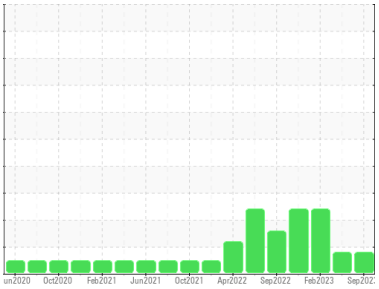
# PROBLEM SUMMARY

Sample Rating Trend

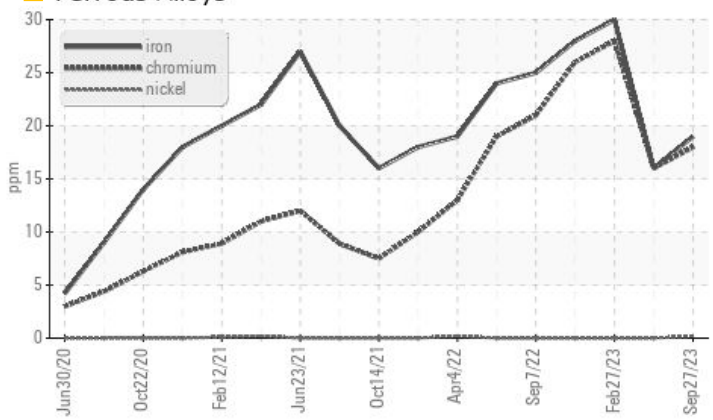


**WEAR**

Machine Id
## JOHN DEERE 844L 1DW844LXVLF705479
Component
**Hydraulic System**
Fluid
**JOHN DEERE HYDRAU (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys




## RECOMMENDATION

No corrective action is recommended at this time.
Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

| | | | | | | |
|---|---|---|---|---|---|---|
| Sample Status | | | | **ABNORMAL** | ABNORMAL | ABNORMAL |
| Chromium | ppm | ASTM D5185m | >10 | ▲ **18** | ▲ 16 | ▲ 28 |


**Customer Id:** JAMASH
**Sample No.:** JR0179313
**Lab Number:** 05966173
**Test Package:** CONST

*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*
Don Baldridge +1
don.b505@comcast.net

*To change component or sample information:*
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

**05 Jun 2023 Diag: Don Baldridge**

WEAR

No corrective action is recommended at this time. Resample at the next service interval to monitor.The chromium level has decreased, but is still abnormal. All other component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

**27 Feb 2023 Diag: Jonathan Hester**

WEAR

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.The iron level is abnormal. The chromium level is abnormal. There is a high amount of silt (particulates < 6 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

view report

**05 Dec 2022 Diag: Angela Borella**

WEAR

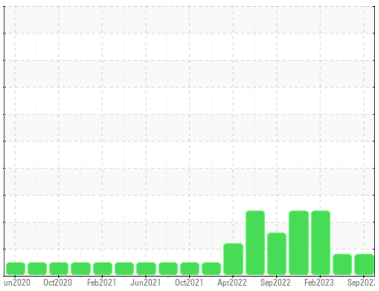
No corrective action is recommended at this time. Resample at the next service interval to monitor.The iron level is abnormal. The chromium level is abnormal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

view report

JAMES RIVER EQUIPMENT

# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**

Machine Id
## JOHN DEERE 844L 1DW844LXVLF705479
Component
**Hydraulic System**
Fluid
**JOHN DEERE HYDRAU (--- GAL)**

