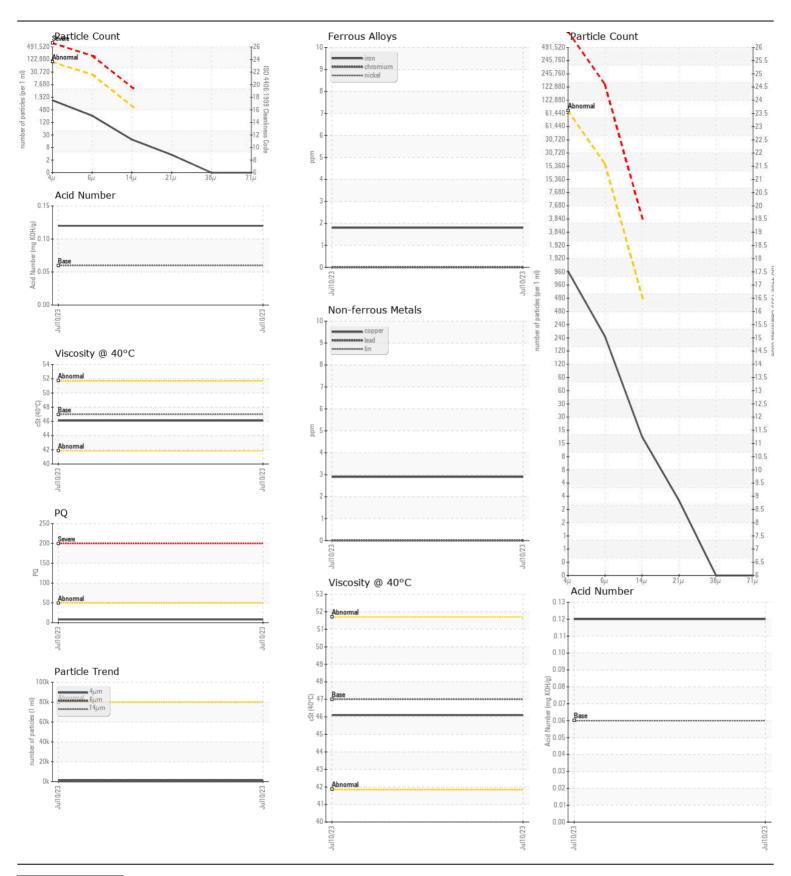
[W14010]

## **JOHN DEERE 350P 1FF350PAHNF000460**

Hydraulic System

HITACHI HYDRAULIC SUPER EX 46HN (51 GAL)

| RECOMMENDATION  | Test             | UOM      | Method       | Limit/Abn  | Current     | History1 | History2 |
|---|------------------|----------|--------------|------------|-------------|----------|----------|
|   | Sample Number    |          | Client Info  |            | JR0173409   |          |          |
| Resample at the next service interval to monitor. ( Customer Sample Comment: W14010 )   | Sample Date      |          | Client Info  |            | 10 Jul 2023 |          |          |
|   | Machine Age      | hrs      | Client Info  |            | 550         |          |          |
|   | Oil Age          | hrs      | Client Info  |            | 550         |          |          |
|   | Filter Age       | hrs      | Client Info  |            | 550         |          |          |
|   | Oil Changed      |          | Client Info  |            | Not Changd  |          |          |
|   | Filter Changed   |          | Client Info  |            | Not Changd  |          |          |
|   | Sample Status    |          |              |            | NORMAL      |          |          |
| WEAR  | PQ               |          | ASTM D8184   | >50        | 8           |          |          |
| ···   | Iron             | ppm      | ASTM D5185m  | >32        | 2           |          |          |
| All component wear rates are normal.  | Chromium         | ppm      | ASTM D5185m  | >9         | 0           |          |          |
|   | Nickel           | ppm      | ASTM D5185m  | >5         | 0           |          |          |
|   | Titanium         | ppm      | ASTM D5185m  |            | <1          |          |          |
|   | Silver           | ppm      | ASTM D5185m  |            | 0           |          |          |
|   | Aluminum         | ppm      | ASTM D5185m  | >9         | 1           |          |          |
|   | Lead             | ppm      | ASTM D5185m  | >28        | 0           |          |          |
|   | Copper           | ppm      | ASTM D5185m  | >50        | 3           |          |          |
|   | Tin              | ppm      | ASTM D5185m  | >5         | 0           |          |          |
|   | Vanadium         | ppm      | ASTM D5185m  |            | <1          |          |          |
|   | White Metal      | scalar   | *Visual      | NONE       | NONE        |          |          |
|   | Yellow Metal     | scalar   | *Visual      | NONE       | NONE        |          |          |
| CONTAMINATION   | Silicon          | ppm      | ASTM D5185m  | <b>\11</b> | <1          |          |          |
|   | Potassium        | ppm      | ASTM D5185m  |            | 3           |          |          |
| The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. | Water            | ррпп     | WC Method    |            | NEG         |          |          |
|   | Particles >4µm   |          | ASTM D7647   |            | 1210        |          |          |
|   | Particles >6µm   |          | ASTM D7647   |            | 219         |          |          |
|   | Particles >14µm  |          | ASTM D7647   | >640       | 16          |          |          |
|   | Particles >21µm  |          | ASTM D7647   |            | 3           |          |          |
|   | Particles >38µm  |          | ASTM D7647   | >40        | 0           |          |          |
|   | Particles >71µm  |          | ASTM D7647   | >10        | 0           |          |          |
|   | Oil Cleanliness  |          | ISO 4406 (c) | >23/21/16  | 17/15/11    |          |          |
|   | 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      | >0.075     | NEG         |          |          |
| FLUID CONDITION   | Sodium           | ppm      | ASTM D5185m  | >21        | 1           |          |          |
| LOID GONDITION  | 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  |            | 3           |          |          |
|   | Calcium          | ppm      | ASTM D5185m  |            | 1           |          |          |
|   | Phosphorus       | ppm      | ASTM D5185m  | 827        | 570         |          |          |
|   | Zinc             | ppm      | ASTM D5185m  |            | 26          |          |          |
|   | Sulfur           | ppm      | ASTM D5185m  |            | 109         |          |          |
|   | Acid Number (AN) | mg KOH/g | ASTM D8045   | 0.06       | 0.12        |          |          |
|   | Visc @ 40°C      | cSt      | ASTM D445    |            | 46.1        |          |          |





Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10553136

: JR0173409 : 05897326

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

: 13 Jul 2023 **Tested** Diagnosed Test Package : CONST ( Additional Tests: PQ )

: 14 Jul 2023 : 14 Jul 2023 - Don Baldridge

JRE - CASTLE HAYNE 113 CROWATAN ROAD CASTLE HAYNE, NC US 28429-5819

Contact: WILMINGTON SHOP

To discuss this sample report, contact Customer Service at 1-800-237-1369.

todd.simmons@jamesriverequipment.com;canastasio@wearcheck.com;canastasio@we T: (910)675-9211

\* - 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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