



|                 |               |
|-----------------|---------------|
| WEAR            | <b>NORMAL</b> |
| CONTAMINATION   | <b>NORMAL</b> |
| FLUID CONDITION | <b>NORMAL</b> |

Machine Id  
**JOHN DEERE 350P 1FF350PATPF000479**  
 Component  
**Hydraulic System**  
 Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (76 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>JR0221118</b>   | JR0220739   | JR0214105   |
| Sample Date    |     | Client Info |           | <b>11 Jul 2024</b> | 21 Jun 2024 | 29 May 2024 |
| Machine Age    | hrs | Client Info |           | <b>2478</b>        | 2007        | 1549        |
| Oil Age        | hrs | Client Info |           | <b>2478</b>        | 2007        | 1549        |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 1000        | 0           |
| Oil Changed    |     | Client Info |           | <b>Not Chngd</b>   | Not Chngd   | N/A         |
| Filter Changed |     | Client Info |           | <b>Not Chngd</b>   | Not Chngd   | N/A         |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

### WEAR

All component wear rates are normal.

|              |        |             |      |             |      |      |
|--------------|--------|-------------|------|-------------|------|------|
| PQ           |        | ASTM D8184  | >50  | <b>13</b>   | 16   | 17   |
| Iron         | ppm    | ASTM D5185m | >32  | <b>1</b>    | <1   | 2    |
| Chromium     | ppm    | ASTM D5185m | >9   | <b>0</b>    | 0    | 0    |
| Nickel       | ppm    | ASTM D5185m | >5   | <b>0</b>    | 0    | 0    |
| Titanium     | ppm    | ASTM D5185m |      | <b>0</b>    | 0    | 0    |
| Silver       | ppm    | ASTM D5185m |      | <b>0</b>    | 0    | 0    |
| Aluminum     | ppm    | ASTM D5185m | >9   | <b>0</b>    | <1   | <1   |
| Lead         | ppm    | ASTM D5185m | >28  | <b>0</b>    | 0    | 0    |
| Copper       | ppm    | ASTM D5185m | >50  | <b>0</b>    | <1   | <1   |
| Tin          | ppm    | ASTM D5185m | >5   | <b>0</b>    | 0    | 0    |
| Vanadium     | ppm    | ASTM D5185m |      | <b>0</b>    | 0    | <1   |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b> | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b> | NONE | NONE |

