



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

Machine Id
JOHN DEERE 700L 1T0700LXJNF426587

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (28 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0183861 | JR0173020 | JR0160106 |
| Sample Date | | Client Info | | 17 Aug 2023 | 12 May 2023 | 25 Jan 2023 |
| Machine Age | hrs | Client Info | | 1457 | 970 | 461 |
| Oil Age | hrs | Client Info | | 948 | 509 | 461 |
| Filter Age | hrs | Client Info | | 948 | 0 | 461 |
| Oil Changed | | Client Info | | Changed | N/A | Changed |
| Filter Changed | | Client Info | | Changed | N/A | Changed |
| Sample Status | | | | NORMAL | NORMAL | ABNORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|-------|
| Iron | ppm | ASTM D5185m | >51 | 15 | 16 | 19 |
| Chromium | ppm | ASTM D5185m | >11 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >5 | 2 | 2 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Silver | ppm | ASTM D5185m | >3 | <1 | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >31 | 4 | 2 | 3 |
| Lead | ppm | ASTM D5185m | >26 | <1 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >26 | 8 | 41 | ▲ 404 |
| Tin | ppm | ASTM D5185m | >4 | <1 | 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 |

CONTAMINATION

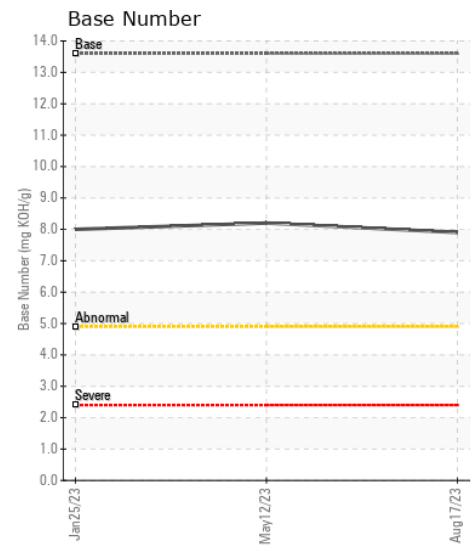
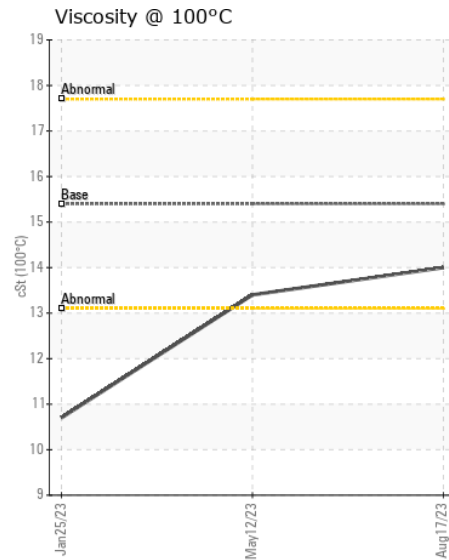
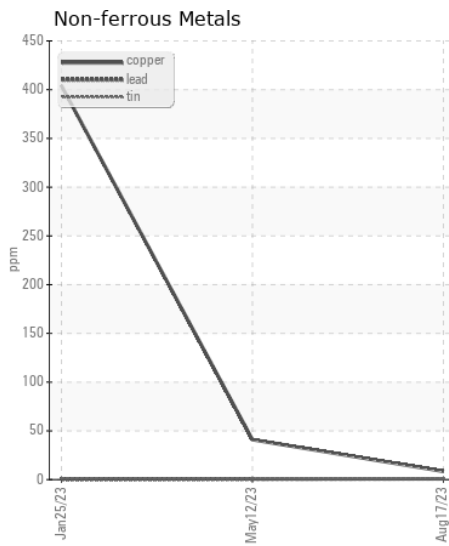
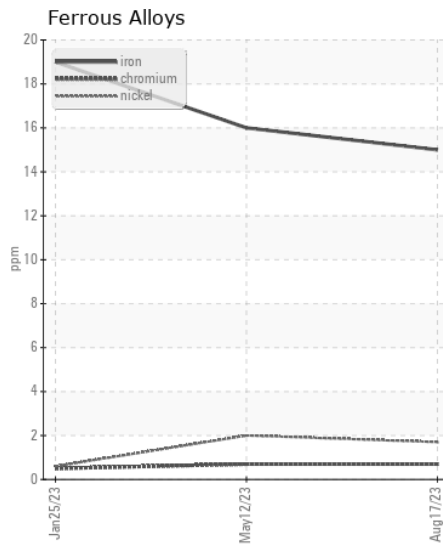
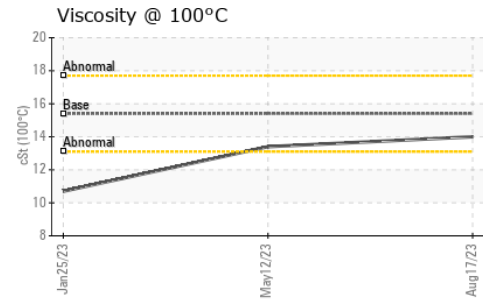
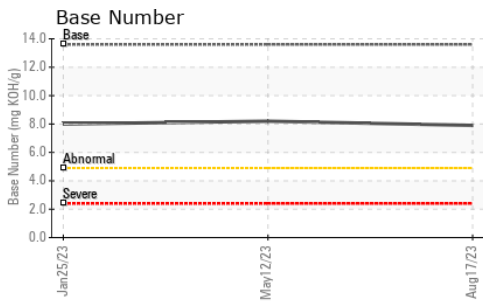
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >22 | 8 | 8 | 8 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 2 | 0 |
| Fuel | | WC Method | >2.1 | <1.0 | <1.0 | 0.6 |
| 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 | 9.4 | 9.9 | 8.6 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 23.3 | 23.6 | 21.8 |
| 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 |

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.

| | | | | | | |
|------------------|----------|-------------|------|-------------|------|--------|
| Sodium | ppm | ASTM D5185m | >31 | 4 | 4 | 4 |
| Boron | ppm | ASTM D5185m | | 214 | 222 | 257 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 1 |
| Molybdenum | ppm | ASTM D5185m | | 272 | 233 | 221 |
| Manganese | ppm | ASTM D5185m | | 1 | 1 | 3 |
| Magnesium | ppm | ASTM D5185m | | 888 | 843 | 739 |
| Calcium | ppm | ASTM D5185m | | 1664 | 1581 | 1380 |
| Phosphorus | ppm | ASTM D5185m | | 923 | 940 | 840 |
| Zinc | ppm | ASTM D5185m | | 1163 | 1199 | 1009 |
| Sulfur | ppm | ASTM D5185m | | 3603 | 3198 | 3118 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 18.7 | 18.4 | 16.8 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 13.6 | 7.9 | 8.2 | 8.0 |
| Visc @ 100°C | cSt | ASTM D445 | 15.4 | 14.0 | 13.4 | ● 10.7 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0183861 **Received** : 18 Aug 2023
Lab Number : 05928562 **Tested** : 20 Aug 2023
Unique Number : 10608509 **Diagnosed** : 20 Aug 2023 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

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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)