



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

Machine Id
JOHN DEERE 85G 1FF085GXVKJ021308
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0223604 | JR0187323 | JR0145491 |
| Sample Date | | Client Info | | 10 Jul 2024 | 02 Nov 2023 | 12 Oct 2022 |
| Machine Age | hrs | Client Info | | 3777 | 3391 | 2401 |
| 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 |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >51 | 13 | 20 | 16 |
| Chromium | ppm | ASTM D5185m | >11 | <1 | <1 | 2 |
| Nickel | ppm | ASTM D5185m | >5 | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >31 | 6 | 4 | 2 |
| Lead | ppm | ASTM D5185m | >26 | 0 | 0 | 2 |
| Copper | ppm | ASTM D5185m | >26 | <1 | 1 | 2 |
| Tin | ppm | ASTM D5185m | >4 | 0 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

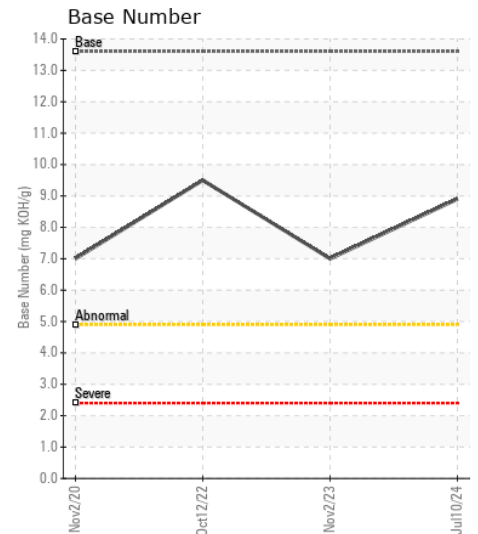
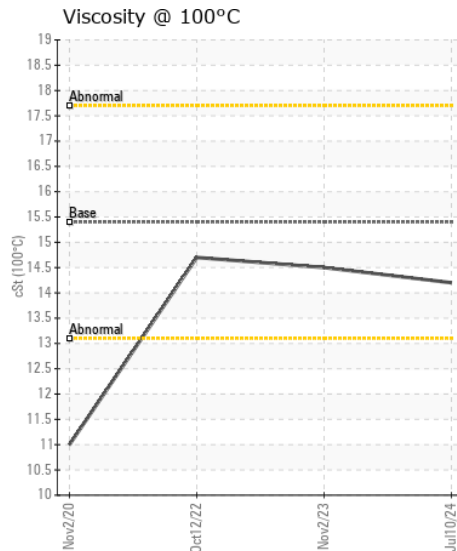
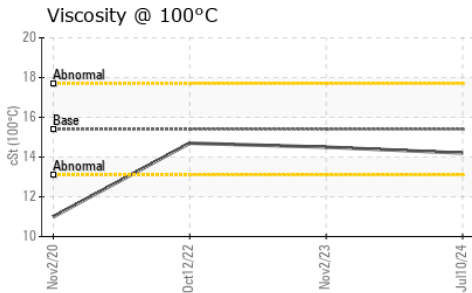
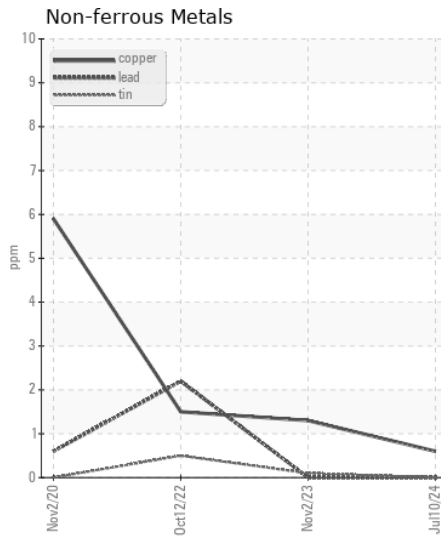
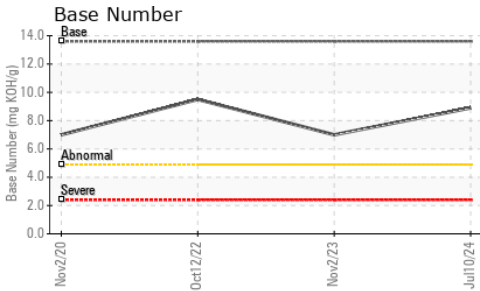
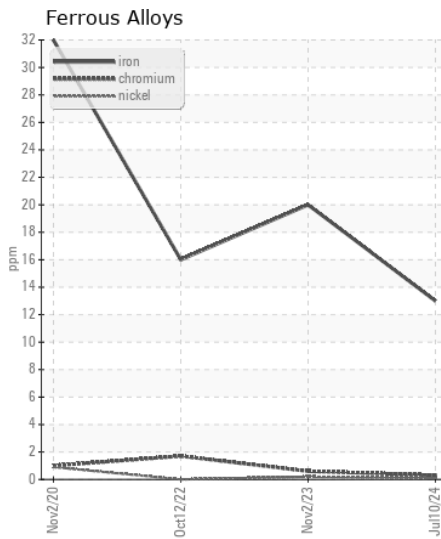
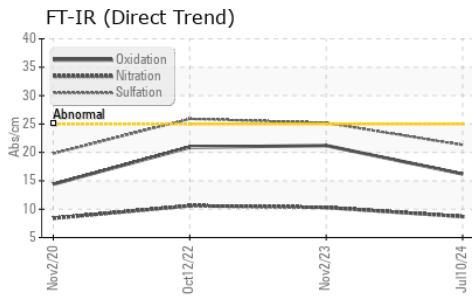
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >22 | 12 | 14 | 9 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 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 | 0.4 | 0.7 | 0.6 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 8.7 | 10.3 | 10.6 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.3 | 25.2 | 25.9 |
| 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 | 2 | 3 | 5 |
| Boron | ppm | ASTM D5185m | | 238 | 160 | 155 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 265 | 250 | 241 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | 2 |
| Magnesium | ppm | ASTM D5185m | | 888 | 793 | 786 |
| Calcium | ppm | ASTM D5185m | | 1562 | 1451 | 1526 |
| Phosphorus | ppm | ASTM D5185m | | 947 | 775 | 841 |
| Zinc | ppm | ASTM D5185m | | 1123 | 999 | 1100 |
| Sulfur | ppm | ASTM D5185m | | 3524 | 2747 | 3279 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 16.2 | 21.2 | 20.9 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 13.6 | 8.9 | 7.0 | 9.5 |
| Visc @ 100°C | cSt | ASTM D445 | 15.4 | 14.2 | 14.5 | 14.7 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0223604 **Received** : 11 Jul 2024
Lab Number : 06233122 **Tested** : 12 Jul 2024
Unique Number : 11116615 **Diagnosed** : 12 Jul 2024 - 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)