



OIL ANALYSIS REPORT

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



Area
Store 9 - Marietta
Machine Id
JOHN DEERE 850L 1T0850LXHKF365119
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (31 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | LEC0045553 | LEC0037513 | LEC0021204 |
| Sample Date | | Client Info | | 26 Oct 2023 | 18 Jan 2023 | 24 May 2021 |
| Machine Age | hrs | Client Info | | 1524 | 980 | 398 |
| Oil Age | hrs | Client Info | | 1524 | 980 | 398 |
| Filter Age | hrs | Client Info | | 1524 | 980 | 398 |
| Oil Changed | | Client Info | | Not Chngd | Not Chngd | Not Chngd |
| Filter Changed | | Client Info | | Not Chngd | Not Chngd | Not Chngd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| PQ | | ASTM D8184 | >50 | 11 | 10 | 16 |
| Iron | ppm | ASTM D5185m | >23 | 17 | 11 | 5 |
| Chromium | ppm | ASTM D5185m | >9 | 2 | 2 | <1 |
| Nickel | ppm | ASTM D5185m | >5 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Aluminum | ppm | ASTM D5185m | >9 | 1 | 3 | <1 |
| Lead | ppm | ASTM D5185m | >28 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >51 | 2 | 2 | 2 |
| Tin | ppm | ASTM D5185m | >5 | 1 | <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

