James River Equipment

OIL ANALYSIS REPORT

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

Machine Id
## JOHN DEERE 317G 1T0317GJLJJ328487
Component
## Hydraulic System
Fluid
## JOHN DEERE HYDRAU (--- GAL)

## RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

## WEAR

All component wear rates are normal.

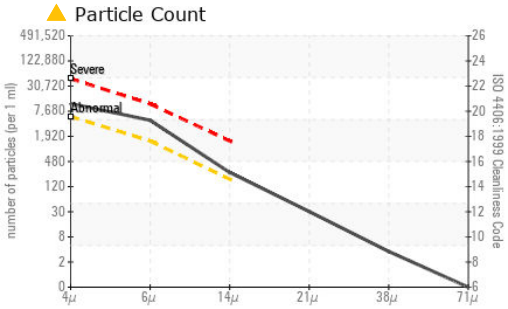
## CONTAMINATION

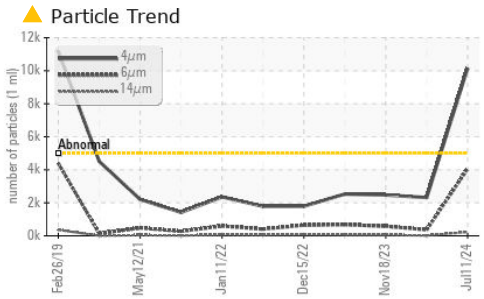
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

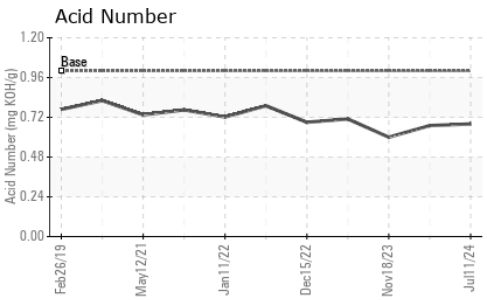
## FLUID CONDITION

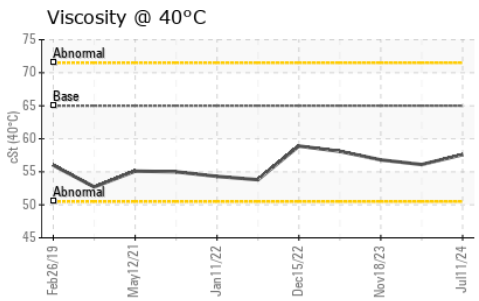
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

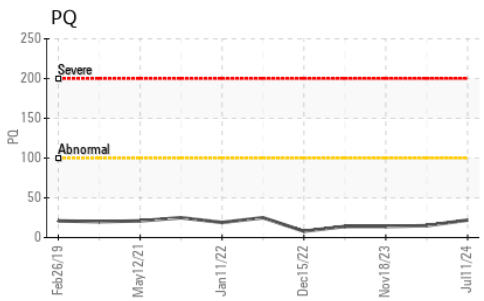
| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | JR0218874 | JR0207976 | JR0191463 |
| Sample Date | | Client Info | | 11 Jul 2024 | 19 Mar 2024 | 18 Nov 2023 |
| Machine Age | hrs | Client Info | | 4249 | 3818 | 3447 |
| Oil Age | hrs | Client Info | | 431 | 991 | 620 |
| Filter Age | hrs | Client Info | | 431 | 991 | 620 |
| Oil Changed | | Client Info | | Not Changd | Changed | Not Changd |
| Filter Changed | | Client Info | | Not Changd | Changed | Not Changd |
| Sample Status | | | | ABNORMAL | ABNORMAL | NORMAL |
| PQ | | ASTM D8184 | | 22 | 15 | 14 |
| Iron | ppm | ASTM D5185m | >20 | 15 | ▲ 22 | 13 |
| Chromium | ppm | ASTM D5185m | >10 | 2 | 2 | 2 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | 3 | 3 | 2 |
| Lead | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >75 | 6 | 8 | 6 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silicon | ppm | ASTM D5185m | >20 | 4 | 6 | 4 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 0 | 0 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | >5000 | ▲ 10149 | 2318 | 2473 |
| Particles >6µm | | ASTM D7647 | >1300 | ▲ 4063 | 361 | 578 |
| Particles >14µm | | ASTM D7647 | >160 | ● 231 | 15 | 53 |
| Particles >21µm | | ASTM D7647 | >40 | 27 | 4 | 22 |
| Particles >38µm | | ASTM D7647 | >10 | 3 | 0 | 1 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | ▲ 21/19/15 | 18/16/11 | 18/16/13 |
| 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 |
| Sodium | ppm | ASTM D5185m | | 2 | 1 | <1 |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 2 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | 87 | 94 | 87 | 81 |
| Phosphorus | ppm | ASTM D5185m | 727 | 660 | 680 | 645 |
| Zinc | ppm | ASTM D5185m | 900 | 804 | 864 | 884 |
| Sulfur | ppm | ASTM D5185m | 1500 | 1816 | 1877 | 1648 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | 0.68 | 0.67 | 0.60 |
| Visc @ 40°C | cSt | ASTM D445 | 65 | 57.6 | 56.1 | 56.8 |

