



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

Area
[W20875-VALENTINO]
 Machine Id
JOHN DEERE 2032R 1LV2032RVHH103032
 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 | | JR0204488 | JR0120690 | JR0085249 |
| Sample Date | | Client Info | | 24 Jan 2024 | 10 Jan 2023 | 15 Dec 2021 |
| Machine Age | hrs | Client Info | | 614 | 493 | 384 |
| Oil Age | hrs | Client Info | | 0 | 0 | 384 |
| Filter Age | hrs | Client Info | | 0 | 0 | 384 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | MARGINAL | ABNORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >51 | 3 | 6 | 7 |
| Chromium | ppm | ASTM D5185m | >11 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >31 | 4 | 2 | 3 |
| Lead | ppm | ASTM D5185m | >26 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >26 | 2 | 3 | 3 |
| Tin | ppm | ASTM D5185m | >4 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

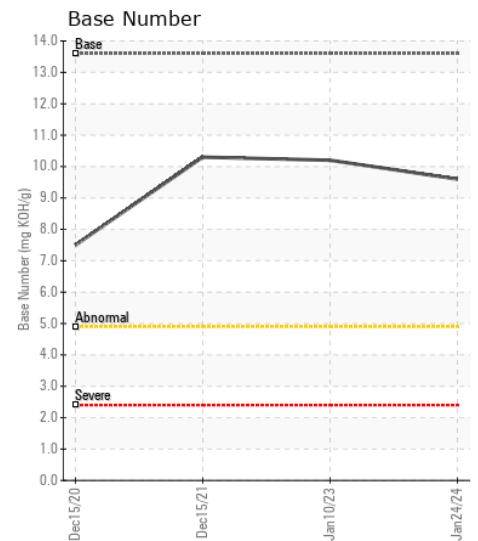
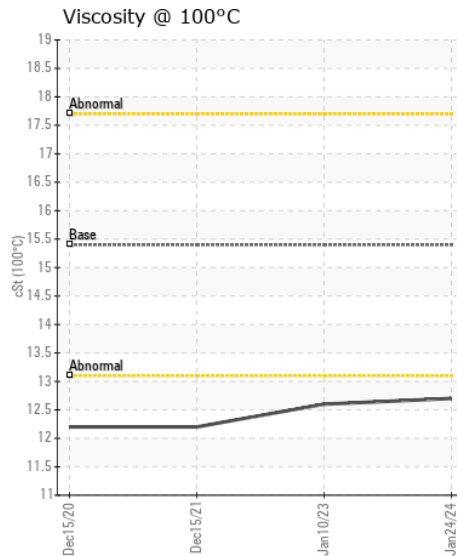
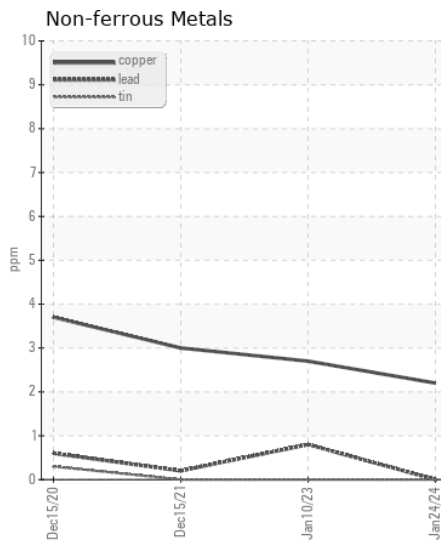
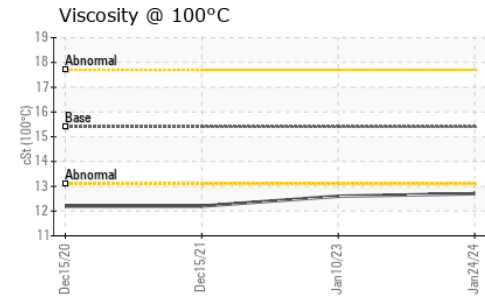
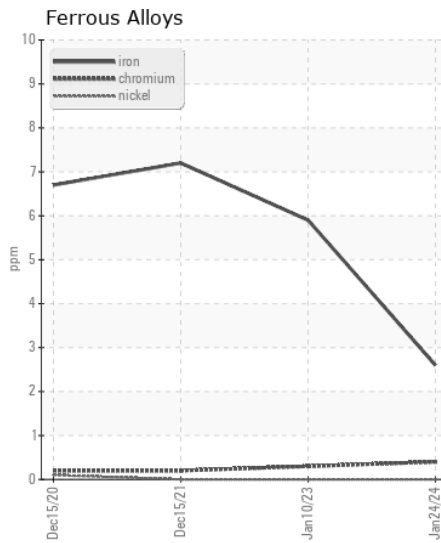
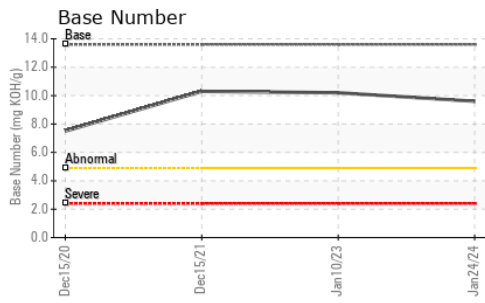
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >22 | 6 | 7 | 9 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | <1 | 0 |
| Fuel | | WC Method | >2.1 | <1.0 | ▲ 3.4 | ▲ 4.8 |
| Water | | WC Method | >0.21 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.1 | 0.1 | 0.1 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 8.2 | 7.7 | 8.2 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 19.6 | 19.4 | 20.4 |
| 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 | 0 | 2 | <1 |
| Boron | ppm | ASTM D5185m | | 256 | 267 | 252 |
| Barium | ppm | ASTM D5185m | | 1 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 242 | 230 | 226 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 743 | 737 | 765 |
| Calcium | ppm | ASTM D5185m | | 1289 | 1288 | 1334 |
| Phosphorus | ppm | ASTM D5185m | | 859 | 806 | 829 |
| Zinc | ppm | ASTM D5185m | | 1004 | 986 | 919 |
| Sulfur | ppm | ASTM D5185m | | 2993 | 3222 | 2424 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 15.1 | 14.9 | 15.7 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 13.6 | 9.6 | 10.2 | 10.3 |
| Visc @ 100°C | cSt | ASTM D445 | 15.4 | 12.7 | 12.6 | ▲ 12.2 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0204488

Lab Number : 06077563

Unique Number : 10859654

Test Package : CONST (Additional Tests: TBN)

Received : 01 Feb 2024

Tested : 02 Feb 2024

Diagnosed : 05 Feb 2024 - Jonathan Hester

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)

JRE - BURKEVILLE

510 WEST COLONIAL DR

BURKEVILLE, VA

US 23922

Contact: BRANDON BOLLING

bbolling@jamesriverequipment.com

T: (434)767-5578

F: (434)767-3774