James River Equipment

OIL ANALYSIS REPORT

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

Machine Id
## JOHN DEERE 700L 1T0700LXLNF422061
Component
## Diesel Engine
Fluid
## JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (28 GAL)

### RECOMMENDATION

Resample at the next service interval to monitor.

### WEAR

All component wear rates are normal.

### CONTAMINATION

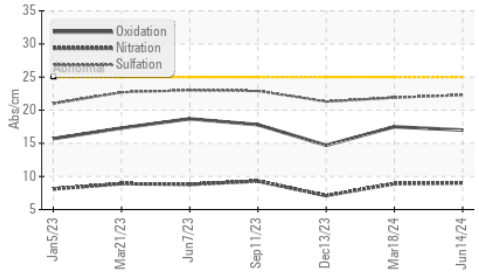
There is no indication of any contamination in the oil.

### FLUID CONDITION

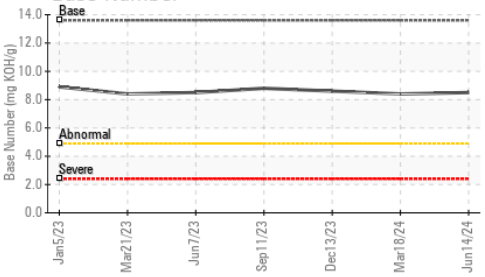
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | JR0218414 | JR0208432 | JR0196106 |
| Sample Date | | Client Info | | 14 Jun 2024 | 18 Mar 2024 | 13 Dec 2023 |
| Machine Age | hrs | Client Info | | 3494 | 2445 | 2445 |
| Oil Age | hrs | Client Info | | 1049 | 2445 | 494 |
| Filter Age | hrs | Client Info | | 0 | 0 | 494 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | ABNORMAL | ATTENTION |
| Iron | ppm | ASTM D5185m | >51 | 13 | 8 | 10 |
| Chromium | ppm | ASTM D5185m | >11 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >5 | <1 | 2 | <1 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >31 | 6 | 2 | 2 |
| Lead | ppm | ASTM D5185m | >26 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >26 | 2 | 3 | 1 |
| Tin | ppm | ASTM D5185m | >4 | 0 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silicon | ppm | ASTM D5185m | >22 | 7 | 8 | 6 |
| Potassium | ppm | ASTM D5185m | >20 | 4 | ▲ 119 | 3 |
| Fuel | | WC Method | >2.1 | <1.0 | <1.0 | 1.3 |
| Water | | WC Method | >0.21 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.3 | 0.3 | 0.2 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.0 | 8.9 | 7.1 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 22.3 | 21.9 | 21.3 |
| 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 | 6 | ▲ 106 | 0 |
| Boron | ppm | ASTM D5185m | | 188 | 17 | 137 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 13 |
| Molybdenum | ppm | ASTM D5185m | | 238 | 34 | 143 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 830 | 263 | 484 |
| Calcium | ppm | ASTM D5185m | | 1473 | 1021 | 2560 |
| Phosphorus | ppm | ASTM D5185m | | 916 | 572 | 1035 |
| Zinc | ppm | ASTM D5185m | | 1098 | 660 | 1233 |
| Sulfur | ppm | ASTM D5185m | | 3501 | 1842 | 3459 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 17.0 | 17.5 | 14.7 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 13.6 | 8.5 | 8.4 | 8.6 |
| Visc @ 100°C | cSt | ASTM D445 | 15.4 | 13.5 | 12.8 | ● 11.0 |

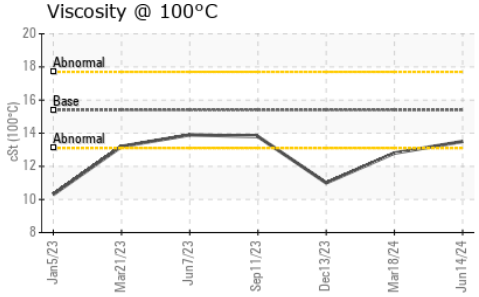
FT-IR (Direct Trend)



