



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



Machine Id  
**JOHN DEERE 700K 1T0700KXHFK367447**  
 Component  
**Hydraulic System**  
 Fluid  
**JOHN DEERE HYDRAU (--- GAL)**

### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>JR0222604</b>   | JR0167961   | JR0108236   |
| Sample Date    |     | Client Info |           | <b>26 Jun 2024</b> | 23 May 2023 | 28 Oct 2021 |
| Machine Age    | hrs | Client Info |           | <b>4683</b>        | 3166        | 1030        |
| Oil Age        | hrs | Client Info |           | <b>4683</b>        | 3166        | 1030        |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | 1030        |
| Oil Changed    |     | Client Info |           | <b>Changed</b>     | Not Changd  | Not Changd  |
| Filter Changed |     | Client Info |           | <b>Changed</b>     | Not Changd  | Not Changd  |
| Sample Status  |     |             |           | <b>ATTENTION</b>   | NORMAL      | NORMAL      |

### WEAR

All component wear rates are normal.

|              |        |             |      |              |      |      |
|--------------|--------|-------------|------|--------------|------|------|
| PQ           |        | ASTM D8184  | >50  | <b>16</b>    | 14   | 18   |
| Iron         | ppm    | ASTM D5185m | >23  | <b>1</b>     | 2    | 1    |
| Chromium     | ppm    | ASTM D5185m | >9   | <b>0</b>     | <1   | <1   |
| Nickel       | ppm    | ASTM D5185m | >5   | <b>&lt;1</b> | <1   | 0    |
| Titanium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | <1   | 0    |
| Silver       | ppm    | ASTM D5185m |      | <b>&lt;1</b> | 0    | <1   |
| Aluminum     | ppm    | ASTM D5185m | >9   | <b>4</b>     | 3    | 1    |
| Lead         | ppm    | ASTM D5185m | >28  | <b>&lt;1</b> | 2    | 2    |
| Copper       | ppm    | ASTM D5185m | >51  | <b>5</b>     | 21   | 24   |
| Tin          | ppm    | ASTM D5185m | >5   | <b>&lt;1</b> | <1   | <1   |
| Vanadium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | 0    | 0    |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |

### CONTAMINATION

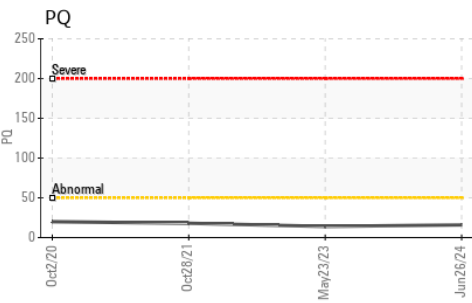
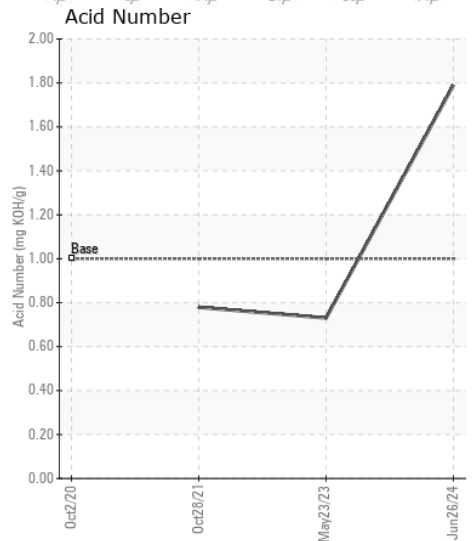
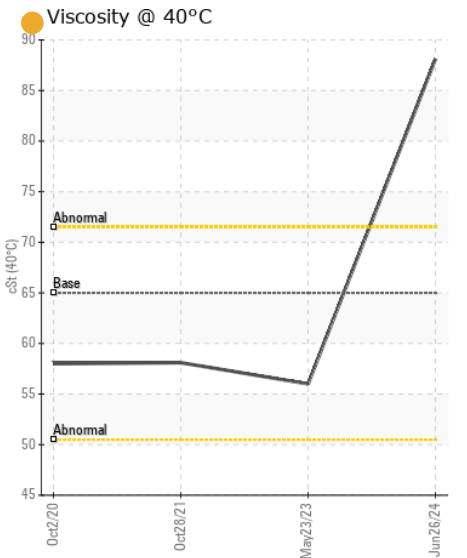
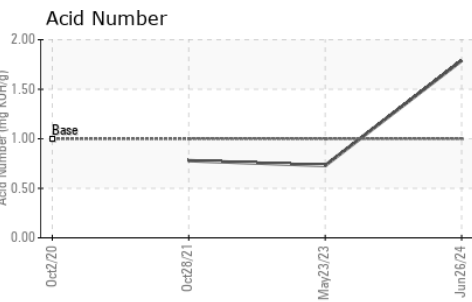
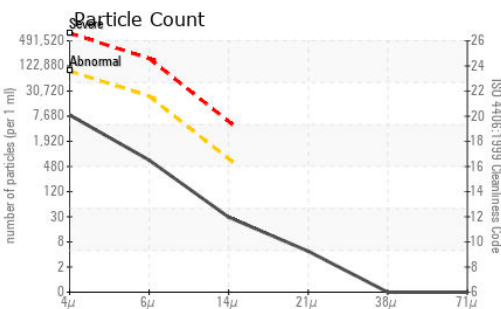
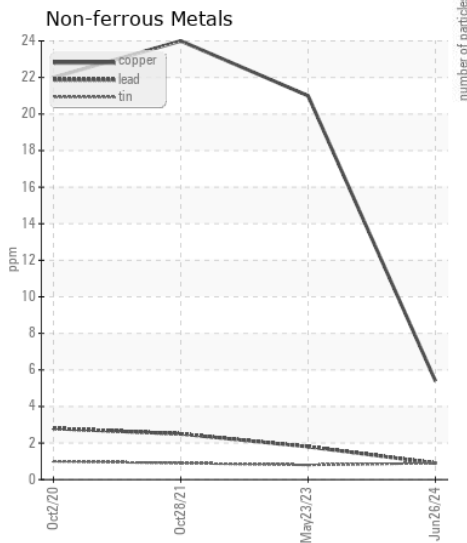
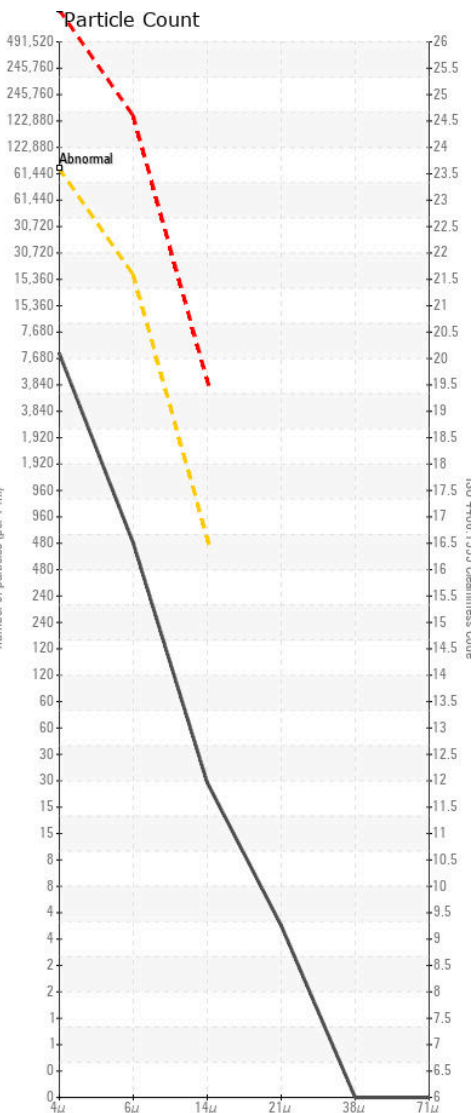
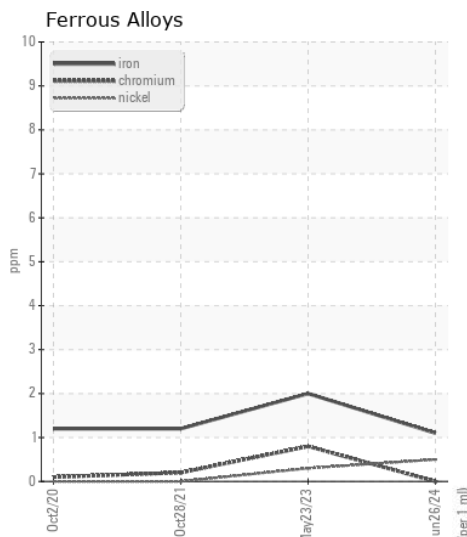
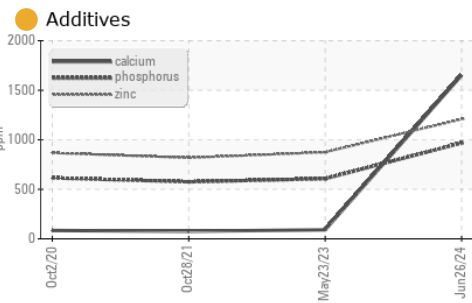
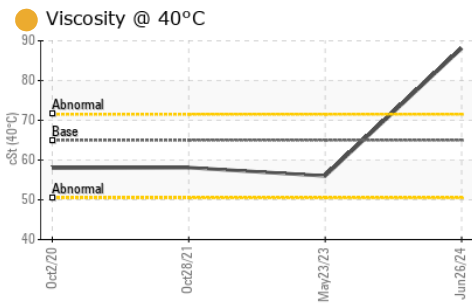
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