### CONTAMINATION

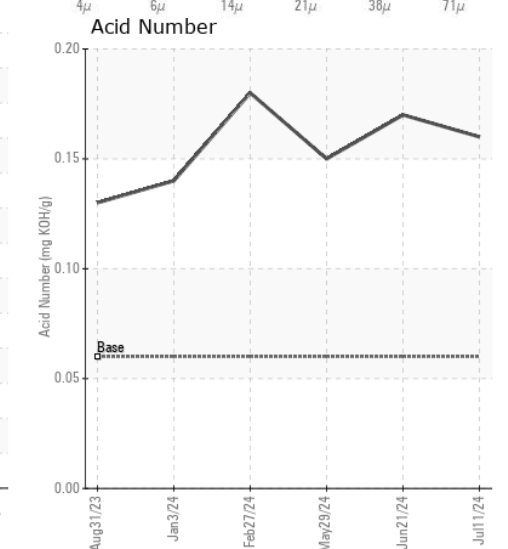
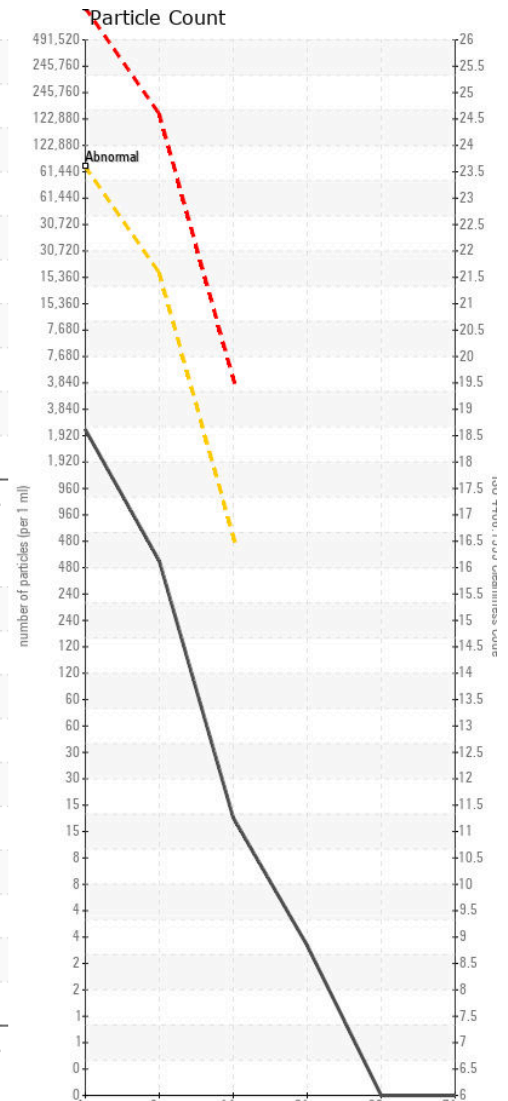
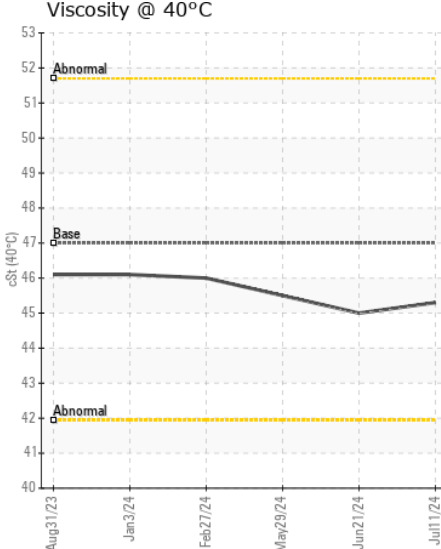
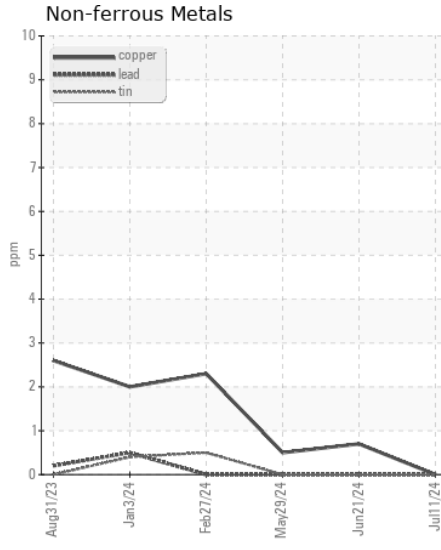
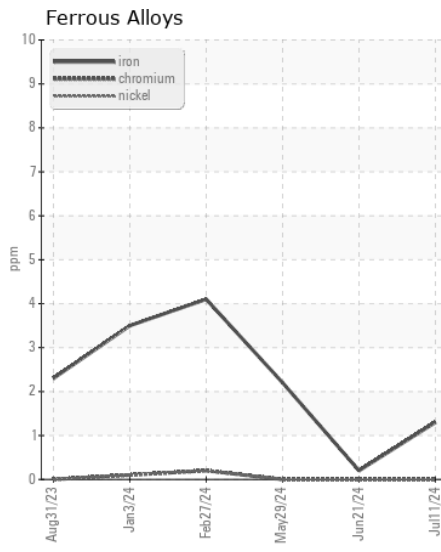
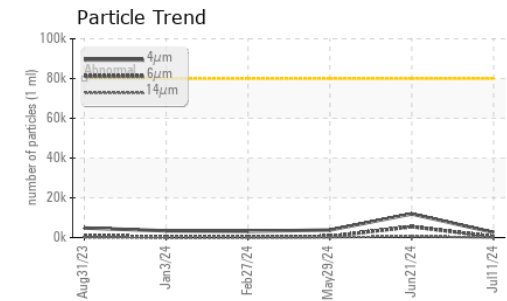
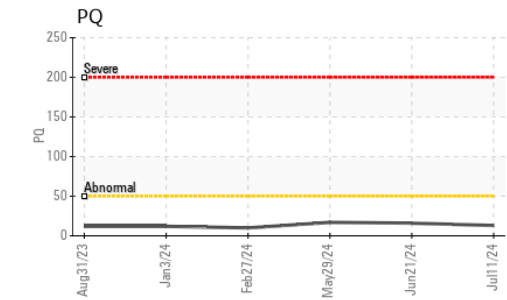
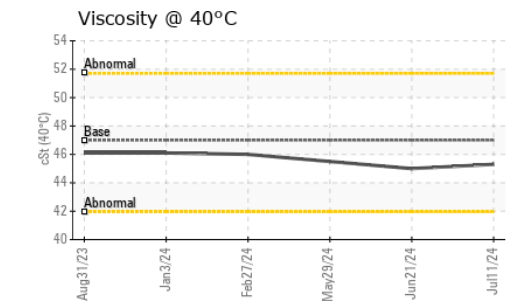
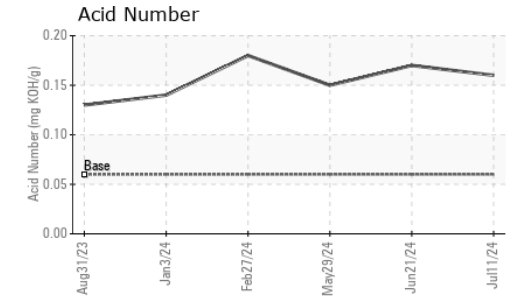
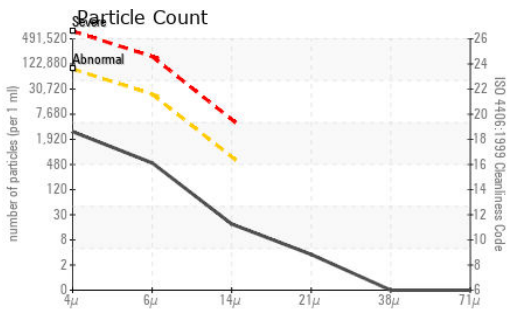
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

