



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

Machine Id
JOHN DEERE 848L 1DW848LBLMF710505

Component
Hydraulic System

Fluid
JOHN DEERE HYDRAU (--- QTS)

RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. The filter change at the time of sampling has been noted. Resample in 30-45 days to monitor this situation.

WEAR

All component wear rates are normal.

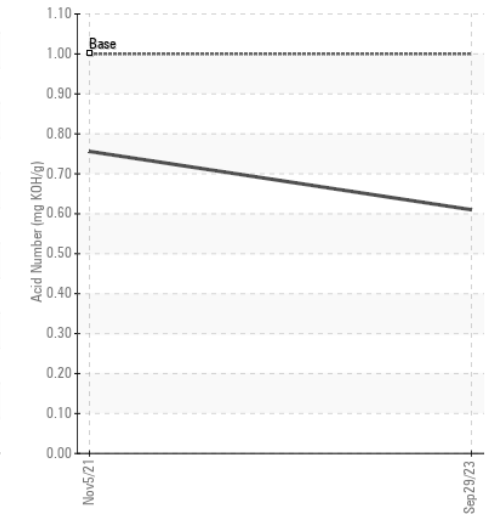
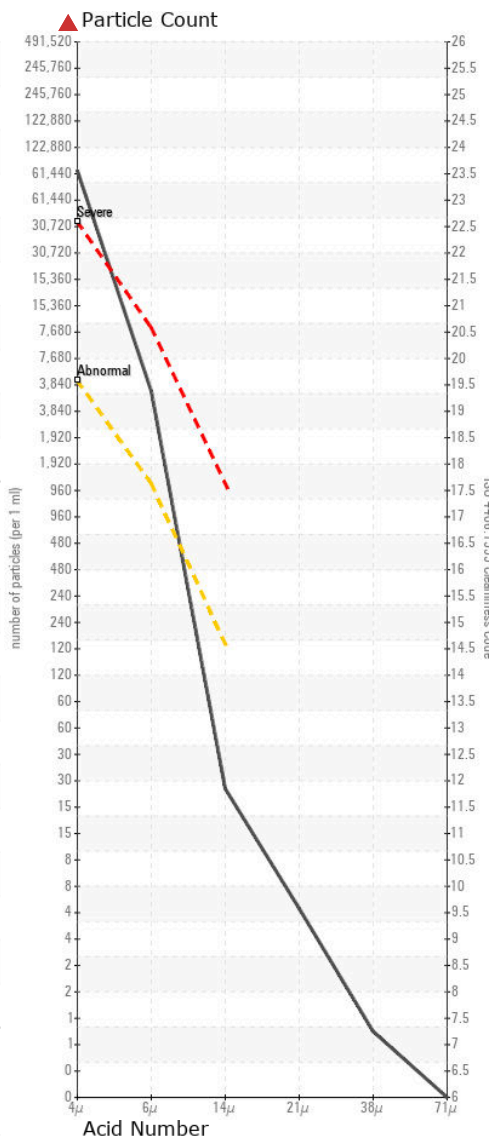
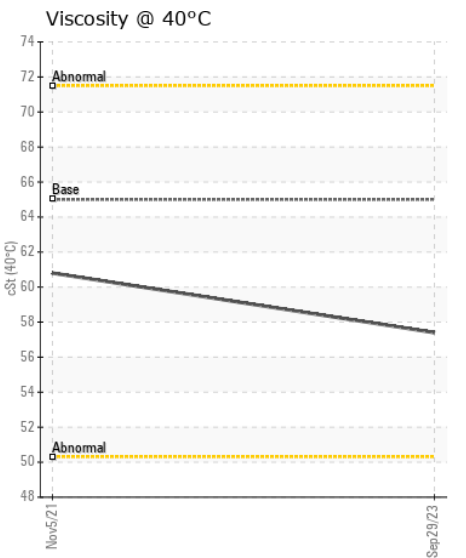
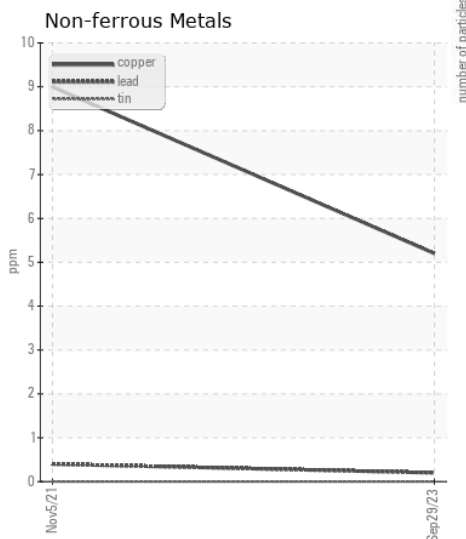
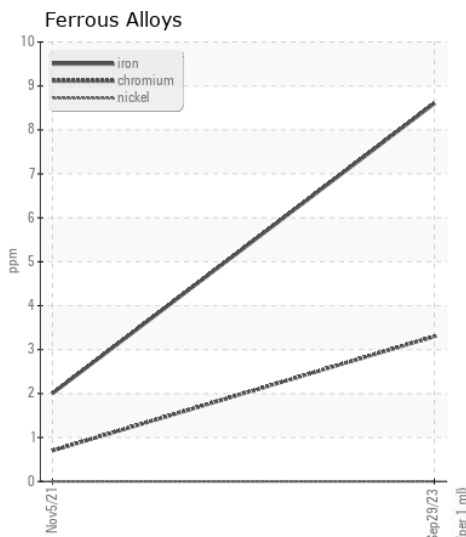
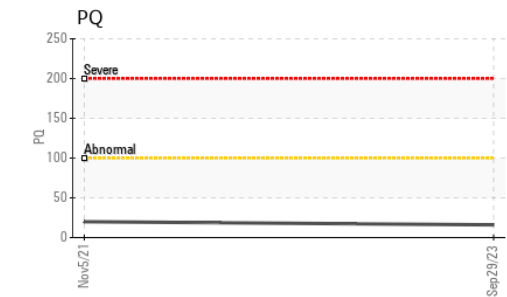
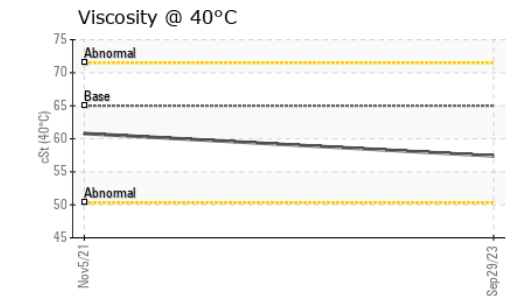
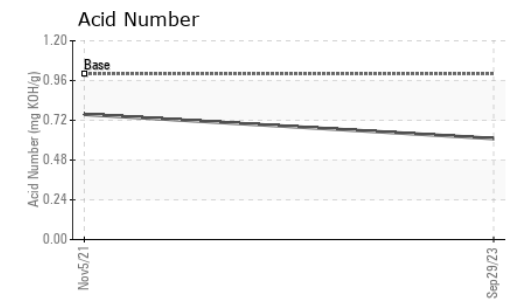
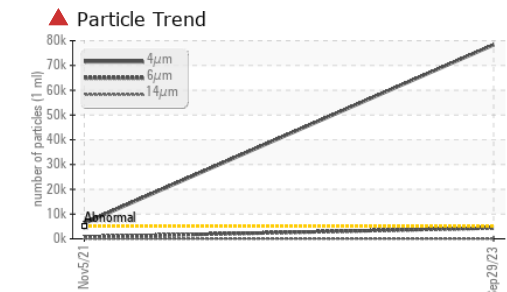
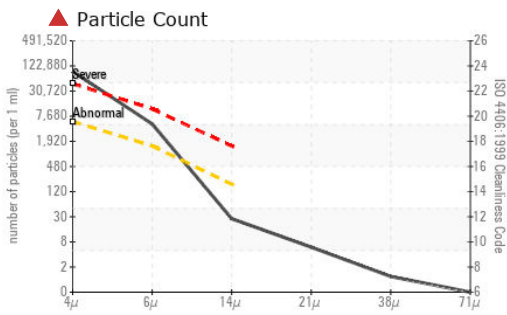
CONTAMINATION