## DIAGNOSIS

**▲ Recommendation**
No corrective action is recommended at this time. Resample at the next service interval to monitor.

**▲ Wear**
The chromium level is abnormal. All other component wear rates are normal.

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

**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 | | **JR0179313** | JR0164713 | JR0147023 |
| Sample Date | | Client Info | | **27 Sep 2023** | 05 Jun 2023 | 27 Feb 2023 |
| Machine Age | hrs | Client Info | | **8933** | 8437 | 7955 |
| Oil Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Changed | | Client Info | | **Not Changd** | Not Changd | Changed |
| Sample Status | | | | **ABNORMAL** | ABNORMAL | ABNORMAL |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| PQ | | ASTM D8184 | | **27** | 15 | 14 |
| Iron | ppm | ASTM D5185m | >20 | **19** | 16 | ▲ 30 |
| Chromium | ppm | ASTM D5185m | >10 | ▲ **18** | ▲ 16 | ▲ 28 |
| Nickel | ppm | ASTM D5185m | >10 | **<1** | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | **<1** | <1 | 0 |
| Silver | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | **3** | 2 | 5 |
| Lead | ppm | ASTM D5185m | >10 | **<1** | 0 | 0 |
| Copper | ppm | ASTM D5185m | >75 | **4** | 3 | 5 |
| Tin | ppm | ASTM D5185m | >10 | **0** | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | 0 | 0 |

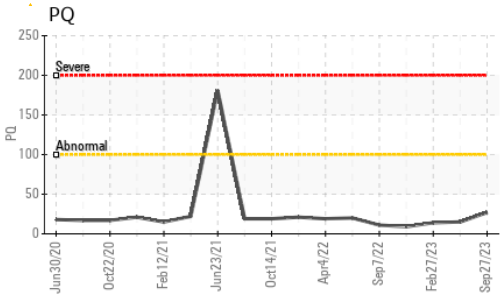
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Barium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | **<1** | <1 | <1 |
| Manganese | ppm | ASTM D5185m | | **0** | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | **2** | 2 | 0 |
| Calcium | ppm | ASTM D5185m | 87 | **99** | 100 | 88 |
| Phosphorus | ppm | ASTM D5185m | 727 | **662** | 600 | 522 |
| Zinc | ppm | ASTM D5185m | 900 | **865** | 806 | 648 |
| Sulfur | ppm | ASTM D5185m | 1500 | **1797** | 1909 | 1230 |

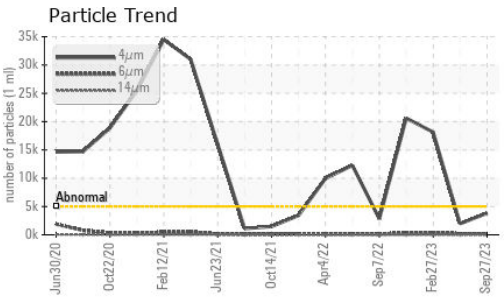
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >20 | **9** | 7 | 15 |
| Sodium | ppm | ASTM D5185m | | **2** | 2 | 4 |
| Potassium | ppm | ASTM D5185m | >20 | **1** | 0 | 0 |

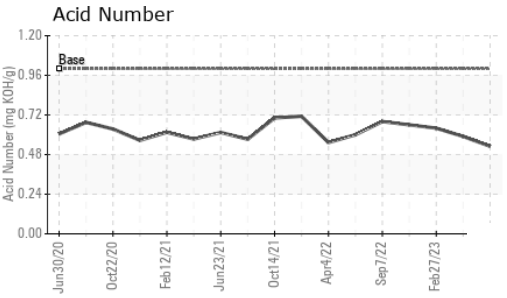
| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >5000 | **3822** | 1964 | ▲ 18124 |
| Particles >6µm | | ASTM D7647 | >1300 | **181** | 196 | 372 |
| Particles >14µm | | ASTM D7647 | >160 | **16** | 8 | 25 |
| Particles >21µm | | ASTM D7647 | >40 | **5** | 2 | 6 |
| Particles >38µm | | ASTM D7647 | >10 | **1** | 0 | 1 |
| Particles >71µm | | ASTM D7647 | >3 | **0** | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | **19/15/11** | 18/15/10 | ▲ 21/16/12 |

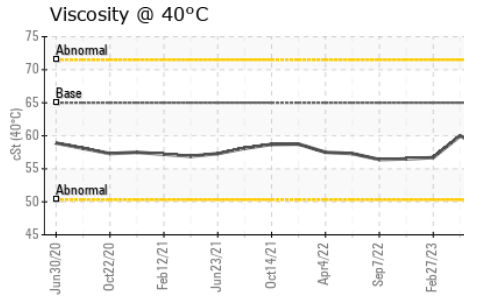
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | **0.53** | 0.59 | 0.64 |