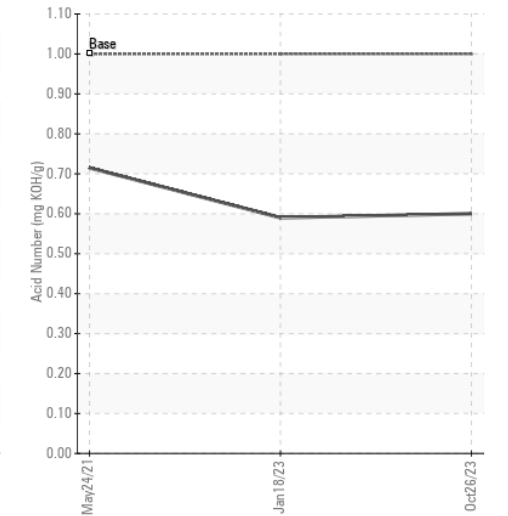
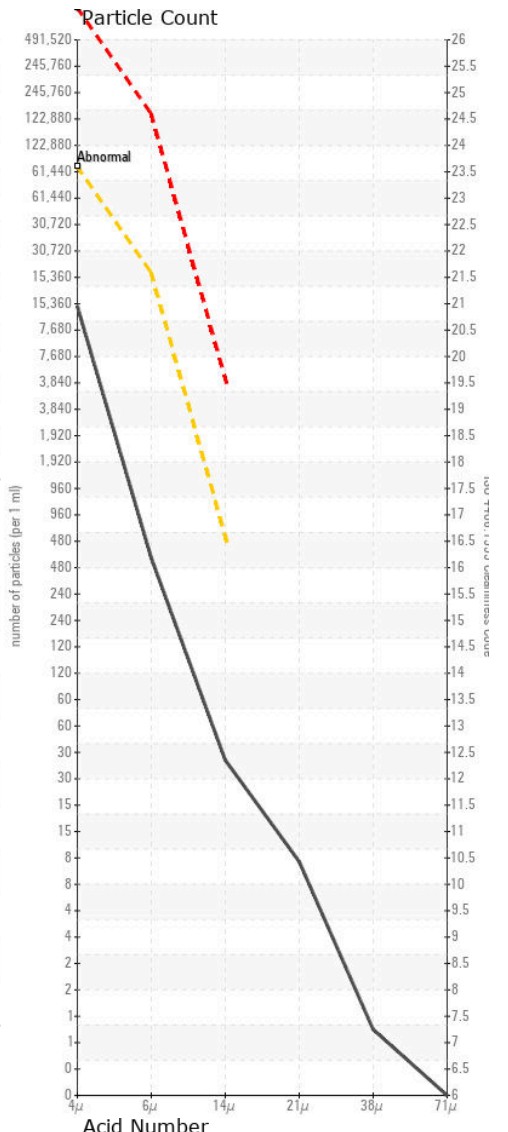
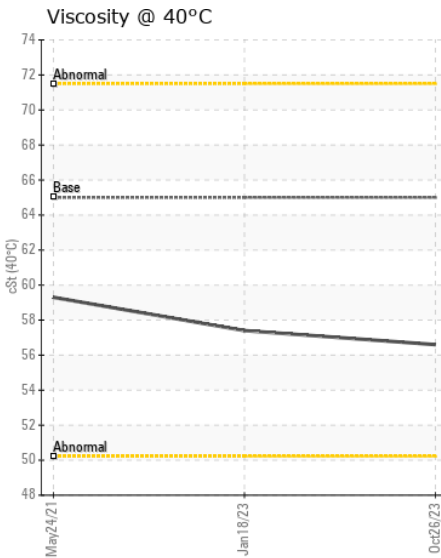
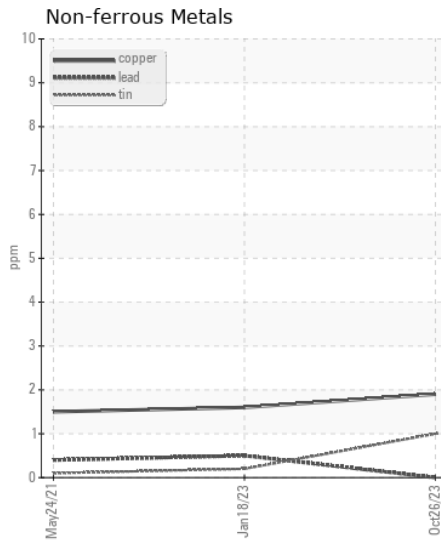
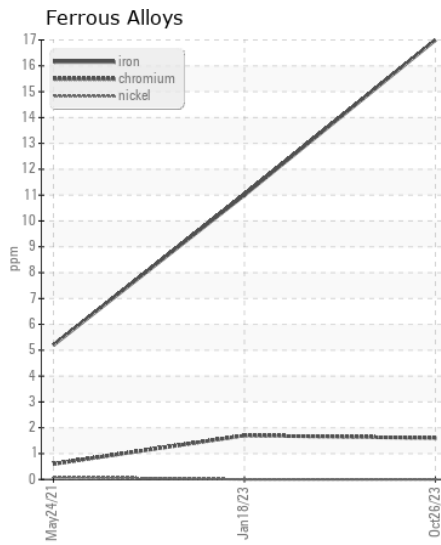
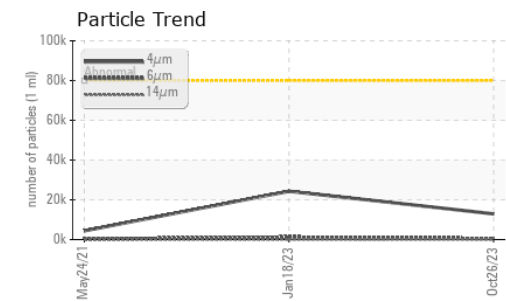
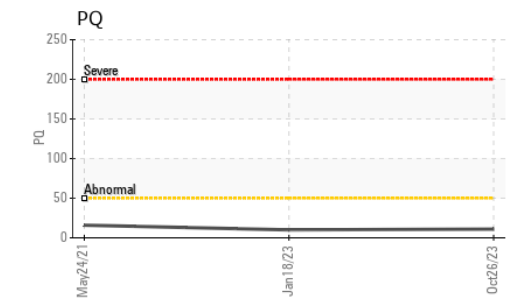
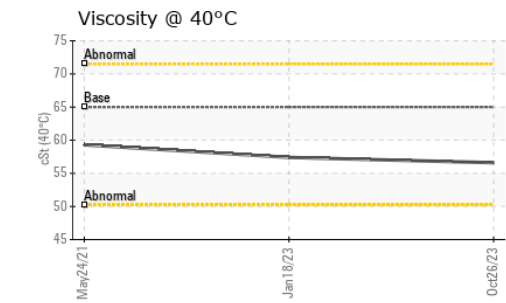
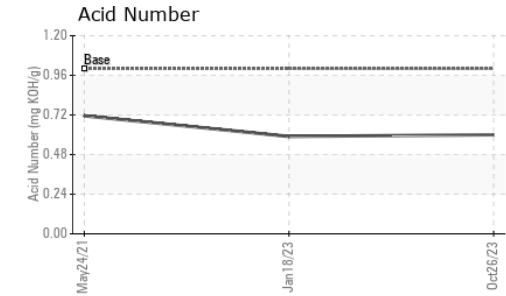
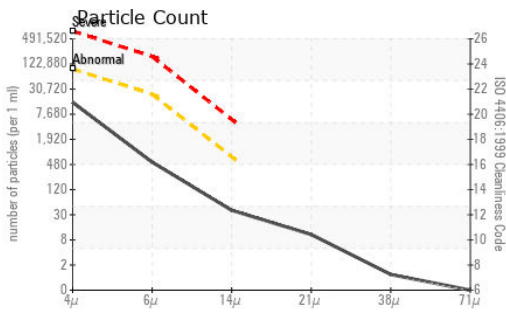
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|--------------|-----------|-----------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >31 | 4 | 3 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 4 | 3 |
| Water | | WC Method | >0.075 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | >80000 | 12933 | 24331 | 4389 |
| Particles >6µm | | ASTM D7647 | >20000 | 479 | 1224 | 232 |
| Particles >14µm | | ASTM D7647 | >640 | 34 | 25 | 9 |
| Particles >21µm | | ASTM D7647 | >160 | 9 | 4 | 3 |
| Particles >38µm | | ASTM D7647 | >40 | 1 | 0 | 0 |
| Particles >71µm | | ASTM D7647 | >10 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >23/21/16 | 21/16/12 | 22/17/12 | 19/15/10 |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | VLITE | 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 | 2 | 0 | 2 |
| Boron | ppm | ASTM D5185m | | 22 | 22 | 15 |
| Barium | ppm | ASTM D5185m | | 20 | 1 | <1 |
| Molybdenum | ppm | ASTM D5185m | | 4 | 4 | 4 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 15 | 18 | 20 |
| Calcium | ppm | ASTM D5185m | 87 | 433 | 457 | 132 |
| Phosphorus | ppm | ASTM D5185m | 727 | 674 | 610 | 622 |
| Zinc | ppm | ASTM D5185m | 900 | 805 | 803 | 836 |
| Sulfur | ppm | ASTM D5185m | 1500 | 2292 | 1724 | 1426 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | 0.60 | 0.59 | 0.715 |
| Visc @ 40°C | cSt | ASTM D445 | 65 | 56.6 | 57.4 | 59.3 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0045553 **Received** : 31 Oct 2023
Lab Number : 05994230 **Tested** : 01 Nov 2023
Unique Number : 10722590 **Diagnosed** : 01 Nov 2023 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.com

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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