



| | |
|-----------------|---------------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |



Area
[W68912]
 Machine Id
JOHN DEERE 310E 1DW310EXPJF691440
 Component
Rear Differential
 Fluid
JOHN DEERE HY-GARD HYD/TRANS (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: W68912)

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0205906 | JR0206377 | JR0171285 |
| Sample Date | | Client Info | | 16 Jul 2024 | 20 Mar 2024 | 30 Jun 2023 |
| Machine Age | hrs | Client Info | | 5478 | 4961 | 4478 |
| Oil Age | hrs | Client Info | | 2922 | 2888 | 2874 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | Not Changd | Not Changd |
| Filter Changed | | Client Info | | N/A | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|-------|------|
| PQ | | ASTM D8184 | | 324 | 325 | 116 |
| Iron | ppm | ASTM D5185m | >500 | 861 | 679 | 348 |
| Chromium | ppm | ASTM D5185m | >10 | 3 | 3 | 1 |
| Nickel | ppm | ASTM D5185m | >10 | <1 | <1 | 2 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 2 | 6 | 2 |
| Lead | ppm | ASTM D5185m | >25 | 11 | 8 | 0 |
| Copper | ppm | ASTM D5185m | >100 | 144 | 109 | 96 |
| Tin | ppm | ASTM D5185m | >10 | 6 | 6 | 4 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | MODER | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

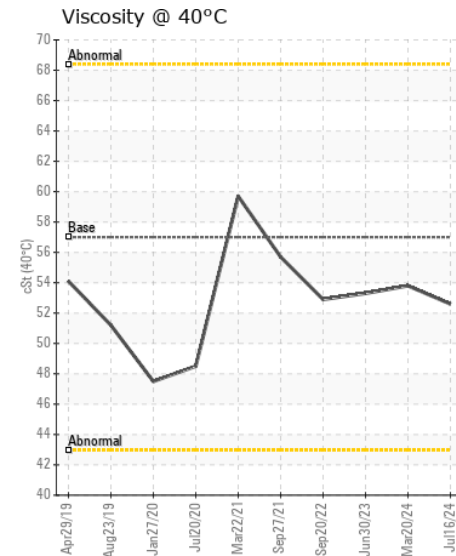
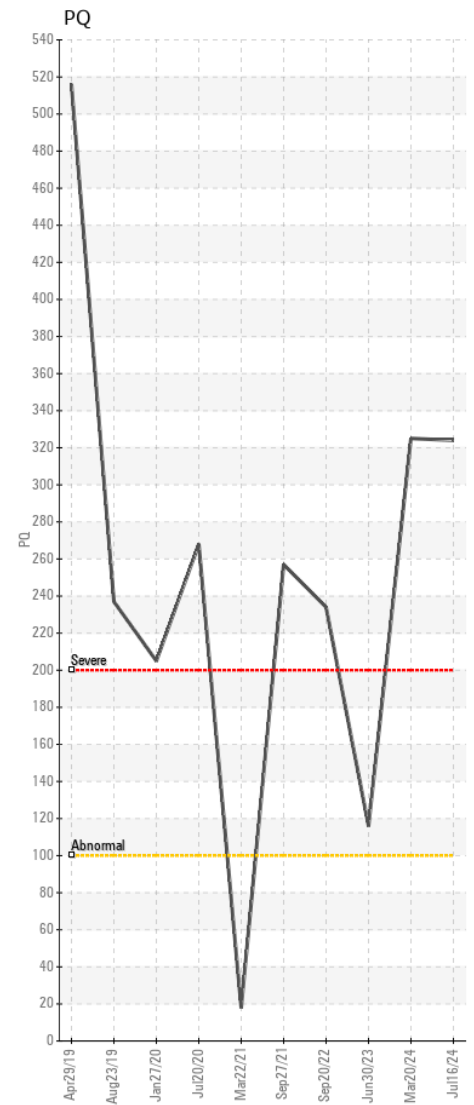
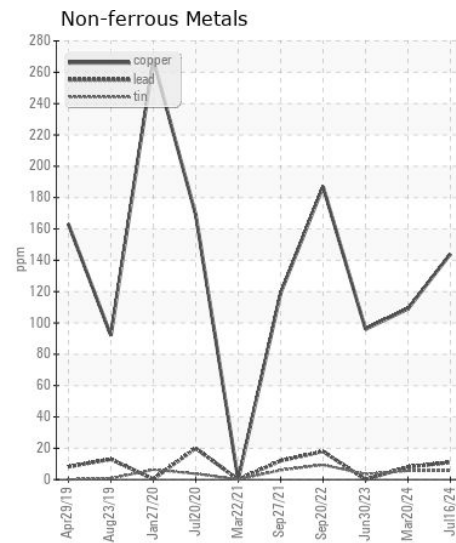
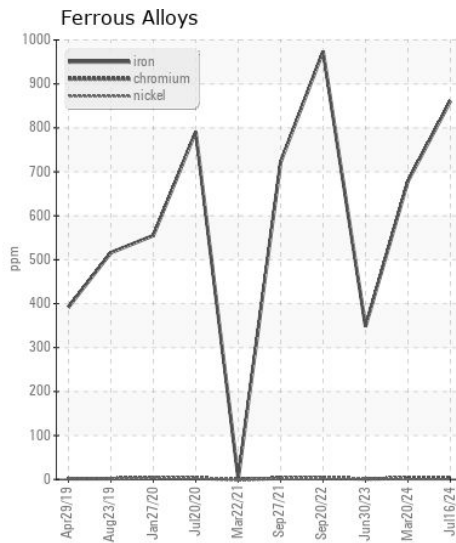
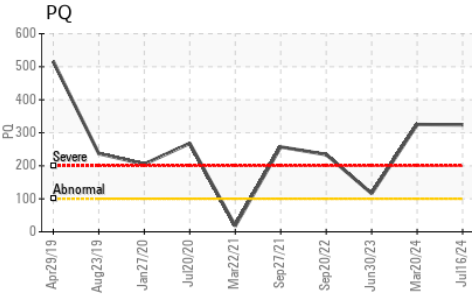
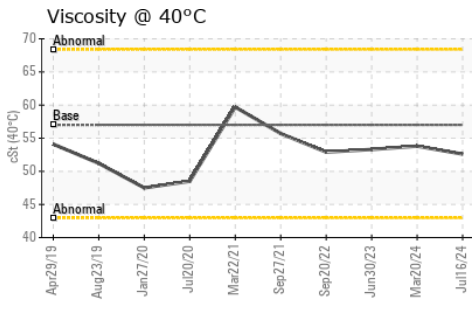
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >75 | 11 | 20 | 8 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | 2 |
| Water | | WC Method | >.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 | >.2 | NEG | NEG | NEG |

