

# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**JOHN DEERE 843L-II 1DW843LBPNF714405**  
Component  
**Hydraulic System**  
Fluid  
**JOHN DEERE HYDRAU (--- GAL)**

**DIAGNOSIS**

**Recommendation**

Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

**Fluid Condition**

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

| SAMPLE INFORMATION |             | method      | limit/base | current            | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|----------|----------|
| Sample Number      | Client Info |             |            | <b>JR0179595</b>   | ---      | ---      |
| Sample Date        | Client Info |             |            | <b>12 Jan 2024</b> | ---      | ---      |
| Machine Age        | hrs         | Client Info |            | <b>446</b>         | ---      | ---      |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | ---      | ---      |
| Oil Changed        | Client Info |             |            | <b>Not Chngd</b>   | ---      | ---      |
| Sample Status      |             |             |            | <b>NORMAL</b>      | ---      | ---      |

| CONTAMINATION |           | method | limit/base | current    | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water         | WC Method |        | >0.1       | <b>NEG</b> | ---      | ---      |

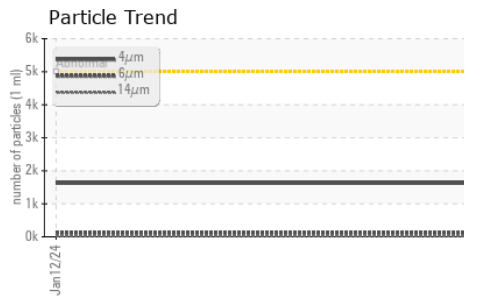
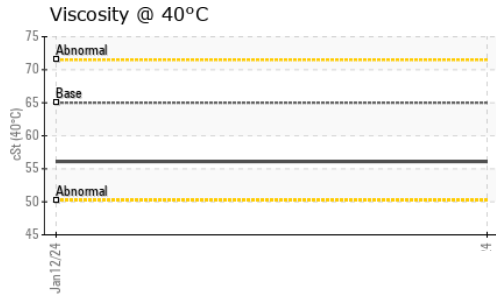
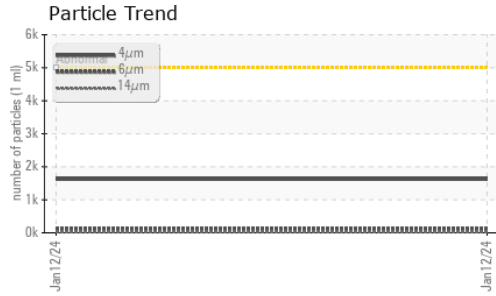
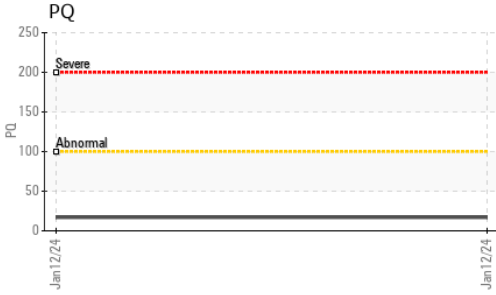
| WEAR METALS |     | method      | limit/base | current   | history1 | history2 |
|-------------|-----|-------------|------------|-----------|----------|----------|
| PQ          |     | ASTM D8184  |            | <b>17</b> | ---      | ---      |
| Iron        | ppm | ASTM D5185m | >20        | <b>5</b>  | ---      | ---      |
| Chromium    | ppm | ASTM D5185m | >10        | <b>2</b>  | ---      | ---      |
| Nickel      | ppm | ASTM D5185m | >10        | <b>0</b>  | ---      | ---      |
| Titanium    | ppm | ASTM D5185m |            | <b>0</b>  | ---      | ---      |
| Silver      | ppm | ASTM D5185m |            | <b>0</b>  | ---      | ---      |
| Aluminum    | ppm | ASTM D5185m | >10        | <b>0</b>  | ---      | ---      |
| Lead        | ppm | ASTM D5185m | >10        | <b>0</b>  | ---      | ---      |
| Copper      | ppm | ASTM D5185m | >75        | <b>5</b>  | ---      | ---      |
| Tin         | ppm | ASTM D5185m | >10        | <b>0</b>  | ---      | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>  | ---      | ---      |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>  | ---      | ---      |

| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Barium     | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Molybdenum | ppm | ASTM D5185m |            | <b>&lt;1</b> | ---      | ---      |
| Manganese  | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Magnesium  | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Calcium    | ppm | ASTM D5185m | 87         | <b>87</b>    | ---      | ---      |
| Phosphorus | ppm | ASTM D5185m | 727        | <b>683</b>   | ---      | ---      |
| Zinc       | ppm | ASTM D5185m | 900        | <b>881</b>   | ---      | ---      |
| Sulfur     | ppm | ASTM D5185m | 1500       | <b>1654</b>  | ---      | ---      |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >20        | <b>6</b>     | ---      | ---      |
| Sodium       | ppm | ASTM D5185m |            | <b>&lt;1</b> | ---      | ---      |
| Potassium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | ---      | ---      |

| FLUID CLEANLINESS |  | method       | limit/base | current         | history1 | history2 |
|-------------------|--|--------------|------------|-----------------|----------|----------|
| Particles >4µm    |  | ASTM D7647   | >5000      | <b>1625</b>     | ---      | ---      |
| Particles >6µm    |  | ASTM D7647   | >1300      | <b>139</b>      | ---      | ---      |
| Particles >14µm   |  | ASTM D7647   | >160       | <b>18</b>       | ---      | ---      |
| Particles >21µm   |  | ASTM D7647   | >40        | <b>5</b>        | ---      | ---      |
| Particles >38µm   |  | ASTM D7647   | >10        | <b>0</b>        | ---      | ---      |
| Particles >71µm   |  | ASTM D7647   | >3         | <b>0</b>        | ---      | ---      |
| Oil Cleanliness   |  | ISO 4406 (c) | >19/17/14  | <b>18/14/11</b> | ---      | ---      |

# OIL ANALYSIS REPORT



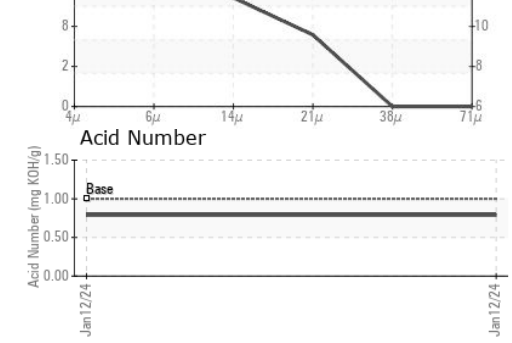
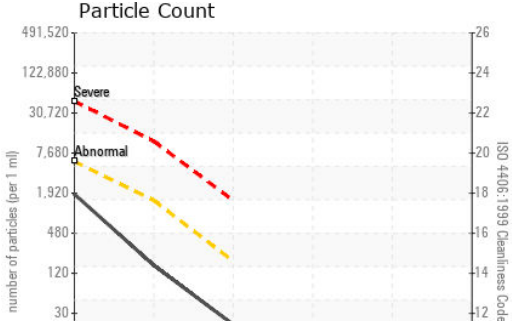
| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 1.0        | <b>0.79</b> | ---      | ---      |

| VISUAL           |        | method  | limit/base | current      | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal      | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Yellow Metal     | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Precipitate      | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Silt             | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Debris           | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Sand/Dirt        | scalar | *Visual | NONE       | <b>NONE</b>  | ---      | ---      |
| Appearance       | scalar | *Visual | NORML      | <b>NORML</b> | ---      | ---      |
| Odor             | scalar | *Visual | NORML      | <b>NORML</b> | ---      | ---      |
| Emulsified Water | scalar | *Visual | >0.1       | <b>NEG</b>   | ---      | ---      |
| Free Water       | scalar | *Visual |            | <b>NEG</b>   | ---      | ---      |

| FLUID PROPERTIES |     | method    | limit/base | current     | history1 | history2 |
|------------------|-----|-----------|------------|-------------|----------|----------|
| Visc @ 40°C      | cSt | ASTM D445 | 65         | <b>56.1</b> | ---      | ---      |

| SAMPLE IMAGES |  | method | limit/base | current | history1 | history2 |
|---------------|--|--------|------------|---------|----------|----------|
| Color         |  |        |            |         | no image | no image |
| Bottom        |  |        |            |         | no image | no image |

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0179595 **Received** : 16 Jan 2024  
**Lab Number** : 06060937 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10832319 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - ASHLAND**  
 11047 LEADBETTER RD  
 ASHLAND, VA  
 US 23005  
 Contact: DAVID ZIEG  
 dzieg@jamesriverequipment.com  
 T: (804)798-6001  
 F: (804)798-0292

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)