



| | |
|-----------------|-----------------|
| WEAR | ABNORMAL |
| CONTAMINATION | SEVERE |
| FLUID CONDITION | NORMAL |



Machine Id
JOHN DEERE 850K 1T0850KXCHF318430
Component
Left Outer Final Drive
Fluid
JOHN DEERE HY-GARD HYD/TRANS (4 GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0225150 | JR0116894 | JR0091461 |
| Sample Date | | Client Info | | 15 Jul 2024 | 29 Jan 2022 | 23 Jun 2021 |
| Machine Age | hrs | Client Info | | 6230 | 4997 | 4519 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Not Changd |
| Filter Changed | | Client Info | | N/A | Not Changd | N/A |
| Sample Status | | | | SEVERE | SEVERE | SEVERE |

WEAR

Gear wear is indicated.

| | | | | | | |
|--------------|--------|-------------|-------|---------------|--------|--------|
| PQ | | ASTM D8184 | >1250 | 500 | 994 | 812 |
| Iron | ppm | ASTM D5185m | >750 | ▲ 1017 | ▲ 1175 | ▲ 1478 |
| Chromium | ppm | ASTM D5185m | >9 | 4 | 4 | 6 |
| Nickel | ppm | ASTM D5185m | >10 | 5 | 3 | 5 |
| Titanium | ppm | ASTM D5185m | | 10 | ▲ 12 | 17 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >40 | ● 69 | ● 162 | ● 183 |
| Lead | ppm | ASTM D5185m | >15 | <1 | <1 | 2 |
| Copper | ppm | ASTM D5185m | >40 | 2 | 2 | 2 |
| Tin | ppm | ASTM D5185m | >10 | 0 | <1 | 1 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

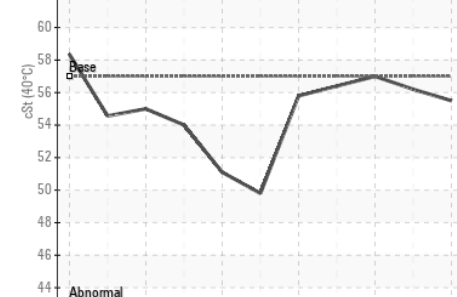
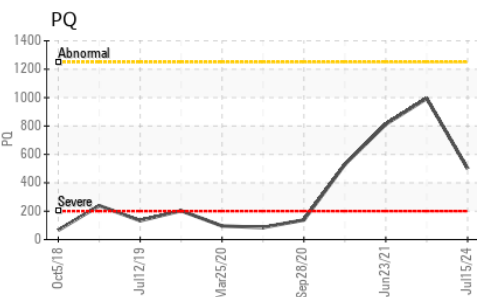
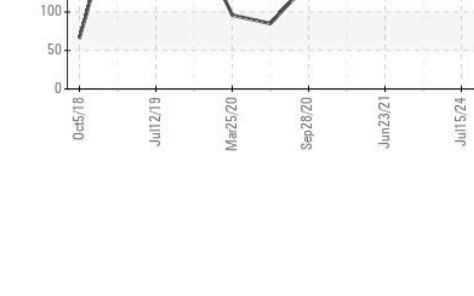
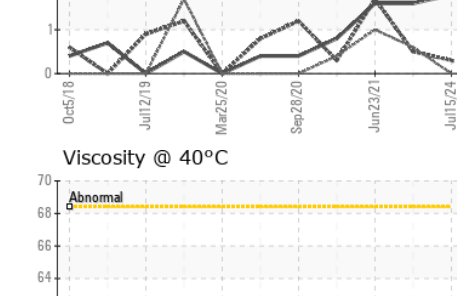
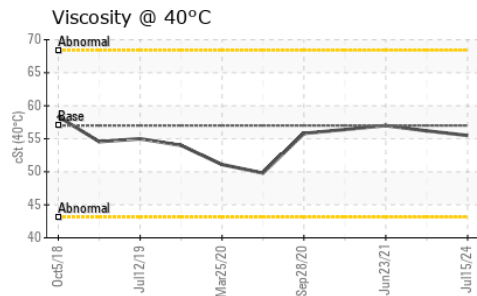
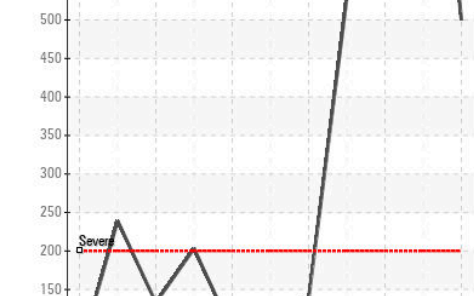
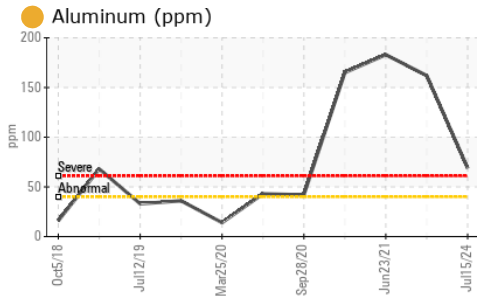
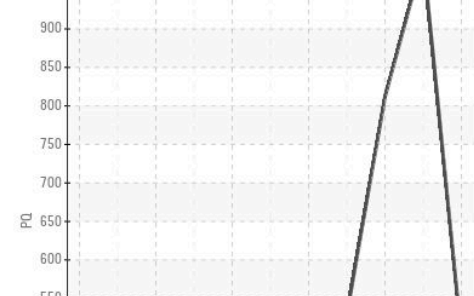
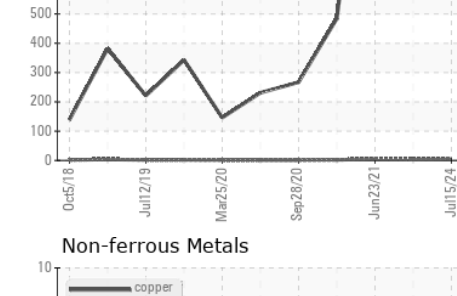
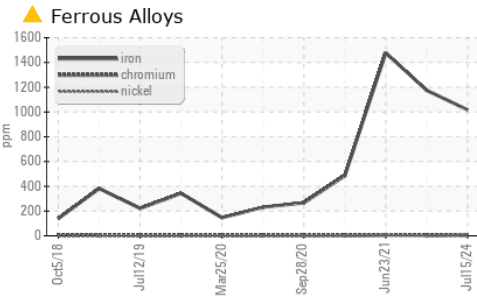
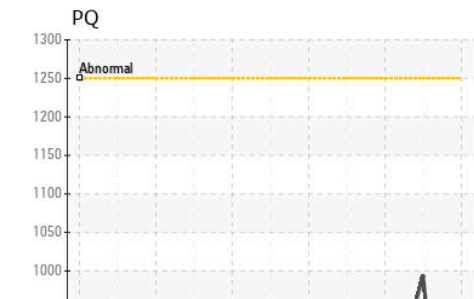
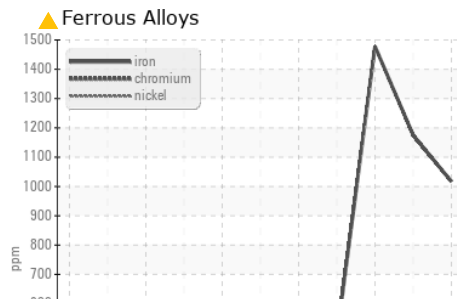
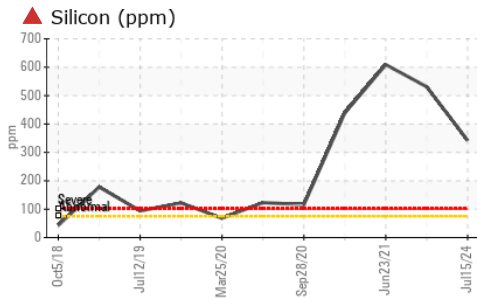
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

