WEAR
CONTAMINATION
FLUID CONDITION

| NORMAL |
| :--- |
| NORMAL |
| NORMAL |

CAROLINE
JOHN DEERE 944X M02-0932 1DW944XAPPLX03758
Diesent Engine
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)

| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sample Number |  | Client Info |  | JR0124848 | --- | --- |
|  | Sample Date |  | Client Info |  | 22 Apr 2024 | --- | --- |
|  | Machine Age | hrs | Client Info |  | 764 | --- | --- |
|  | Oil Age | hrs | Client Info |  | 235 | --- | --- |
|  | Filter Age | hrs | Client Info |  | 235 | --- | --- |
|  | Oil Changed |  | Client Info |  | Not Changd | --- | --- |
|  | Filter Changed |  | Client Info |  | Not Changd | --- | --- |
|  | Sample Status |  |  |  | NORMAL | --- | --- |
| WEAR | Iron | ppm | ASTM D5185m | >51 | 19 | --- | --- |
|  | Chromium | ppm | ASTM D5185m | $>11$ | <1 | --- | --- |
|  | Nickel | ppm | ASTM D5185m | >5 | <1 | --- | --- |
|  | Titanium | ppm | ASTM D5185m |  | <1 | --- | --- |
|  | Silver | ppm | ASTM D5185m | >3 | 0 | --- | --- |
|  | Aluminum | ppm | ASTM D5185m | >31 | 6 | --- | --- |
|  | Lead | ppm | ASTM D5185m | >26 | 27 | --- | --- |
|  | Copper | ppm | ASTM D5185m | >26 | 144 | --- | --- |
|  | Tin | ppm | ASTM D5185m | >4 | 4 | --- | --- |
|  | Vanadium | ppm | ASTM D5185m |  | <1 | --- | --- |
|  | White Metal | scalar | *Visual | NONE | NONE | --- | --- |
|  | Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >22 | 9 | --- | --- |
|  | Potassium | ppm | ASTM D5185m | >20 | 9 | --- | --- |
|  | Fuel | \% | ASTM D3524 | >2.1 | <1.0 | --- | --- |
|  | Water |  | WC Method | $>0.21$ | NEG | --- | --- |
|  | Glycol |  | WC Method |  | NEG | --- | --- |
|  | Soot \% | \% | *ASTM D7844 | >3 | 0.4 | --- | --- |
|  | Nitration | Abs/cm | *ASTM D7624 | >20 | 9.3 | --- | --- |
|  | Sulfation | Abs. 1 mm | *ASTM D7415 | >30 | 20.3 | --- | --- |
|  | Silt | scalar | *Visual | NONE | NONE | --- | --- |
|  | Debris | scalar | *Visual | NONE | NONE | --- | --- |
|  | Sand/Dirt | scalar | *Visual | NONE | NONE | --- | --- |
|  | Appearance | scalar | *Visual | NORML | NORML | --- | --- |
|  | Odor | scalar | *Visual | NORML | NORML | --- | --- |
|  | Emulsified Water | scalar | *Visual | >0.21 | NEG | --- | --- |
| FLUUD CONDITION | Sodium | ppm | ASTM D5185m | >31 | 1 | --- | --- |
|  | Boron | ppm | ASTM D5185m |  | 119 | --- | --- |
|  | Barium | ppm | ASTM D5185m |  | 3 | --- | --- |
|  | Molybdenum | ppm | ASTM D5185m |  | 186 | --- | --- |
|  | Manganese | ppm | ASTM D5185m |  | 2 | --- | --- |
|  | Magnesium | ppm | ASTM D5185m |  | 425 | --- | --- |
|  | Calcium | ppm | ASTM D5185m |  | 1747 | --- | --- |
|  | Phosphorus | ppm | ASTM D5185m |  | 938 | --- | --- |
|  | Zinc | ppm | ASTM D5185m |  | 1049 | --- | --- |
|  | Sulfur | ppm | ASTM D5185m |  | 3300 | --- | --- |
|  | Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 14.9 | --- | --- |
|  | Base Number (BN) | mgKOHg | ASTM D2896 | 13.6 | 7.7 | --- | --- |
|  | Visc @ 100 ${ }^{\circ} \mathrm{C}$ | cSt | ASTM D445 | 15.4 | 12.1 | --- | --- |