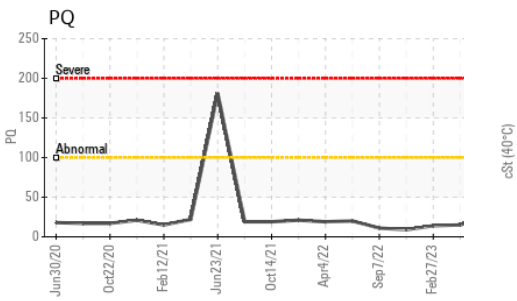
# OIL ANALYSIS REPORT



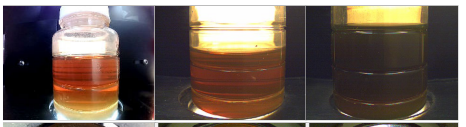
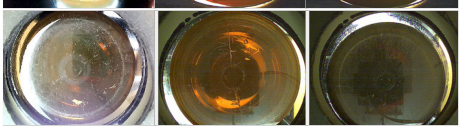



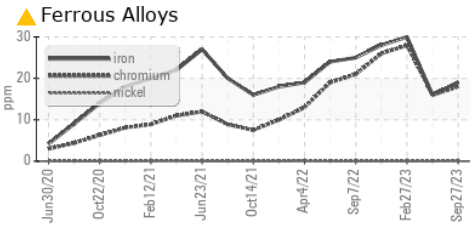



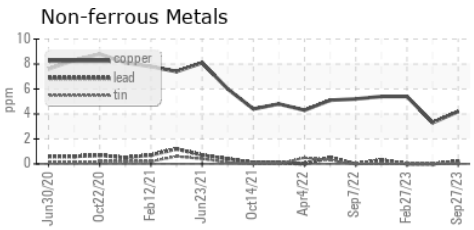

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| 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 | >0.1 | **NEG** | NEG | NEG |
| Free Water | scalar | *Visual | | **NEG** | NEG | NEG |

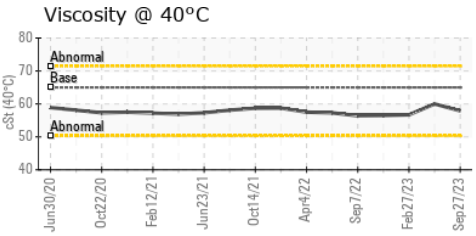
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 65 | **57.9** | 60.0 | 56.7 |

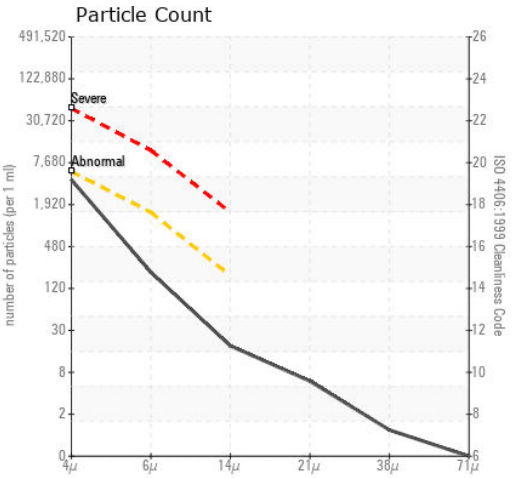
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

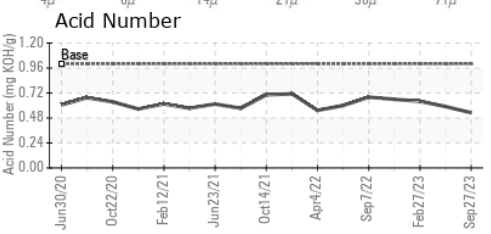
## GRAPHS




**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : JR0179313 **Received** : 02 Oct 2023
**Lab Number** : 05966173 **Diagnosed** : 03 Oct 2023
**Unique Number** : 10672724 **Diagnostician** : Don Baldridge
**Test Package** : CONST ( Additional Tests: PQ )

Certificate L2367

*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)*

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