



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

Machine Id
JOHN DEERE 524P 1DW524PAPNLZ13570

Component
Rear Axle

Fluid
JOHN DEERE HY-GARD HYDRAULIC/RANSMISSION (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0205795 | JR0192613 | JR0171170 |
| Sample Date | | Client Info | | 15 Jun 2024 | 29 Nov 2023 | 15 Jun 2023 |
| Machine Age | hrs | Client Info | | 2468 | 2037 | 1456 |
| Oil Age | hrs | Client Info | | 431 | 1042 | 1456 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Not Changd | Changed | Not Changd |
| Filter Changed | | Client Info | | Not Changd | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|-------|
| PQ | | ASTM D8184 | | 47 | 94 | 91 |
| Iron | ppm | ASTM D5185m | >750 | 69 | 201 | 148 |
| Chromium | ppm | ASTM D5185m | >11 | <1 | 2 | 1 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 2 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >21 | 2 | 1 | <1 |
| Lead | ppm | ASTM D5185m | >49 | 1 | 16 | 4 |
| Copper | ppm | ASTM D5185m | >101 | 2 | 39 | 8 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 4 | 1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | MODER |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

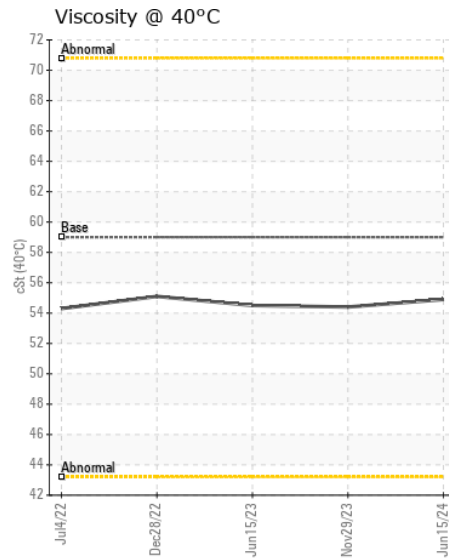
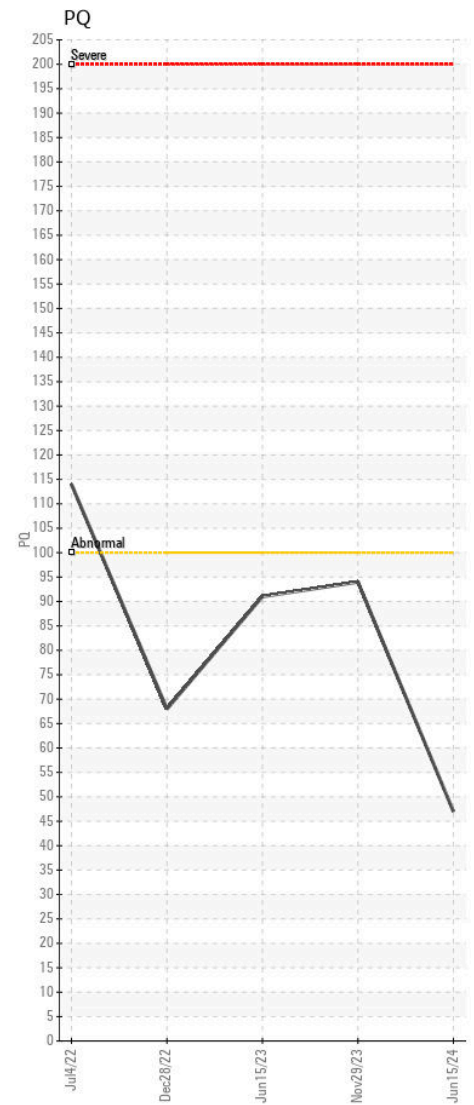
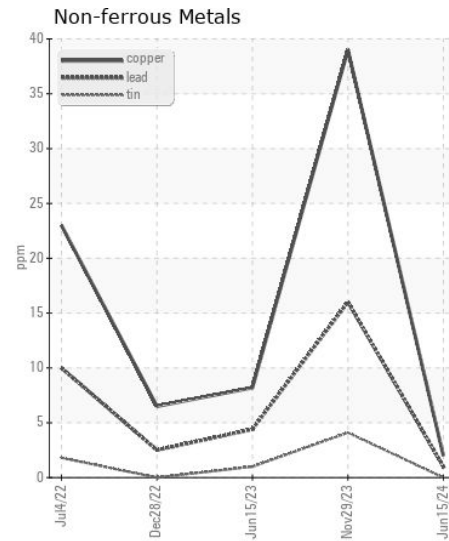
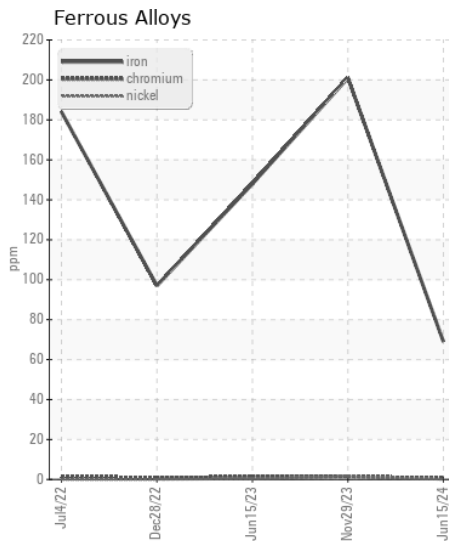