|                  |        |              |           |                 |          |          |
|------------------|--------|--------------|-----------|-----------------|----------|----------|
| Silicon          | ppm    | ASTM D5185m  | >11       | <b>2</b>        | 2        | 2        |
| Potassium        | ppm    | ASTM D5185m  | >20       | <b>0</b>        | 1        | 0        |
| Water            |        | WC Method    | >0.075    | <b>NEG</b>      | NEG      | NEG      |
| Particles >4µm   |        | ASTM D7647   | >80000    | <b>2568</b>     | 11902    | 3793     |
| Particles >6µm   |        | ASTM D7647   | >20000    | <b>460</b>      | 5475     | 618      |
| Particles >14µm  |        | ASTM D7647   | >640      | <b>16</b>       | 529      | 70       |
| Particles >21µm  |        | ASTM D7647   | >160      | <b>3</b>        | 37       | 19       |
| Particles >38µm  |        | ASTM D7647   | >40       | <b>0</b>        | 1        | 1        |
| Particles >71µm  |        | ASTM D7647   | >10       | <b>0</b>        | 0        | 0        |
| Oil Cleanliness  |        | ISO 4406 (c) | >23/21/16 | <b>19/16/11</b> | 21/20/16 | 19/16/13 |
| Silt             | scalar | *Visual      | NONE      | <b>NONE</b>     | NONE     | NONE     |
| Debris           | scalar | *Visual      | NONE      | <b>LIGHT</b>    | NONE     | NONE     |
| Sand/Dirt        | scalar | *Visual      | NONE      | <b>NONE</b>     | NONE     | NONE     |
| Appearance       | scalar | *Visual      | NORML     | <b>NORML</b>    | NORML    | NORML    |
| Odor             | scalar | *Visual      | NORML     | <b>NORML</b>    | NORML    | NORML    |
| Emulsified Water | scalar | *Visual      | >0.075    | <b>NEG</b>      | NEG      | NEG      |

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

|                  |          |             |      |              |      |      |
|------------------|----------|-------------|------|--------------|------|------|
| Sodium           | ppm      | ASTM D5185m | >21  | <b>&lt;1</b> | 1    | <1   |
| Boron            | ppm      | ASTM D5185m |      | <b>0</b>     | 0    | 0    |
| Barium           | ppm      | ASTM D5185m |      | <b>0</b>     | 0    | 0    |
| Molybdenum       | ppm      | ASTM D5185m |      | <b>0</b>     | 0    | 0    |
| Manganese        | ppm      | ASTM D5185m |      | <b>0</b>     | <1   | 0    |
| Magnesium        | ppm      | ASTM D5185m |      | <b>&lt;1</b> | 0    | 2    |
| Calcium          | ppm      | ASTM D5185m |      | <b>3</b>     | 3    | 50   |
| Phosphorus       | ppm      | ASTM D5185m | 827  | <b>569</b>   | 540  | 527  |
| Zinc             | ppm      | ASTM D5185m | 0    | <b>2</b>     | 14   | 29   |
| Sulfur           | ppm      | ASTM D5185m | 13   | <b>54</b>    | 95   | 117  |
| Acid Number (AN) | mg KOH/g | ASTM D8045  | 0.06 | <b>0.16</b>  | 0.17 | 0.15 |
| Visc @ 40°C      | cSt      | ASTM D445   | 47   | <b>45.3</b>  | 45.0 | 45.5 |



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0221118 **Received** : 16 Jul 2024  
**Lab Number** : 06237669 **Tested** : 17 Jul 2024  
**Unique Number** : 11126503 **Diagnosed** : 18 Jul 2024 - Don Baldridge  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - NEW BERN**  
 3816 MARTIN LUTHER KING BLVD  
 NEW BERN, NC  
 US 28562  
 Contact: NEW BERN SHOP  
 nick.etherdridge@jamesriverequipment.com; canastasio@wearchckusa.com

Certificate L2367  
 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)