

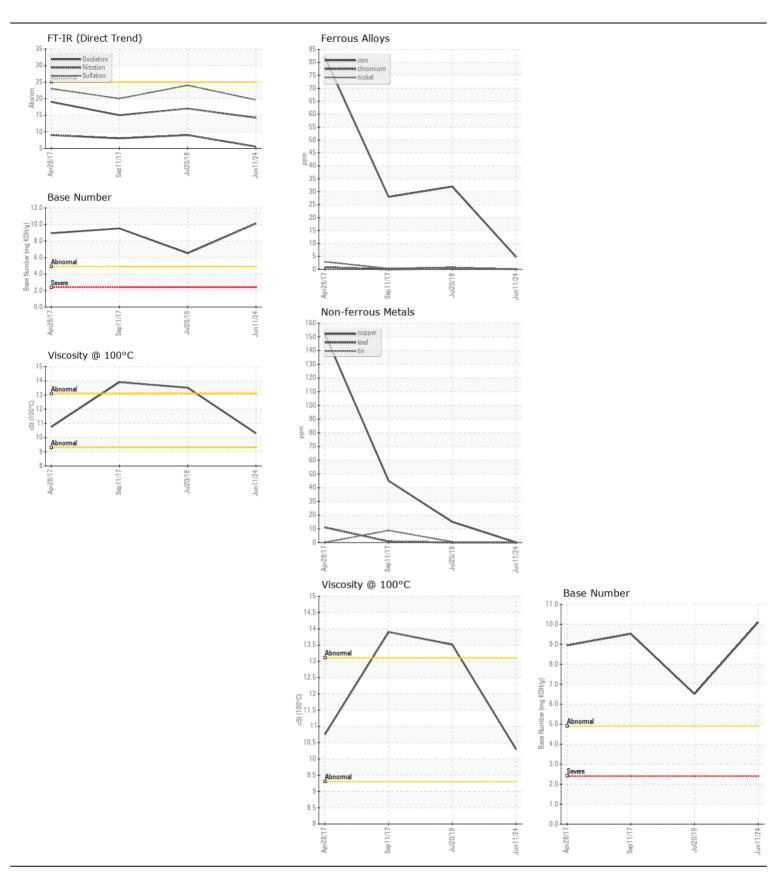


**WEAR CONTAMINATION FLUID CONDITION**  **NORMAL NORMAL NORMAL** 

## Store 2 - Beaver [RO#150930] **JOHN DEERE 748L 1DW748LXVFF670787**

Diesel Engine

| JOHN DEERE ENGINE OIL PLUS 50 II 10W30 (8 GAL)  |                         |                  |                            |              |              |             |             |
|---|-------------------------|------------------|----------------------------|--------------|--------------|-------------|-------------|
| RECOMMENDATION  | Test                    | UOM              | Method                     | Limit/Abn    | Current      | History1    | History2    |
| No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. ( Customer Sample Comment: New engine install/ Break in oil ) | Sample Number           | COM              | Client Info                | Limit / torr | LEC0050028   |             | LECP172464  |
|   | Sample Date             |                  | Client Info                |              | 11 Jun 2024  | 20 Jul 2018 | 11 Sep 2017 |
|   | Machine Age             | hrs              | Client Info                |              | 8325         | 1645        | 1128        |
|   | Oil Age                 | hrs              | Client Info                |              | 1            | 517         | 464         |
| motali, broak in oil j  | Filter Age              | hrs              | Client Info                |              | 1            | 517         | 464         |
|   | Oil Changed             |                  | Client Info                |              | Changed      | Changed     | Changed     |
|   | Filter Changed          |                  | Client Info                |              | Changed      | Changed     | Changed     |
|   | Sample Status           |                  |                            |              | NORMAL       | NORMAL      | NORMAL      |
| WEAR  | Iron                    | ppm              | ASTM D5185m                | >51          | 5            | 32          | 28          |
| Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.   | Chromium                | ppm              | ASTM D5185m                | >11          | <1           | <1          | 0           |
|   | Nickel                  | ppm              | ASTM D5185m                | >5           | 0            | <1          | <1          |
|   | Titanium                | ppm              | ASTM D5185m                |              | <1           | 0           | 0           |
|   | Silver                  | ppm              | ASTM D5185m                |              | 0            | 0           | 0           |
|   | Aluminum                | ppm              | ASTM D5185m                |              | 4            | 7           | 10          |
|   | Lead                    | ppm              |                            | >26          | 0            | 0           | <1          |
|   | Copper                  | ppm              | ASTM D5185m                |              | <1           | 15          | 45          |
|   | Tin                     | ppm              | ASTM D5185m                | >4           | <1           | <1          | 9           |
|   | Vanadium<br>White Metal | ppm              | *Visual                    | NONE         | 0<br>NONE    | 0<br>NONE   | 0<br>NONE   |
|   | Yellow Metal            | scalar           | *Visual                    | NONE         | NONE<br>NONE | NONE        | NONE        |
|   | reliow Metal            | scalar           | VISUAI                     | INOINE       | INOINE       | NONE        | NONE        |
| CONTAMINATION   | Silicon                 | ppm              | ASTM D5185m                | >!20         | 8            | 6           | 6           |
| There is no indication of any contamination in the oil.   | Potassium               | ppm              | ASTM D5185m                | >20          | 2            | 18          | 17          |