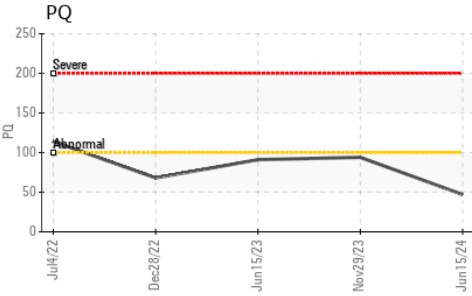
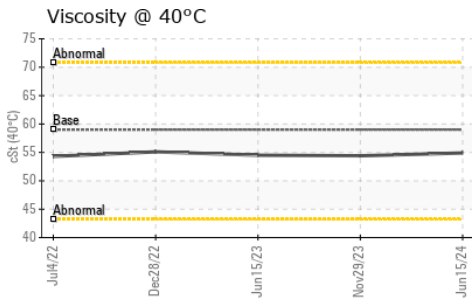
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >31 | 11 | 12 | 12 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | <1 | <1 |
| Water | | WC Method | >0.1 | 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 | >0.1 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|-------------|-----|-------------|-----|--------------|------|------|
| Sodium | ppm | ASTM D5185m | >51 | 0 | 5 | 2 |
| Boron | ppm | ASTM D5185m | | 3 | <1 | 2 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 6 |
| Molybdenum | ppm | ASTM D5185m | | <1 | 0 | 1 |
| Manganese | ppm | ASTM D5185m | | 1 | 4 | 5 |
| Magnesium | ppm | ASTM D5185m | | 95 | 65 | 113 |
| Calcium | ppm | ASTM D5185m | | 3201 | 3207 | 3696 |
| Phosphorus | ppm | ASTM D5185m | | 964 | 1044 | 1108 |
| Zinc | ppm | ASTM D5185m | | 1183 | 1229 | 1331 |
| Sulfur | ppm | ASTM D5185m | | 3719 | 3517 | 4791 |
| Visc @ 40°C | cSt | ASTM D445 | 59 | 54.9 | 54.4 | 54.5 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0205795 **Received** : 18 Jun 2024
Lab Number : 06213787 **Tested** : 20 Jun 2024
Unique Number : 11086651 **Diagnosed** : 20 Jun 2024 - Wes Davis
Test Package : CONST (Additional Tests: PQ)

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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