

## Machine Id HITACHI 250LC 1FFDC270VJF440228 Component Pump Drive

## JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (2 QTS)

| JUHN DEERE ENGINE UIL PLUS 50 II 15W40 (                        | 2 (413)          |        |             |           |             |             |             |
|---|------------------|--------|-------------|-----------|-------------|-------------|-------------|
| RECOMMENDATION  | Test             | UOM    | Method      | Limit/Abn | Current     | History1    | History2    |
| Resample at the next service interval to monitor.               | Sample Number    |        | Client Info |           | JR0215694   | JR0198460   | JR0177980   |
|   | Sample Date      |        | Client Info |           | 20 May 2024 | 25 Jan 2024 | 25 Aug 2023 |
|   | Machine Age      | hrs    | Client Info |           | 6999        | 6584        | 6053        |
|   | Oil Age          | hrs    | Client Info |           | 6468        | 531         | 580         |
|   | Filter Age       | hrs    | Client Info |           | 0           | 0           | 0           |
|   | Oil Changed      |        | Client Info |           | Changed     | Not Changd  | Changed     |
|   | Filter Changed   |        | Client Info |           | N/A         | Not Changd  | N/A         |
|   | Sample Status    |        |             |           | NORMAL      | NORMAL      | NORMAL      |
| WEAR  | PQ               |        | ASTM D8184  |           | 51          | 53          | 64          |
| All component wear rates are normal.                            | Iron             | ppm    | ASTM D5185m | >500      | 134         | 115         | 108         |
|   | Chromium         | ppm    | ASTM D5185m | >15       | 1           | 1           | <1          |
|   | Nickel           | ppm    | ASTM D5185m | >10       | 0           | 0           | 0           |
|   | Titanium         | ppm    | ASTM D5185m |           | <1          | <1          | <1          |
|   | Silver           | ppm    | ASTM D5185m |           | 0           | 0           | 0           |
|   | Aluminum         | ppm    | ASTM D5185m | >20       | 13          | 13          | 10          |
|   | Lead             | ppm    | ASTM D5185m |           | 0           | 0           | 0           |
|   | Copper           | ppm    | ASTM D5185m | >35       | 0           | 0           | 0           |
|   | Tin              | ppm    | ASTM D5185m | >4        | <1          | <1          | 0           |
|   | Vanadium         | ppm    | ASTM D5185m |           | 0           | <1          | 0           |
|   | White Metal      | scalar | *Visual     | NONE      | NONE        | NONE        | NONE        |
|   | Yellow Metal     | scalar | *Visual     | NONE      | NONE        | NONE        | NONE        |
| CONTAMINATION   | Silicon          | ppm    | ASTM D5185m | >75       | 26          | 23          | 21          |
| There is no indication of any contamination in the oil.         | Potassium        | ppm    | ASTM D5185m | >20       | 1           | 3           | 2           |
|   | Water            |        | WC Method   | >0.2      | NEG         | NEG         | NEG         |
|   | Silt             | scalar | *Visual     | NONE      | NONE        | NONE        | NONE        |
|   | Debris           | 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 | scalar | *Visual     | >0.2      | NEG         | NEG         | NEG         |
| FLUID CONDITION   | Sodium           | ppm    | ASTM D5185m |           | 2           | 2           | 2           |
| The condition of the oil is acceptable for the time in service. | Boron            | ppm    | ASTM D5185m |           | 325         | 347         | 330         |
|   | Barium           | ppm    | ASTM D5185m |           | 0           | <1          | 0           |
|   | Molybdenum       | ppm    | ASTM D5185m |           | 258         | 249         | 242         |
|   | Manganese        | ppm    | ASTM D5185m |           | 2           | 2           | 1           |
|   | Magnesium        | ppm    | ASTM D5185m |           | 842         | 814         | 791         |
|   | Calcium          | ppm    | ASTM D5185m |           | 1483        | 1454        | 1539        |
|   | Phosphorus       | ppm    | ASTM D5185m |           | 960         | 962         | 903         |
|   | Zinc             | ppm    | ASTM D5185m |           | 1085        | 1074        | 1039        |
|   | Sulfur           | ppm    | ASTM D5185m |           | 3722        | 3302        | 3875        |

Visc @ 40°C

cSt

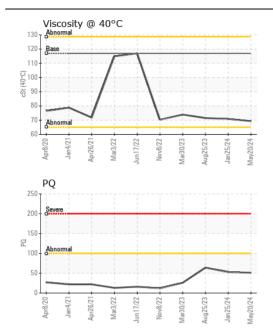
Submitted By: Mike Young - CHARLOTTE SHOP

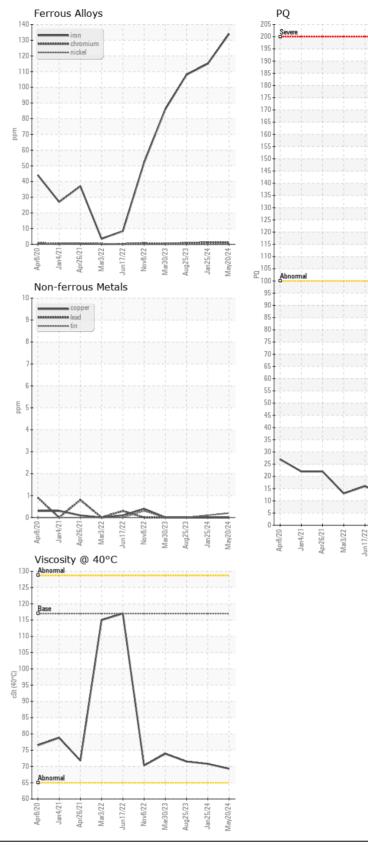
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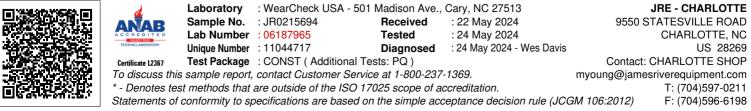
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71.5







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