|                  |        |              |           |                 |          |          |
|------------------|--------|--------------|-----------|-----------------|----------|----------|
| Silicon          | ppm    | ASTM D5185m  | >31       | <b>8</b>        | 5        | 2        |
| Potassium        | ppm    | ASTM D5185m  | >20       | <b>3</b>        | 3        | 1        |
| Water            |        | WC Method    | >0.075    | <b>NEG</b>      | NEG      | NEG      |
| Particles >4µm   |        | ASTM D7647   | >80000    | <b>7145</b>     | 1269     | 1418     |
| Particles >6µm   |        | ASTM D7647   | >20000    | <b>597</b>      | 225      | 223      |
| Particles >14µm  |        | ASTM D7647   | >640      | <b>26</b>       | 18       | 26       |
| Particles >21µm  |        | ASTM D7647   | >160      | <b>4</b>        | 5        | 4        |
| Particles >38µm  |        | ASTM D7647   | >40       | <b>0</b>        | 0        | 0        |
| Particles >71µm  |        | ASTM D7647   | >10       | <b>0</b>        | 0        | 0        |
| Oil Cleanliness  |        | ISO 4406 (c) | >23/21/16 | <b>20/16/12</b> | 17/15/11 | 18/15/12 |
| Silt             | scalar | *Visual      | NONE      | <b>NONE</b>     | NONE     | NONE     |
| Debris           | scalar | *Visual      | NONE      | <b>NONE</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 oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

|                  |          |             |      |              |      |       |
|------------------|----------|-------------|------|--------------|------|-------|
| Sodium           | ppm      | ASTM D5185m | >21  | <b>0</b>     | 2    | 1     |
| Boron            | ppm      | ASTM D5185m |      | <b>61</b>    | 0    | 0     |
| Barium           | ppm      | ASTM D5185m |      | <b>0</b>     | 0    | 0     |
| Molybdenum       | ppm      | ASTM D5185m |      | <b>62</b>    | 1    | <1    |
| Manganese        | ppm      | ASTM D5185m |      | <b>&lt;1</b> | <1   | 0     |
| Magnesium        | ppm      | ASTM D5185m |      | <b>22</b>    | 11   | 0     |
| Calcium          | ppm      | ASTM D5185m | 87   | <b>1652</b>  | 91   | 76    |
| Phosphorus       | ppm      | ASTM D5185m | 727  | <b>968</b>   | 607  | 575   |
| Zinc             | ppm      | ASTM D5185m | 900  | <b>1208</b>  | 874  | 818   |
| Sulfur           | ppm      | ASTM D5185m | 1500 | <b>4110</b>  | 1779 | 1441  |
| Acid Number (AN) | mg KOH/g | ASTM D8045  | 1.0  | <b>1.79</b>  | 0.73 | 0.779 |
| Visc @ 40°C      | cSt      | ASTM D445   | 65   | <b>88.1</b>  | 56.0 | 58.1  |



Certificate L2367

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

Sample No. : JR0222604

Lab Number : 06224983

Unique Number : 11103180

Test Package : CONST ( Additional Tests: PQ )

Received : 01 Jul 2024

Tested : 02 Jul 2024

Diagnosed : 03 Jul 2024 - Don Baldrige

JRE - GARNER

4161 AUBURN CHURCH RD

GARNER, NC

US 27529

Contact: RALEIGH SHOP

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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)