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|------------------|----------|--------------|-----------|--------------------|-------------|----------|
| Sample Number | | Client Info | | JR0179433 | JR0107089 | --- |
| Sample Date | | Client Info | | 29 Sep 2023 | 05 Nov 2021 | --- |
| Machine Age | hrs | Client Info | | 4185 | 551 | --- |
| Oil Age | hrs | Client Info | | 0 | 551 | --- |
| Filter Age | hrs | Client Info | | 0 | 551 | --- |
| Oil Changed | | Client Info | | Changed | Not Changd | --- |
| Filter Changed | | Client Info | | Changed | Not Changd | --- |
| Sample Status | | | | SEVERE | ATTENTION | --- |
| PQ | | ASTM D8184 | | 16 | 20 | --- |
| Iron | ppm | ASTM D5185m | >20 | 9 | 2 | --- |
| Chromium | ppm | ASTM D5185m | >10 | 3 | <1 | --- |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | --- |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | --- |
| Silver | ppm | ASTM D5185m | | 0 | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >10 | 2 | <1 | --- |
| Lead | ppm | ASTM D5185m | >10 | <1 | <1 | --- |
| Copper | ppm | ASTM D5185m | >75 | 5 | 9 | --- |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | --- |
| White Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Silicon | ppm | ASTM D5185m | >20 | 4 | 5 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 9 | --- |
| Water | | WC Method | >0.1 | NEG | NEG | --- |
| Particles >4µm | | ASTM D7647 | >5000 | ▲ 78342 | ● 6256 | --- |
| Particles >6µm | | ASTM D7647 | >1300 | ▲ 4361 | 793 | --- |
| Particles >14µm | | ASTM D7647 | >160 | 24 | 29 | --- |
| Particles >21µm | | ASTM D7647 | >40 | 5 | 7 | --- |
| Particles >38µm | | ASTM D7647 | >10 | 1 | 0 | --- |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | --- |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | ▲ 23/19/12 | ● 20/17/12 | --- |
| Silt | scalar | *Visual | NONE | NONE | NONE | --- |
| Debris | scalar | *Visual | NONE | NONE | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | --- |
| Appearance | scalar | *Visual | NORML | NORML | NORML | --- |
| Odor | scalar | *Visual | NORML | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.1 | NEG | NEG | --- |
| Sodium | ppm | ASTM D5185m | | 1 | <1 | --- |
| Boron | ppm | ASTM D5185m | | 0 | 1 | --- |
| Barium | ppm | ASTM D5185m | | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | | <1 | <1 | --- |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | --- |
| Magnesium | ppm | ASTM D5185m | | 5 | 5 | --- |
| Calcium | ppm | ASTM D5185m | 87 | 181 | 102 | --- |
| Phosphorus | ppm | ASTM D5185m | 727 | 639 | 609 | --- |
| Zinc | ppm | ASTM D5185m | 900 | 875 | 857 | --- |
| Sulfur | ppm | ASTM D5185m | 1500 | 1878 | 2160 | --- |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | 0.61 | 0.756 | --- |
| Visc @ 40°C | cSt | ASTM D445 | 65 | 57.4 | 60.8 | --- |



Certificate L2367

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

Sample No. : JR0179433

Lab Number : 05968848

Unique Number : 10675399

Test Package : CONST (Additional Tests: PQ)

Received : 04 Oct 2023

Tested : 05 Oct 2023

Diagnosed : 05 Oct 2023 - 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 - ASHLAND

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