| | | | | | | |
|------------------|--------|-------------|--------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >75 | ▲ 342 | ▲ 531 | ▲ 609 |
| Potassium | ppm | ASTM D5185m | >20 | 12 | 16 | 17 |
| Water | | WC Method | >0.075 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | LIGHT | NONE | MODER |
| Debris | scalar | *Visual | NONE | NONE | VLITE | 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 | >0.075 | NEG | NEG | NEG |

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

| | | | | | | |
|-------------|-----|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | >51 | 6 | 22 | 19 |
| Boron | ppm | ASTM D5185m | 6 | 10 | 17 | 21 |
| Barium | ppm | ASTM D5185m | 0 | <1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 9 | 11 | 13 |
| Manganese | ppm | ASTM D5185m | | 8 | 10 | 12 |
| Magnesium | ppm | ASTM D5185m | 145 | 130 | 156 | 168 |
| Calcium | ppm | ASTM D5185m | 3570 | 3361 | 3375 | 3497 |
| Phosphorus | ppm | ASTM D5185m | 1290 | 938 | 990 | 1049 |
| Zinc | ppm | ASTM D5185m | 1640 | 1221 | 1147 | 1253 |
| Sulfur | ppm | ASTM D5185m | | 3548 | 3094 | 3674 |
| Visc @ 40°C | cSt | ASTM D445 | 57.0 | 55.5 | 56.2 | 57.0 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0225150 **Received** : 17 Jul 2024
Lab Number : 06239352 **Tested** : 18 Jul 2024
Unique Number : 11128186 **Diagnosed** : 19 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

JRE - ASHLAND
 11047 LEADBETTER RD
 ASHLAND, VA
 US 23005
 Contact: DAVID ZIEG
 dzieg@jamesriverequipment.com
 T: (804)798-6001
 F: (804)798-0292

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)