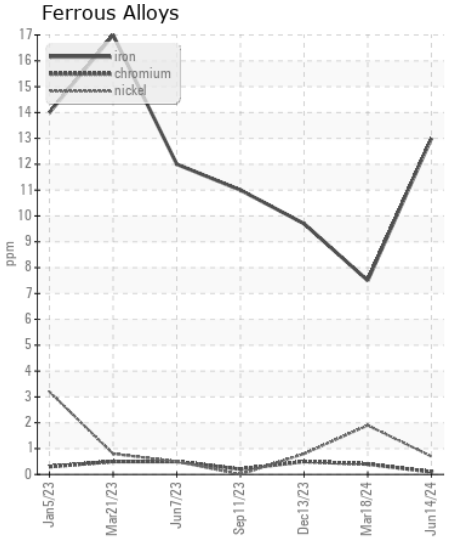

Base Number



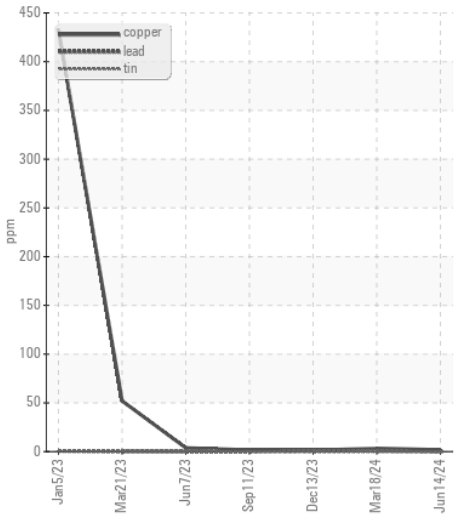

Viscosity @ 100°C



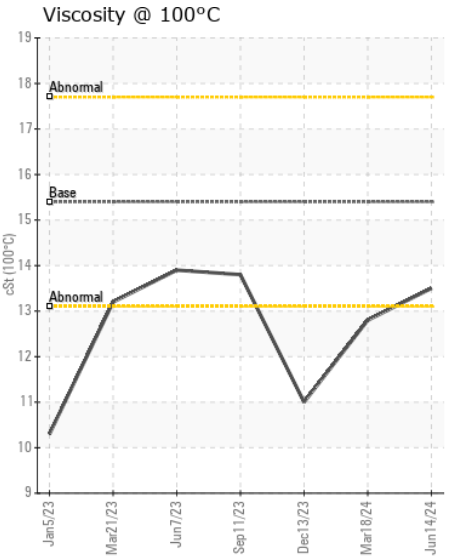

Ferrous Alloys




Non-ferrous Metals




Viscosity @ 100°C

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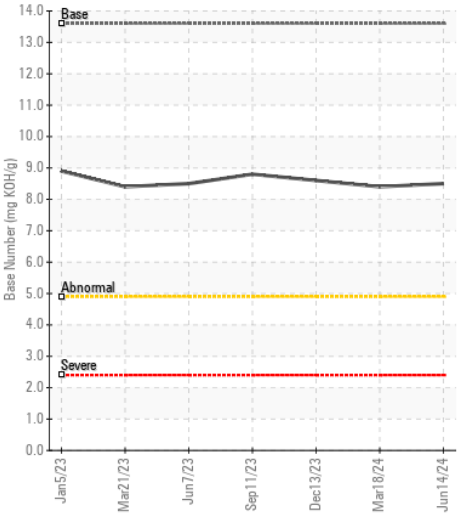


Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : JR0218414 **Received** : 17 Jun 2024
**Lab Number** : 06211423 **Tested** : 18 Jun 2024
**Unique Number** : 11084287 **Diagnosed** : 18 Jun 2024 - Wes Davis
**Test Package** : CONST ( Additional Tests: TBN )

*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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