



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



Machine Id
JOHN DEERE 524K-II 1DW524KZKJF688574
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0218712 | JR0207927 | JR0201454 |
| Sample Date | | Client Info | | 06 Jun 2024 | 25 Mar 2024 | 09 Jan 2024 |
| Machine Age | hrs | Client Info | | 10260 | 9783 | 9283 |
| Oil Age | hrs | Client Info | | 2075 | 1598 | 1098 |
| Filter Age | hrs | Client Info | | 2075 | 1598 | 1098 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Filter Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| PQ | UOM | Method | Limit/Abn | Current | History1 | History2 |
|--------------|--------|-------------|-----------|--------------|----------|----------|
| PQ | | ASTM D8184 | >50 | 17 | 13 | 16 |
| Iron | ppm | ASTM D5185m | >71 | <1 | 4 | 4 |
| Chromium | ppm | ASTM D5185m | >11 | 4 | 4 | 3 |
| Nickel | ppm | ASTM D5185m | >6 | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >11 | 0 | 2 | 2 |
| Lead | ppm | ASTM D5185m | >13 | 0 | 1 | 0 |
| Copper | ppm | ASTM D5185m | >21 | 1 | 2 | 2 |
| Tin | ppm | ASTM D5185m | >5 | 0 | 1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

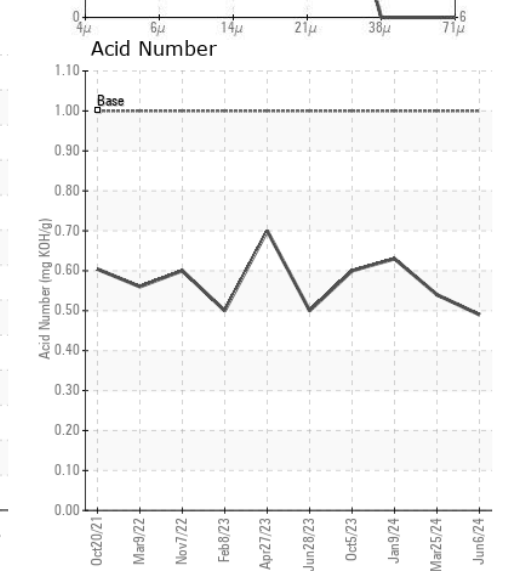
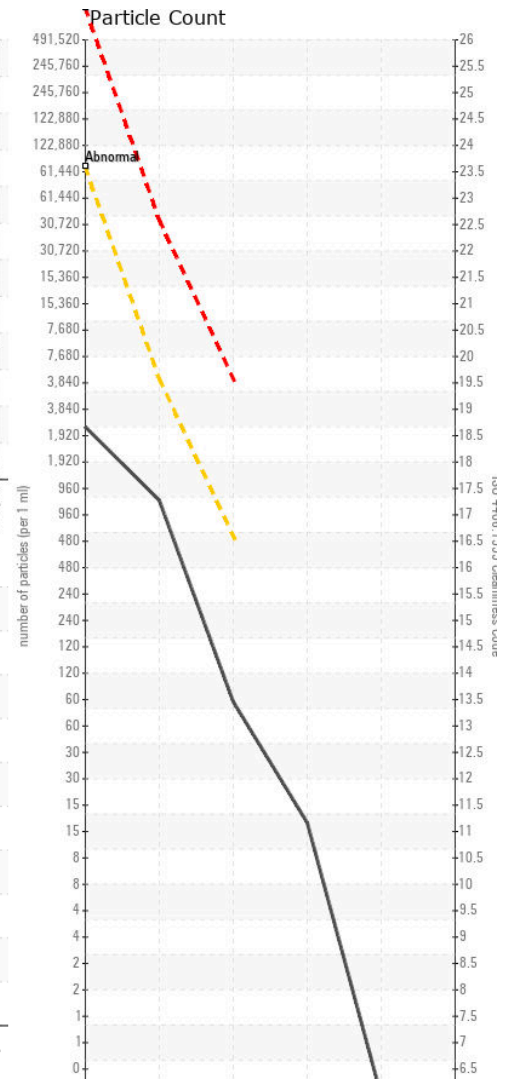
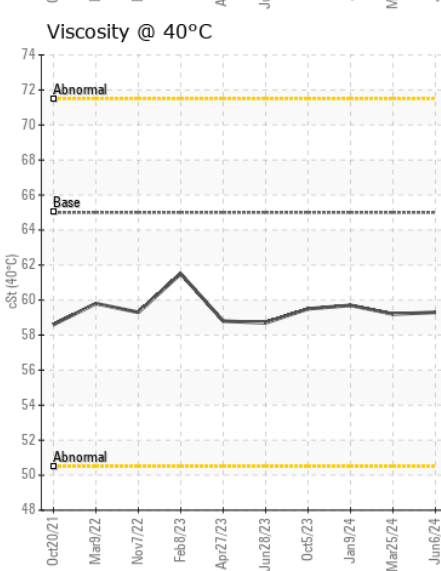
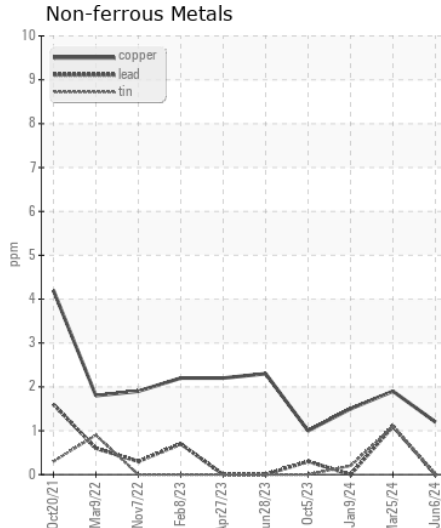
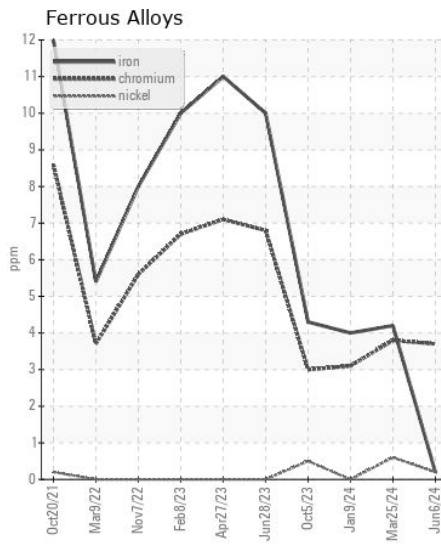
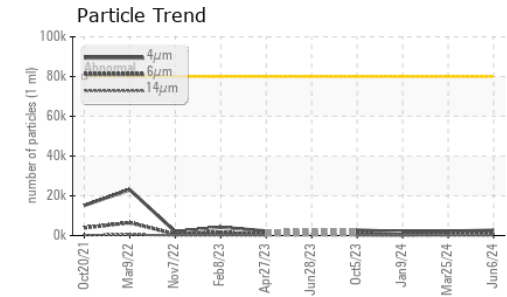
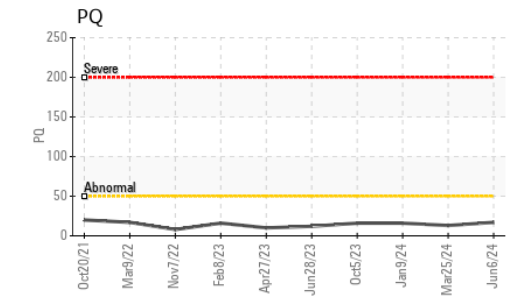
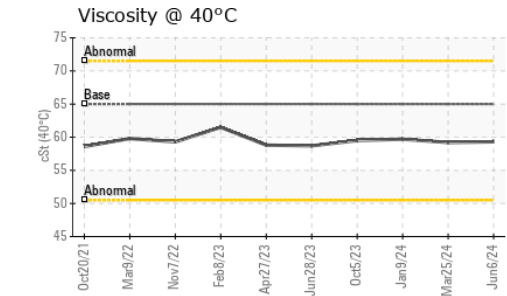
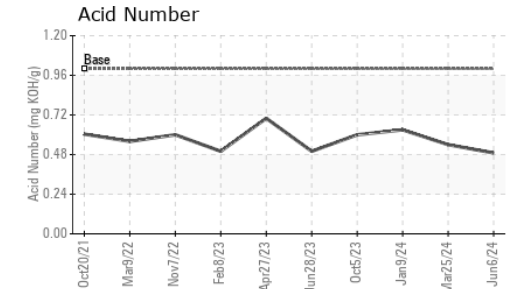
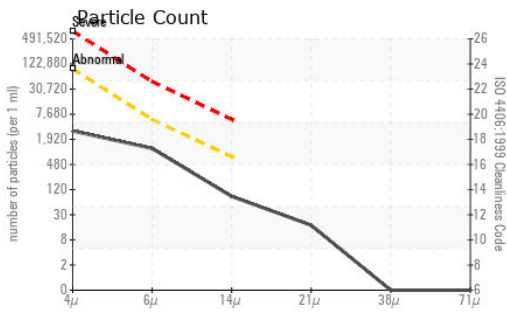
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

