



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

Machine Id
JOHN DEERE 298
 Component
Right Outer Final Drive
 Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0217835 | JR0159505 | JR0154210 |
| Sample Date | | Client Info | | 19 Jun 2024 | 07 Mar 2023 | 28 Nov 2022 |
| Machine Age | hrs | Client Info | | 5096 | 3044 | 2514 |
| Oil Age | hrs | Client Info | | 1000 | 0 | 536 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Not Changd |
| Filter Changed | | Client Info | | N/A | N/A | None |
| Sample Status | | | | NORMAL | NORMAL | ABNORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|-------|--------------|-------|------|
| PQ | | ASTM D8184 | >1250 | 48 | 60 | 37 |
| Iron | ppm | ASTM D5185m | >750 | 85 | 65 | 52 |
| Chromium | ppm | ASTM D5185m | >9 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | 2 | <1 | <1 |
| Titanium | ppm | ASTM D5185m | | 2 | <1 | <1 |
| Silver | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >40 | 15 | 6 | 5 |
| Lead | ppm | ASTM D5185m | >15 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >40 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >10 | <1 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | MODER | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

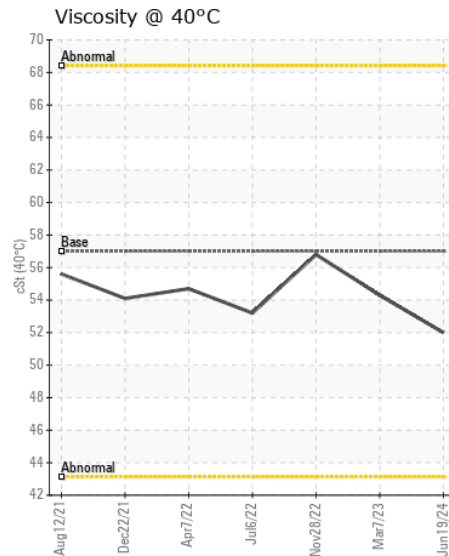
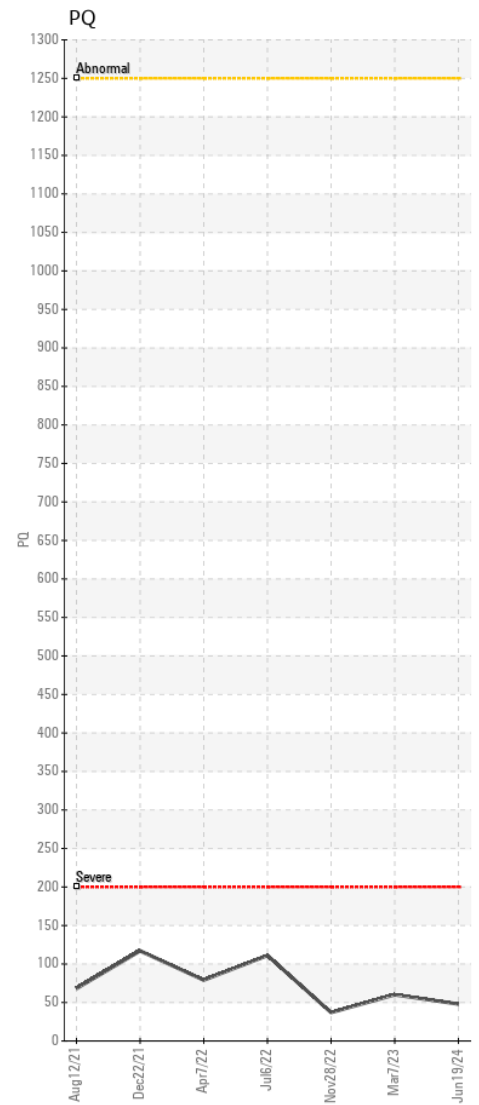
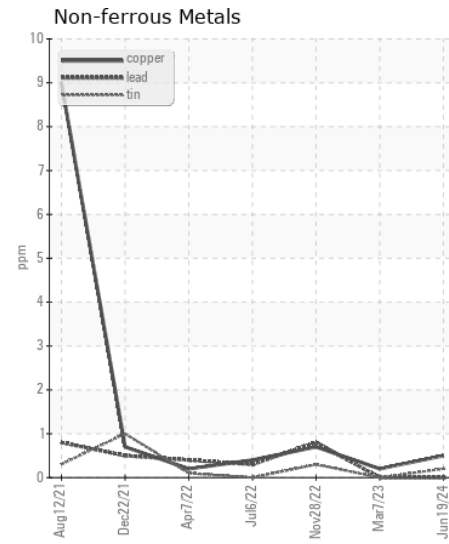
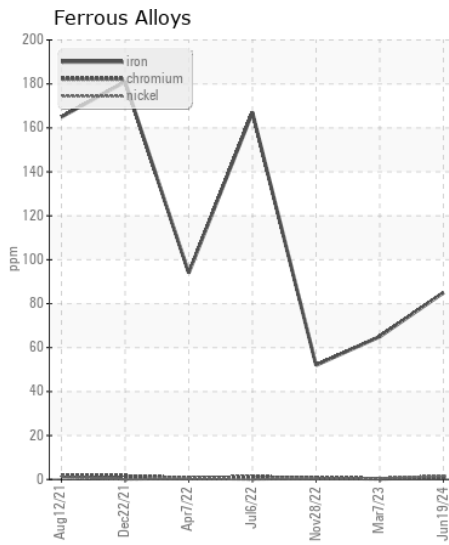
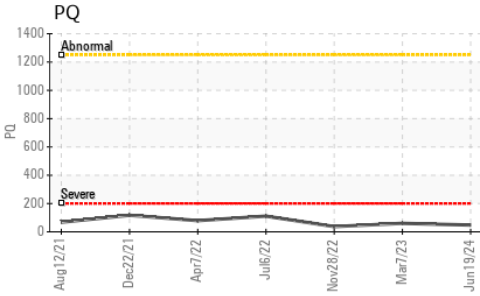
