



OIL ANALYSIS REPORT

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



Area
{unassigned}
Machine Id
JOHN DEERE 644K 1DW644KZJKF694571
Component
Rear Axle
Fluid
JOHN DEERE HY-GARD HYD/TRANS (6 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | LEC0043745 | LEC0027456 | LEC0009034 |
| Sample Date | | Client Info | | 01 Aug 2023 | 16 Feb 2022 | 07 Apr 2021 |
| Machine Age | hrs | Client Info | | 3330 | 1870 | 1224 |
| Oil Age | hrs | Client Info | | 3330 | 1870 | 1224 |
| Filter Age | hrs | Client Info | | 2106 | 646 | 1224 |
| Oil Changed | | Client Info | | Not Changed | Not Changed | Not Changed |
| Filter Changed | | Client Info | | Changed | Not Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | ABNORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|-------|
| PQ | | ASTM D8184 | | 20 | 25 | 36 |
| Iron | ppm | ASTM D5185m | >750 | 175 | 148 | 73 |
| Chromium | ppm | ASTM D5185m | >11 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | 3 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >21 | <1 | 1 | 0 |
| Lead | ppm | ASTM D5185m | >49 | 5 | 4 | 3 |
| Copper | ppm | ASTM D5185m | >101 | 40 | 27 | 10 |
| Tin | ppm | ASTM D5185m | >10 | 2 | 2 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | LIGHT | NONE | MODER |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