|   | Fuel                    |                  | WC Method                  |              | <1.0         | <1.0        | <1.0        |
|   | Water                   |                  | WC Method                  | >0.21        | NEG          | NEG         | NEG         |
|   | Glycol                  |                  | WC Method                  |              | NEG          | NEG         | NEG         |
|   | Soot %                  | %                | *ASTM D7844                |              | 0            | 0.9         | 0.2         |
|   | Nitration               | Abs/dmm          | *ASTM D7624                | >20          | 5.5          | 9.<br>24.   | 8.          |
|   | Sulfation<br>Silt       | Abs/.1mm         | *ASTM D7415 *Visual        |              | 19.6<br>NONE | NONE        | 20.<br>NONE |
|   | Debris                  | scalar<br>scalar | *Visual                    | NONE         | NONE         | NONE        | NONE        |
|   | Sand/Dirt               | scalar           | *Visual                    | NONE         | NONE         | NONE        | NONE        |
|   | Appearance              | scalar           | *Visual                    | NORML        | NORML        | NORML       | NORML       |
|   | Odor                    | scalar           | *Visual                    | NORML        | NORML        | NORML       | NORML       |
|   | Emulsified Water        |                  | *Visual                    | >0.21        | NEG          | NEG         | NEG         |
| ELUD CONDITION  |                         |                  |                            |              |              |             |             |
| FLUID CONDITION   | Sodium                  | ppm              | ASTM D5185m                | >31          | 0            | 5           | 5           |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.   | Boron                   | ppm              | ASTM D5185m                |              | 312          | 95          | 74          |
|   | Barium                  | ppm              | ASTM D5185m                |              | 0            | 0           | 0           |
|   | Molybdenum<br>Manganese | ppm              | ASTM D5185m<br>ASTM D5185m |              | 250<br>0     | 101<br>2    | 261         |
|   | Magnesium               | ppm              | ASTM D5185m                |              | 776          | 429         | 863         |
|   | Calcium                 | ppm              | ASTM D5185m                |              | 1300         | 1415        | 1370        |
|   | Phosphorus              | ppm              | ASTM D5185m                |              | 779          | 912         | 803         |
|   | Zinc                    | ppm              | ASTM D5185m                |              | 1003         | 1117        | 998         |
|   | Sulfur                  | ppm              | ASTM D5185m                |              | 3025         | 2531        | 2788        |
|   | Oxidation               | Abs/.1mm         | *ASTM D7414                | >25          | 14.2         | 17.         | 15.         |
|   | Base Number (BN)        |                  | ASTM D2896                 |              | 10.1         | 6.51        | 9.52        |
|   | Visc @ 100°C            | cSt              | ASTM D445                  |              | 10.3         | 13.51       | 13.9        |







Certificate L2367

Laboratory

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.

: LEC0050028 Lab Number : 06209913 Unique Number : 11082777

Test Package : CONST ( Additional Tests: TBN )

Received **Tested** Diagnosed

: 17 Jun 2024

: 14 Jun 2024

: 17 Jun 2024 - Don Baldridge

Contact: LEANNE KENDALL KendalLeanne@lec1.com T:

105 TENNIS CENTER DR.

MARIETTA, OH

US 45750-9765

LESLIE EQUIPMENT COMPANY

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)

F: (740)373-5570 Submitted By: STORE 2 - BEAVER - CASEY TONEY