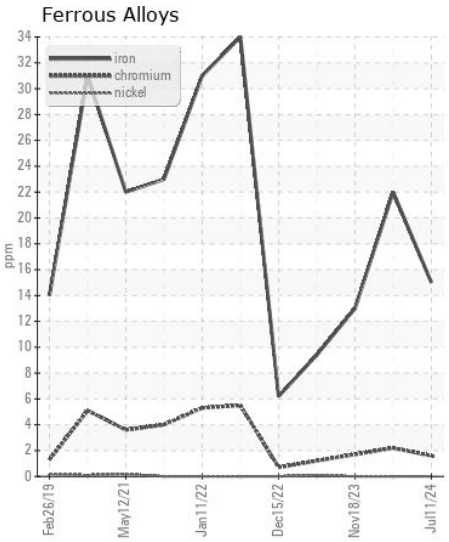


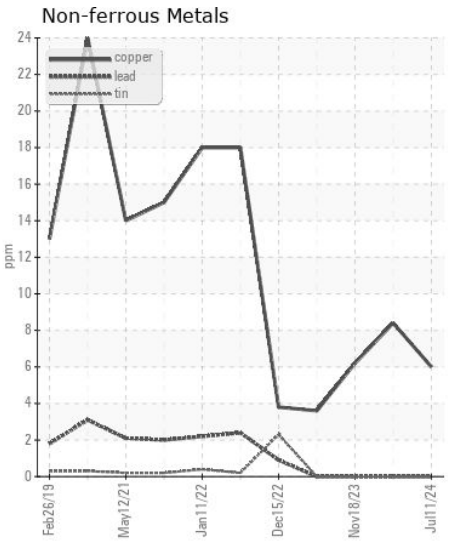



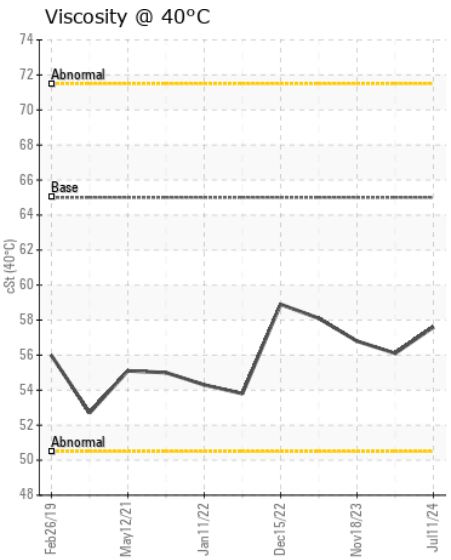



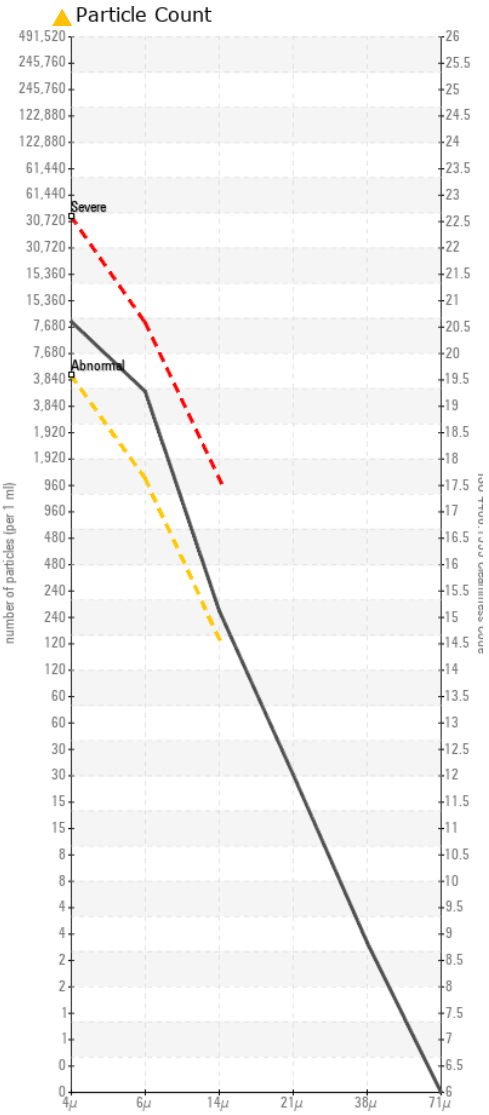



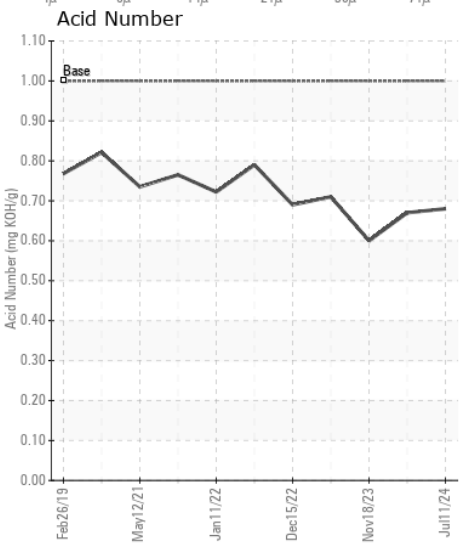




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : JR0218874
**Lab Number** : 06234764
**Unique Number** : 11123598
**Test Package** : CONST ( Additional Tests: PQ )

**Received** : 12 Jul 2024
**Tested** : 15 Jul 2024
**Diagnosed** : 15 Jul 2024 - Wes Davis

*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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