James River Equipment

OIL ANALYSIS REPORT

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

Machine Id
## JOHN DEERE 317G 1T0317GJPKJ357979
Component
## Diesel Engine
Fluid
## {not provided} (--- GAL)

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

## WEAR

All component wear rates are normal.

## CONTAMINATION

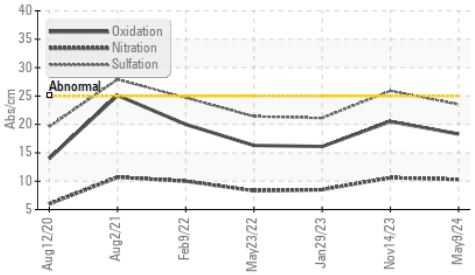
There is no indication of any contamination in the oil.

## FLUID CONDITION

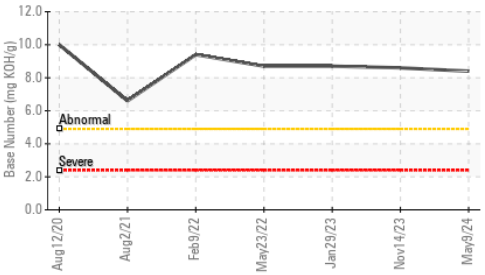
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | JR0213426 | JR0194143 | JR0121965 |
| Sample Date | | Client Info | | 09 May 2024 | 14 Nov 2023 | 29 Jan 2023 |
| Machine Age | hrs | Client Info | | 1716 | 1501 | 1144 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| Iron | ppm | ASTM D5185m | >51 | 30 | 37 | 14 |
| Chromium | ppm | ASTM D5185m | >11 | <1 | 1 | <1 |
| Nickel | ppm | ASTM D5185m | >5 | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >31 | 20 | 23 | 9 |
| Lead | ppm | ASTM D5185m | >26 | 1 | 2 | <1 |
| Copper | ppm | ASTM D5185m | >26 | 2 | 6 | 4 |
| Tin | ppm | ASTM D5185m | >4 | 1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silicon | ppm | ASTM D5185m | >22 | 16 | 15 | 12 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 0 | <1 |
| Fuel | | WC Method | >2.1 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.21 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.7 | 1 | 0.4 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 10.3 | 10.6 | 8.5 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 23.5 | 25.9 | 21.1 |
| 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 | >0.21 | NEG | NEG | NEG |
| Sodium | ppm | ASTM D5185m | >31 | 2 | 2 | 1 |
| Boron | ppm | ASTM D5185m | | 190 | 123 | 236 |
| Barium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 257 | 256 | 240 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 833 | 846 | 763 |
| Calcium | ppm | ASTM D5185m | | 1471 | 1491 | 1390 |
| Phosphorus | ppm | ASTM D5185m | | 913 | 885 | 828 |
| Zinc | ppm | ASTM D5185m | | 1062 | 1111 | 1038 |
| Sulfur | ppm | ASTM D5185m | | 3402 | 3089 | 3383 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 18.3 | 20.5 | 16.1 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 8.4 | 8.6 | 8.7 |
| Visc @ 100°C | cSt | ASTM D445 | | 13.7 | 14.1 | 13.9 |

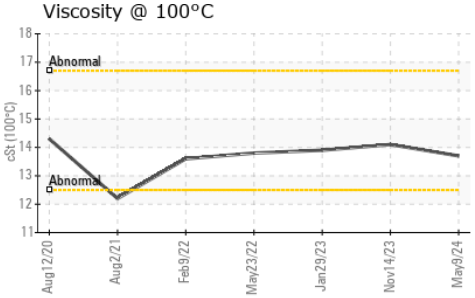
FT-IR (Direct Trend)



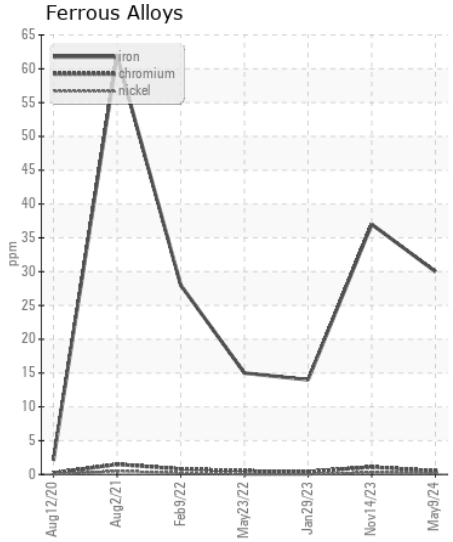

Base Number



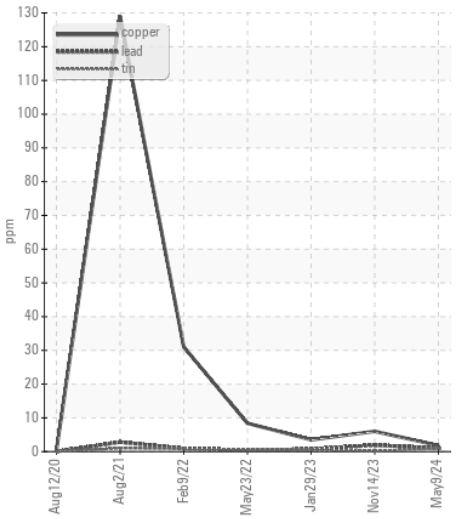

Viscosity @ 100°C



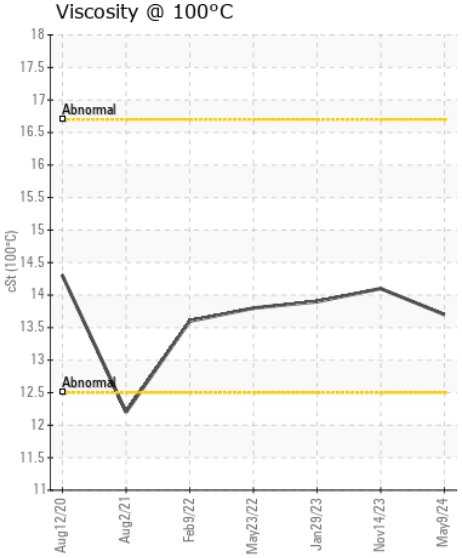

Ferrous Alloys




Non-ferrous Metals




Viscosity @ 100°C

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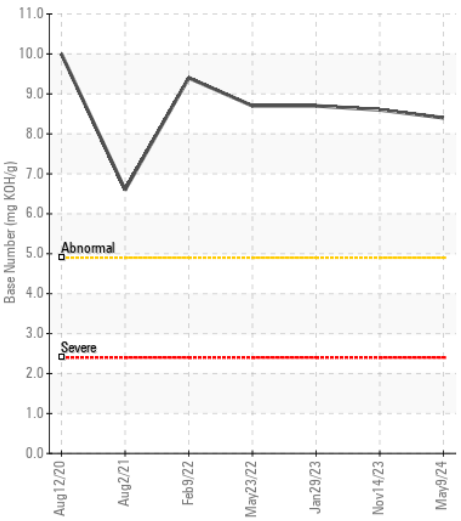


Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : JR0213426
**Lab Number** : 06175219
**Unique Number** : 11021272
**Test Package** : CONST ( Additional Tests: TBN )

**Received** : 10 May 2024
**Tested** : 13 May 2024
**Diagnosed** : 13 May 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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