



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

Machine Id
JOHN DEERE 844L 1DW844LXLNL714450
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (36 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0224514 | JR0196564 | JR0183390 |
| Sample Date | | Client Info | | 10 Jul 2024 | 11 Dec 2023 | 10 Oct 2023 |
| Machine Age | hrs | Client Info | | 2986 | 2538 | 2166 |
| Oil Age | hrs | Client Info | | 0 | 372 | 700 |
| Filter Age | hrs | Client Info | | 0 | 372 | 700 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | ABNORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >51 | 20 | 10 | 27 |
| Chromium | ppm | ASTM D5185m | >11 | <1 | 0 | <1 |
| Nickel | ppm | ASTM D5185m | >5 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >31 | 6 | 4 | 6 |
| Lead | ppm | ASTM D5185m | >26 | 3 | 2 | 20 |
| Copper | ppm | ASTM D5185m | >26 | 6 | 7 | 18 |
| Tin | ppm | ASTM D5185m | >4 | 1 | 2 | 4 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | <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.

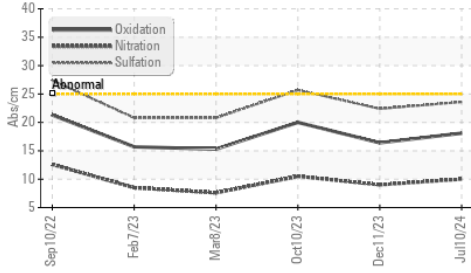
| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >22 | 7 | 6 | 8 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | <1 | 3 |
| Fuel | % | ASTM D3524 | >2.1 | <1.0 | <1.0 | ▲ 3.2 |
| Water | | WC Method | >0.21 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.5 | 0.5 | 0.7 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 10.0 | 9.0 | 10.5 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 23.6 | 22.4 | 25.7 |
| 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

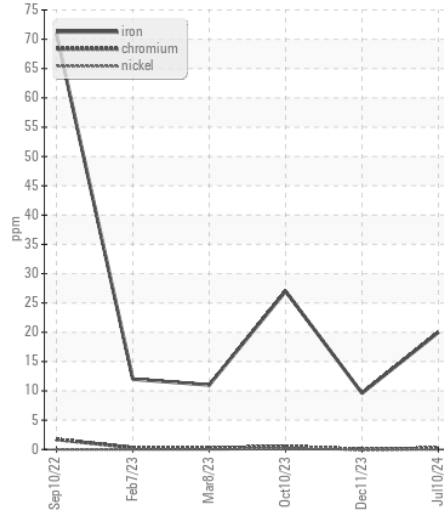
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|--------|
| Sodium | ppm | ASTM D5185m | >31 | 5 | 2 | 6 |
| Boron | ppm | ASTM D5185m | | 124 | 148 | 36 |
| Barium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 247 | 211 | 249 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | 2 |
| Magnesium | ppm | ASTM D5185m | | 808 | 754 | 815 |
| Calcium | ppm | ASTM D5185m | | 1452 | 1318 | 1393 |
| Phosphorus | ppm | ASTM D5185m | | 847 | 804 | 775 |
| Zinc | ppm | ASTM D5185m | | 984 | 1044 | 988 |
| Sulfur | ppm | ASTM D5185m | | 3333 | 2876 | 2825 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 18.1 | 16.4 | 20.0 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 13.6 | 7.9 | 8.1 | 6.3 |
| Visc @ 100°C | cSt | ASTM D445 | 15.4 | 12.8 | 13.1 | ▲ 12.4 |

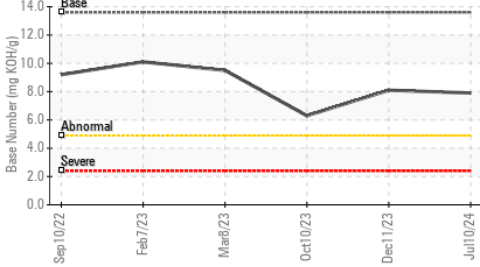
FT-IR (Direct Trend)



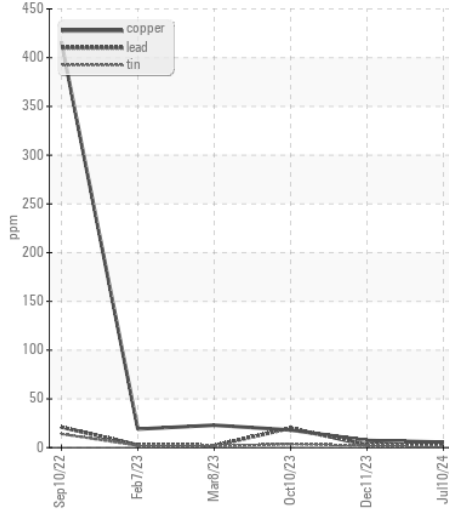
Ferrous Alloys



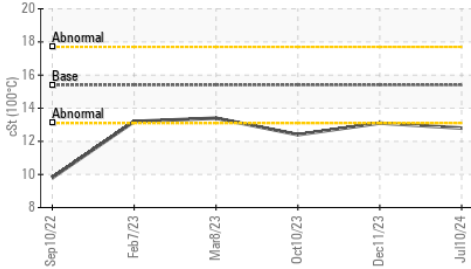
Base Number



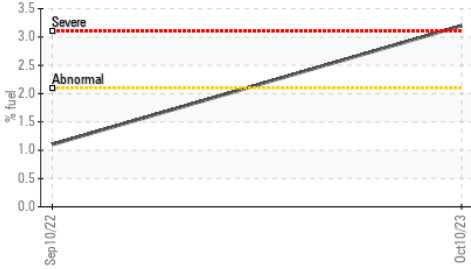
Non-ferrous Metals



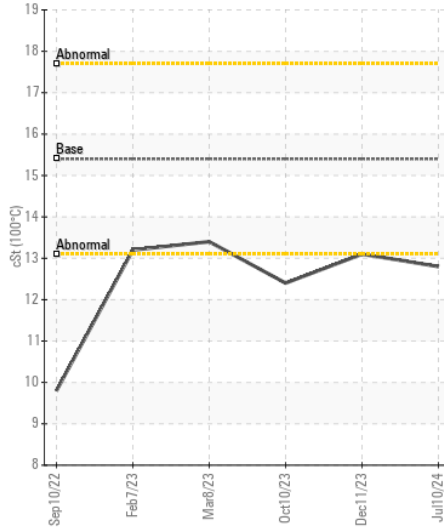
Viscosity @ 100°C



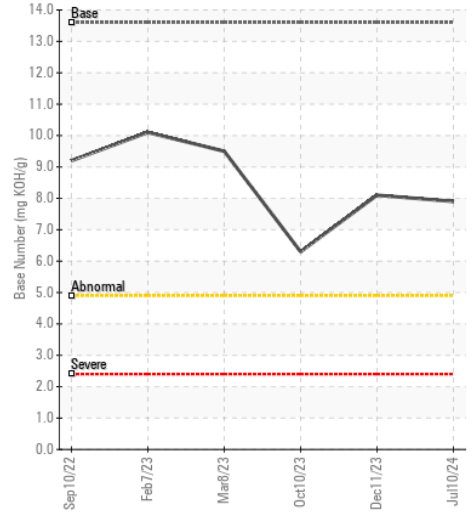
Fuel Dilution



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0224514 **Received** : 17 Jul 2024
Lab Number : 06238931 **Tested** : 18 Jul 2024
Unique Number : 11127765 **Diagnosed** : 18 Jul 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FuelDilution, 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)