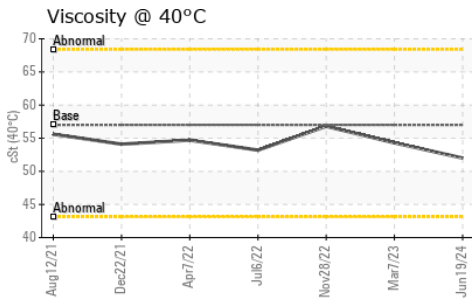
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|--------|--------------|-------|---------|
| Silicon | ppm | ASTM D5185m | >75 | 47 | 21 | 18 |
| Potassium | ppm | ASTM D5185m | >20 | 6 | 4 | 2 |
| Water | | WC Method | >0.075 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | ▲ MODER |
| 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 condition of the oil is acceptable for the time in service.

| | | | | | | |
|-------------|-----|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | >51 | <1 | 0 | 1 |
| Boron | ppm | ASTM D5185m | 6 | 13 | 13 | 17 |
| Barium | ppm | ASTM D5185m | 0 | <1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 14 | 12 | 13 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 145 | 142 | 123 | 142 |
| Calcium | ppm | ASTM D5185m | 3570 | 3209 | 3276 | 3493 |
| Phosphorus | ppm | ASTM D5185m | 1290 | 1054 | 979 | 993 |
| Zinc | ppm | ASTM D5185m | 1640 | 1214 | 1158 | 1244 |
| Sulfur | ppm | ASTM D5185m | | 3547 | 3370 | 4441 |
| Visc @ 40°C | cSt | ASTM D445 | 57.0 | 52.0 | 54.3 | 56.8 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0217835
Lab Number : 06224741
Unique Number : 11102938
Test Package : CONST (Additional Tests: PQ)

TOTAL DEVELOPMENT SOLUTIONS LLC
 7805 PROGRESS CT
 GAINESVILLE, VA
 US 20155
 Contact: JOE SEALE

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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