



**WEAR CONTAMINATION FLUID CONDITION** 

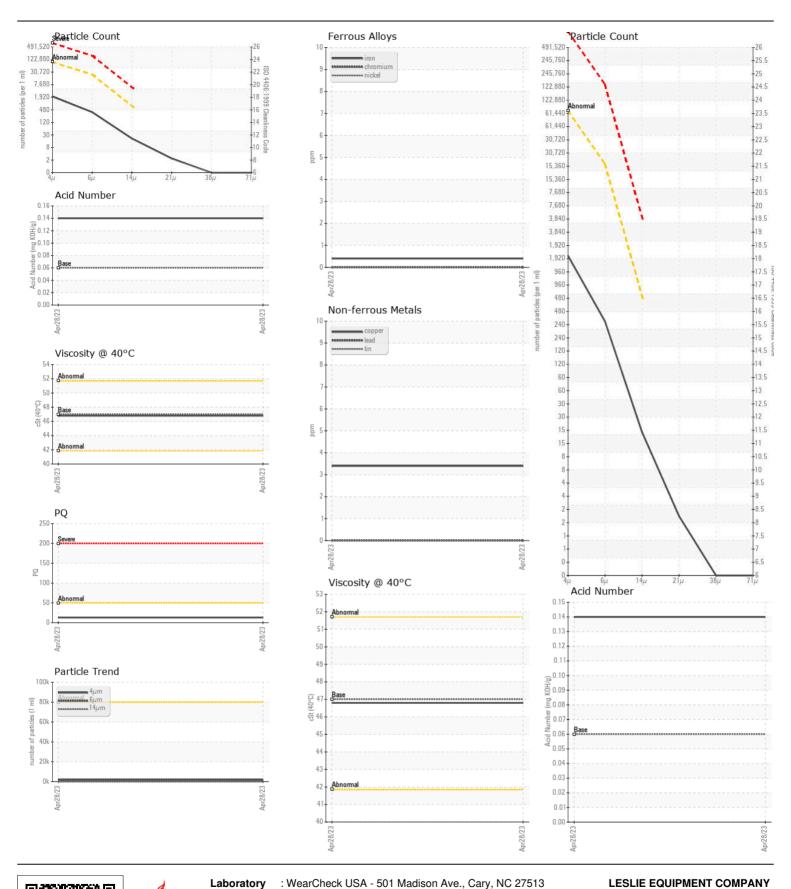
**NORMAL NORMAL NORMAL** 

Store 4 - Fairmont

## JOHN DEERE 160G 1FF160GXENF058790

Component Hydraulic System

| HITACHI HYDRAULIC SUPER E   | X 46HN (56       | GAL             | )                         |           |             |          |          |
|---|------------------|-----------------|---------------------------|-----------|-------------|----------|----------|
| RECOMMENDATION  | Test             | UOM             | Method                    | Limit/Abn | Current     | History1 | History2 |
|   | Sample Number    |                 | Client Info               |           | LEC0038205  |          |          |
| Resample at the next service interval to monitor.   | Sample Date      |                 | Client Info               |           | 28 Apr 2023 |          |          |
|   | Machine Age      | hrs             | Client Info               |           | 337         |          |          |
|   | Oil Age          | hrs             | Client Info               |           | 337         |          |          |
|   | Filter Age       | hrs             | Client Info               |           | 337         |          |          |
|   | Oil Changed      |                 | Client Info               |           | Not Changd  |          |          |
|   | Filter Changed   |                 | Client Info               |           | Not Changd  |          |          |
|   | Sample Status    |                 |                           |           | NORMAL      |          |          |
| WEAR  | PQ               |                 | ASTM D8184                | >50       | 13          |          |          |
|   | Iron             | ppm             | ASTM D5185m               | >32       | <1          |          |          |
| All component wear rates are normal.  | Chromium         | ppm             | ASTM D5185m               | >9        | 0           |          |          |
|   | Nickel           | ppm             | ASTM D5185m               | >5        | 0           |          |          |
|   | Titanium         | ppm             | ASTM D5185m               |           | 0           |          |          |
|   | Silver           | ppm             | ASTM D5185m               |           | 0           |          |          |
|   | Aluminum         | ppm             | ASTM D5185m               | >9        | 0           |          |          |
|   | Lead             | ppm             | ASTM D5185m               |           | 0           |          |          |
|   | Copper           | ppm             | ASTM D5185m               |           | 3           |          |          |
|   | Tin              | ppm             | ASTM D5185m               | >5        | 0           |          |          |
|   | Vanadium         | ppm             | ASTM D5185m               |           | 0           |          |          |
|   | White Metal      | scalar          | *Visual                   | NONE      | NONE        |          |          |
|   | Yellow Metal     | scalar          | *Visual                   | NONE      | NONE        |          |          |
| CONTAMINATION   | Silicon          | ppm             | ASTM D5185m               | >11       | <1          |          |          |
|   | Potassium        | ppm             | ASTM D5185m               | >20       | 1           |          |          |
| There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. | Water            |                 | WC Method                 | >0.075    | NEG         |          |          |
|   | Particles >4µm   |                 | ASTM D7647                | >80000    | 1812        |          |          |
|   | Particles >6µm   |                 | ASTM D7647                | >20000    | 325         |          |          |
|   | Particles >14µm  |                 | ASTM D7647                | >640      | 18          |          |          |
|   | Particles >21µm  |                 | ASTM D7647                | >160      | 2           |          |          |
|   | Particles >38µm  |                 | ASTM D7647                | >40       | 0           |          |          |
|   | Particles >71µm  |                 | ASTM D7647                | >10       | 0           |          |          |
|   | Oil Cleanliness  |                 | ISO 4406 (c)              | >23/21/16 | 18/16/11    |          |          |
|   | Silt             | scalar          | *Visual                   | NONE      | NONE        |          |          |
|   | Debris           | scalar          | *Visual                   | NONE      | LIGHT       |          |          |
|   | 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          |          |          |
|   | 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               |           | <1          |          |          |
|   | Magnesium        | ppm             | ASTM D5185m               |           | 6           |          |          |
|   | Calcium          | ppm             | ASTM D5185m               |           | <1          |          |          |
|   | Phosphorus       | ppm             | ASTM D5185m               | 827       | 480         |          |          |
|   | Zinc             | ppm             | ASTM D5185m               |           | 27          |          |          |
|   |                  |                 |                           |           |             |          |          |
|   | Sulfur           | ppm             | ASTM D5185m               | 13        | 0           |          |          |
|   |                  | ppm<br>mg KOH/g | ASTM D5185m<br>ASTM D8045 |           | 0<br>0.14   |          |          |







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 05837692

: LEC0038205 Unique Number : 10456495

Received Tested

: 04 May 2023 : 05 May 2023

: 08 May 2023 - Don Baldridge

Diagnosed

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.

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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (740)373-5570

T:

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