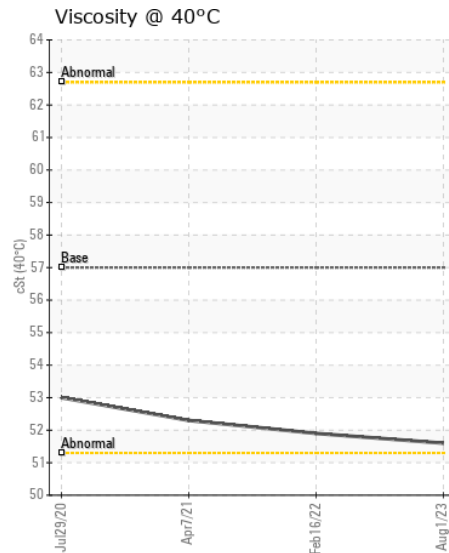
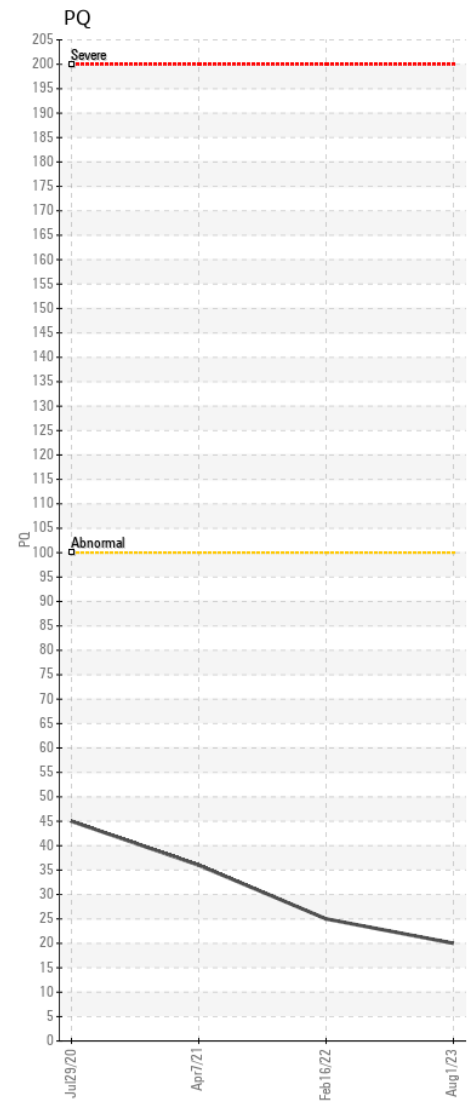
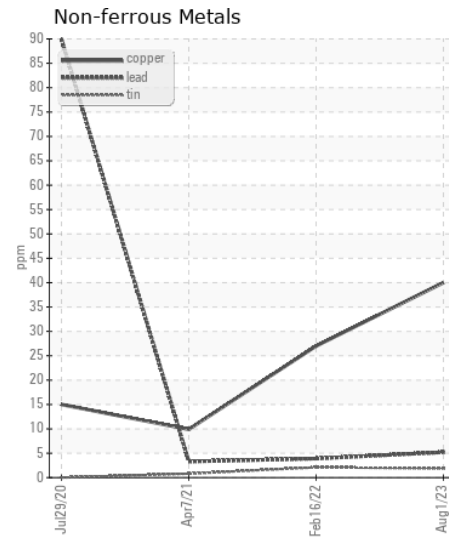
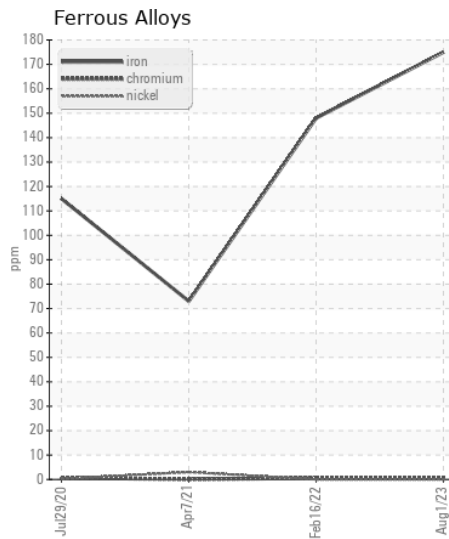
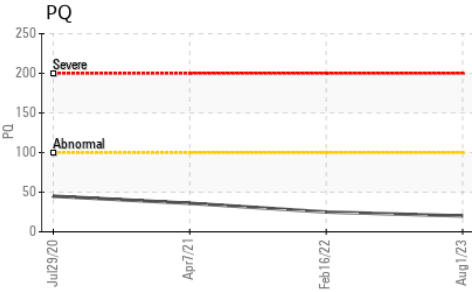
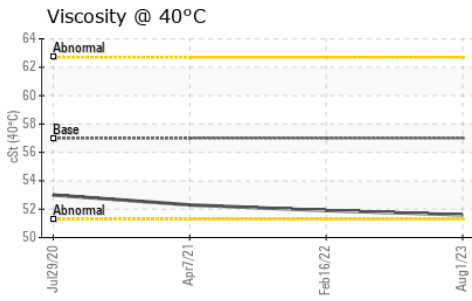
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|---------|
| Silicon | ppm | ASTM D5185m | >31 | 7 | 7 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 0 | 7 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | LIGHT | ▲ MODER |
| 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 |

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

| | | | | | | |
|-------------|-----|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | >51 | 7 | 5 | 3 |
| Boron | ppm | ASTM D5185m | 6 | 4 | 5 | 4 |
| Barium | ppm | ASTM D5185m | 0 | 3 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | <1 | 1 | <1 |
| Manganese | ppm | ASTM D5185m | | 3 | 3 | 2 |
| Magnesium | ppm | ASTM D5185m | 145 | 101 | 110 | 75 |
| Calcium | ppm | ASTM D5185m | 3570 | 3221 | 3592 | 1675 |
| Phosphorus | ppm | ASTM D5185m | 1290 | 972 | 1043 | 592 |
| Zinc | ppm | ASTM D5185m | 1640 | 1193 | 1229 | 765 |
| Sulfur | ppm | ASTM D5185m | | 4102 | 3316 | 1725 |
| Visc @ 40°C | cSt | ASTM D445 | 57.0 | 51.6 | 51.9 | 52.3 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0043745 **Received** : 03 Aug 2023
Lab Number : 05915598 **Tested** : 04 Aug 2023
Unique Number : 10587512 **Diagnosed** : 06 Aug 2023 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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