



OIL ANALYSIS REPORT

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



Area
Store 1 - Cowen [146992]
Machine Id
JOHN DEERE 544K 1DW544KZCDE654148
Component
Front Differential
Fluid
JOHN DEERE HY-GARD HYD/TRANS (18 QTS)

RECOMMENDATION

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

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | LEC0045890 | LEC0009566 | LEC0005307 |
| Sample Date | | Client Info | | 12 Jan 2024 | 24 Jan 2020 | 24 Oct 2019 |
| Machine Age | hrs | Client Info | | 23079 | 14647 | 14069 |
| Oil Age | hrs | Client Info | | 0 | 11966 | 11388 |
| Filter Age | hrs | Client Info | | 0 | 11966 | 0 |
| Oil Changed | | Client Info | | Not Changed | Not Changed | Not Changed |
| Filter Changed | | Client Info | | Not Changed | Not Changed | Not Changed |
| Sample Status | | | | ABNORMAL | NORMAL | ABNORMAL |

WEAR

The lead level is abnormal. All other component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|-------|
| PQ | | ASTM D8184 | | 39 | 25 | 15 |
| Iron | ppm | ASTM D5185m | >500 | 210 | 56 | 204 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | 2 | <1 | 2 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 2 | 1 | 3 |
| Lead | ppm | ASTM D5185m | >25 | ▲ 77 | 32 | ▲ 144 |
| Copper | ppm | ASTM D5185m | >100 | 39 | 14 | 59 |
| Tin | ppm | ASTM D5185m | >10 | 1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