| | | | | | | |
|------------------|--------|--------------|-----------|-----------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >24 | 1 | 2 | 1 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 2 | 1 |
| Water | | WC Method | >0.075 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | >80000 | 2662 | 2183 | 1886 |
| Particles >6µm | | ASTM D7647 | >5000 | 1018 | 822 | 458 |
| Particles >14µm | | ASTM D7647 | >640 | 73 | 82 | 32 |
| Particles >21µm | | ASTM D7647 | >160 | 15 | 19 | 9 |
| Particles >38µm | | ASTM D7647 | >40 | 0 | 1 | 1 |
| Particles >71µm | | ASTM D7647 | >10 | 0 | 0 | 1 |
| Oil Cleanliness | | ISO 4406 (c) | >23/19/16 | 19/17/13 | 18/17/14 | 18/16/12 |
| 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 | >0.075 | NEG | NEG | NEG |

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | >21 | 5 | 2 | 0 |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 1 | <1 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | | 1 | 2 | 0 |
| Calcium | ppm | ASTM D5185m | 87 | 102 | 96 | 102 |
| Phosphorus | ppm | ASTM D5185m | 727 | 568 | 661 | 608 |
| Zinc | ppm | ASTM D5185m | 900 | 733 | 780 | 815 |
| Sulfur | ppm | ASTM D5185m | 1500 | 1592 | 1723 | 1565 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | 0.49 | 0.54 | 0.63 |
| Visc @ 40°C | cSt | ASTM D445 | 65 | 59.3 | 59.2 | 59.7 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0218712 **Received** : 14 Jun 2024
Lab Number : 06209964 **Tested** : 17 Jun 2024
Unique Number : 11082828 **Diagnosed** : 17 Jun 2024 - Wes Davis
Test Package : CONST (Additional Tests: PQ)

JRE - ASHEVILLE
 101 BRUCE DRIVE
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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)