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

| | | | | | | |
|-------------|-----|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | 2 | 1 | 0 |
| Boron | ppm | ASTM D5185m | 6 | 4 | 3 | 9 |
| Barium | ppm | ASTM D5185m | 0 | <1 | 0 | 3 |
| Molybdenum | ppm | ASTM D5185m | 0 | 2 | 1 | 2 |
| Manganese | ppm | ASTM D5185m | | 9 | 8 | 5 |
| Magnesium | ppm | ASTM D5185m | 145 | 98 | 102 | 98 |
| Calcium | ppm | ASTM D5185m | 3570 | 3632 | 3427 | 3597 |
| Phosphorus | ppm | ASTM D5185m | 1290 | 1000 | 1013 | 1057 |
| Zinc | ppm | ASTM D5185m | 1640 | 1189 | 1240 | 1271 |
| Sulfur | ppm | ASTM D5185m | | 3819 | 3868 | 4124 |
| Visc @ 40°C | cSt | ASTM D445 | 57.0 | 52.6 | 53.8 | 53.3 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0205906 **Received** : 18 Jul 2024
Lab Number : 06240558 **Tested** : 19 Jul 2024
Unique Number : 11129392 **Diagnosed** : 20 Jul 2024 - Don Baldridge
Test Package : CONST (Additional Tests: PQ)

JRE - CHARLOTTE
 9550 STATESVILLE ROAD
 CHARLOTTE, NC
 US 28269

Contact: CHARLOTTE SHOP
 myoung@jamesriverequipment.com

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)

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