



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

Machine Id
JOHN DEERE 524 P 1DW524PAVPLX19355

Component
Diesel Engine

Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0213714 | JR0205251 | JR0205131 |
| Sample Date | | Client Info | | 23 May 2024 | 01 Apr 2024 | 14 Feb 2024 |
| Machine Age | hrs | Client Info | | 3498 | 2971 | 2498 |
| 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 | 14 | 11 | 3 |
| Chromium | ppm | ASTM D5185m | >11 | 0 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >5 | 2 | 1 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | >3 | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >31 | 6 | 4 | 4 |
| Lead | ppm | ASTM D5185m | >26 | 1 | <1 | 0 |
| Copper | ppm | ASTM D5185m | >26 | 8 | 2 | <1 |
| Tin | ppm | ASTM D5185m | >4 | <1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

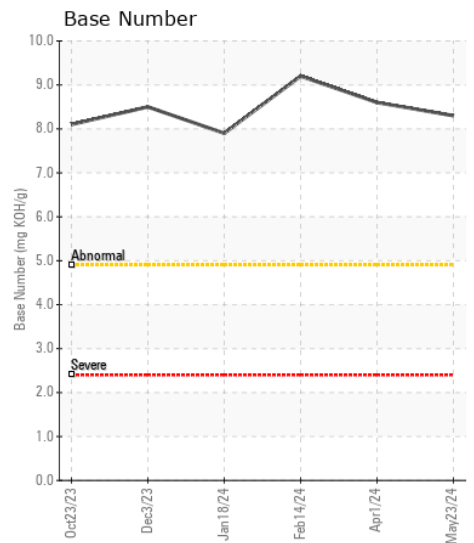
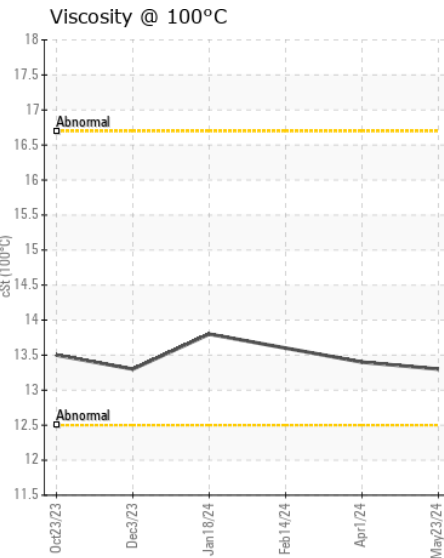
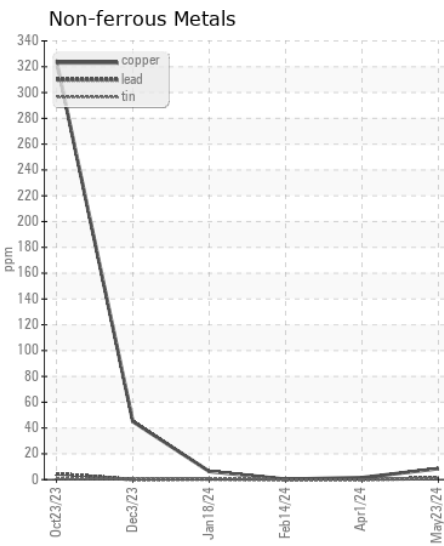
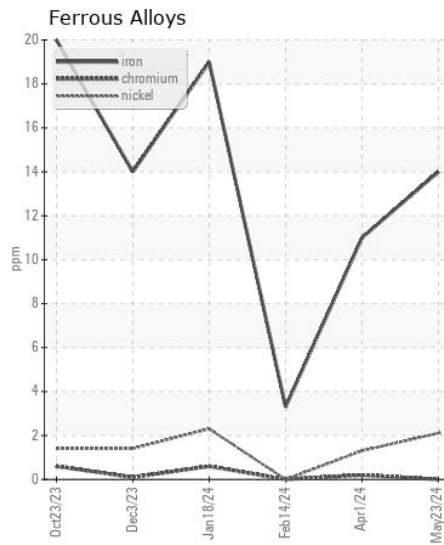
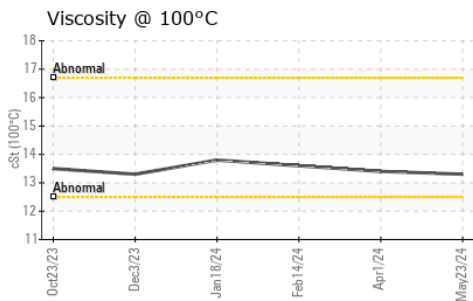
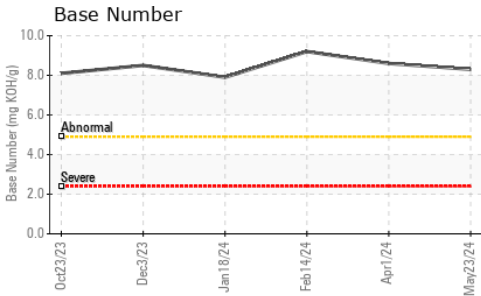
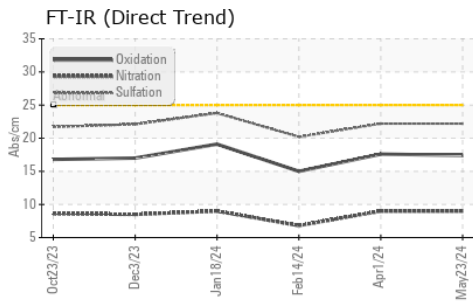
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >22 | 8 | 5 | 7 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | <1 | 2 |
| 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 | 0.3 | 0.3 | 0.2 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.0 | 9.0 | 6.8 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 22.2 | 22.2 | 20.2 |
| 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 | 3 | 3 | 2 |
| Boron | ppm | ASTM D5185m | | 221 | 230 | 264 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 11 |
| Molybdenum | ppm | ASTM D5185m | | 251 | 242 | 244 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | | 876 | 826 | 738 |
| Calcium | ppm | ASTM D5185m | | 1437 | 1495 | 1206 |
| Phosphorus | ppm | ASTM D5185m | | 892 | 863 | 722 |
| Zinc | ppm | ASTM D5185m | | 1128 | 1027 | 998 |
| Sulfur | ppm | ASTM D5185m | | 3462 | 3444 | 2763 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 17.4 | 17.6 | 15.0 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 8.3 | 8.6 | 9.2 |
| Visc @ 100°C | cSt | ASTM D445 | | 13.3 | 13.4 | 13.6 |



Certificate L2367

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

Sample No. : JR0213714

Lab Number : 06190170

Unique Number : 11046922

Test Package : CONST (Additional Tests: TBN)

Received : 24 May 2024

Tested : 28 May 2024

Diagnosed : 28 May 2024 - Wes Davis

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 - GREENSBORO
411 SOUTH REGIONAL ROAD
GREENSBORO, NC
US 27409

Contact: NICK GALLAHER
NGALLAHER@JRENET.COM

T: (336)668-2762

F: (336)665-9556