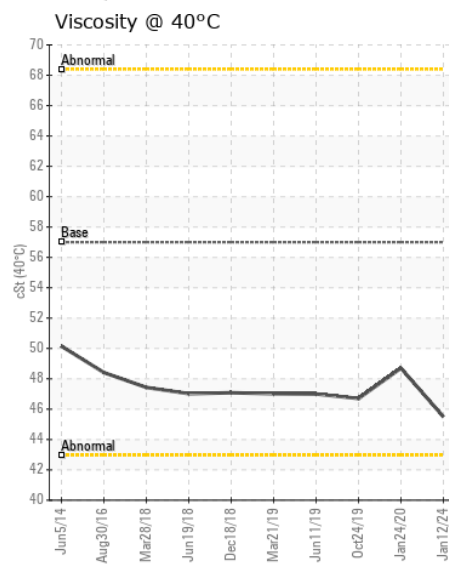
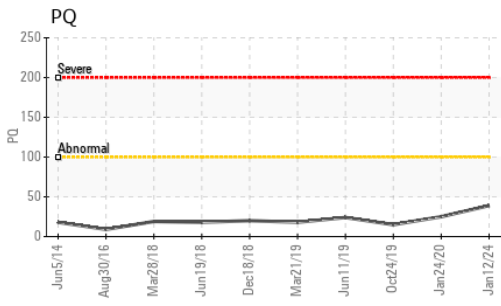
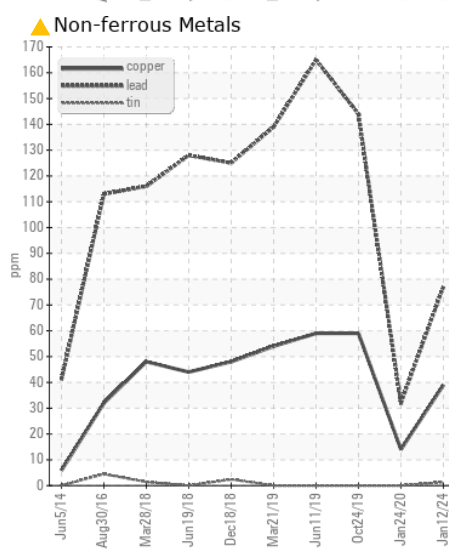
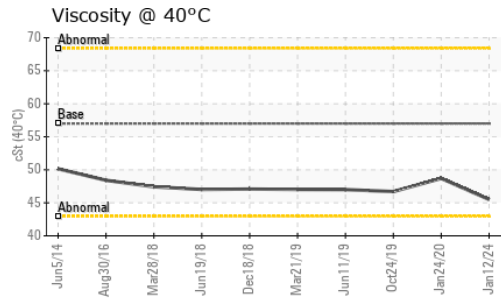
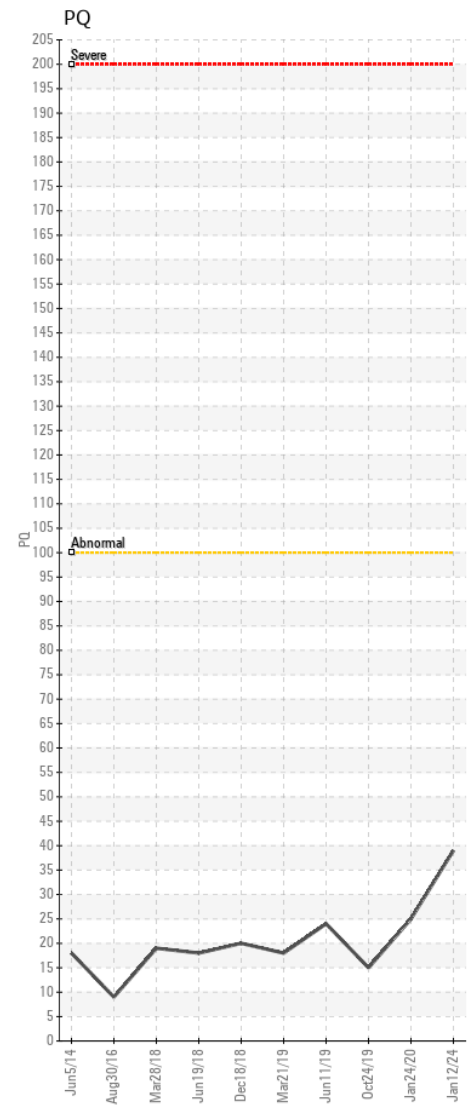
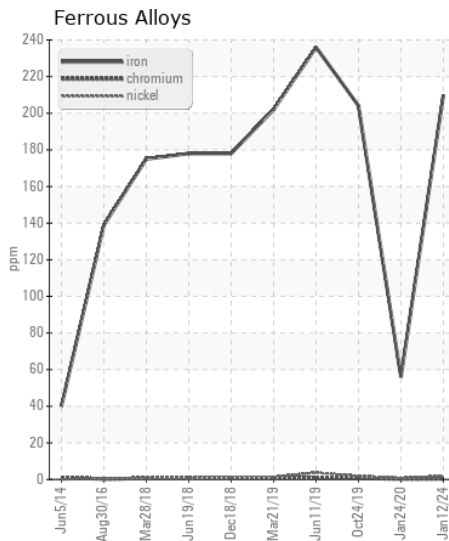
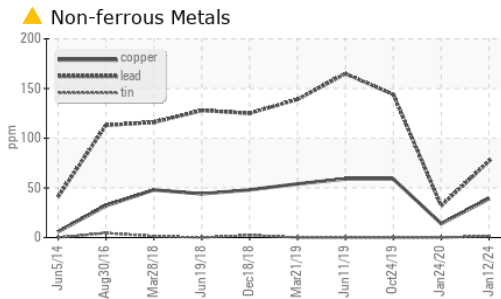
There is no indication of any contamination in the component.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >75 | 11 | 9 | 18 |
| Potassium | ppm | ASTM D5185m | >20 | 19 | 4 | 3 |
| Water | | WC Method | >.2 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | LIGHT | 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 | >.2 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|-------------|-----|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | 3 | 3 | 7 |
| Boron | ppm | ASTM D5185m | 6 | 25 | 2 | 4 |
| Barium | ppm | ASTM D5185m | 0 | 4 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185m | 0 | <1 | <1 | 2 |
| Manganese | ppm | ASTM D5185m | | 2 | <1 | 2 |
| Magnesium | ppm | ASTM D5185m | 145 | 63 | 89 | 87 |
| Calcium | ppm | ASTM D5185m | 3570 | 2694 | 3355 | 3244 |
| Phosphorus | ppm | ASTM D5185m | 1290 | 988 | 960 | 1021 |
| Zinc | ppm | ASTM D5185m | 1640 | 1107 | 1182 | 1121 |
| Sulfur | ppm | ASTM D5185m | | 4697 | 2854 | 3513 |
| Visc @ 40°C | cSt | ASTM D445 | 57.0 | 45.5 | 48.7 | 46.7 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0045890 **Received** : 18 Jan 2024
Lab Number : 06064591 **Diagnosed** : 21 Jan 2024
Unique Number : 10835973 **Diagnostician** : Don Baldridge
Test Package : CONST (Additional Tests: PQ)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.com
 T:
 F: (740)373-5570

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)