



# OIL ANALYSIS REPORT

|                 |               |
|-----------------|---------------|
| WEAR            | <b>NORMAL</b> |
| CONTAMINATION   | <b>NORMAL</b> |
| FLUID CONDITION | <b>NORMAL</b> |



Area  
**Store 1 - Cowen [RO#147374]**  
Machine Id  
**JOHN DEERE 850K 1T0850KXAEE259195**  
Component  
**Left Inner Final Drive**  
Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (2 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>LEC0047977</b>  | LEC0045372  | LECP193032  |
| Sample Date    |     | Client Info |           | <b>23 Feb 2024</b> | 10 Oct 2023 | 19 May 2019 |
| Machine Age    | hrs | Client Info |           | <b>8110</b>        | 7867        | 4516        |
| Oil Age        | hrs | Client Info |           | <b>243</b>         | 1           | 2476        |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>Not Changd</b>  | Changed     | Changed     |
| Filter Changed |     | Client Info |           | <b>N/A</b>         | N/A         | N/A         |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | ABNORMAL    |

## WEAR

All component wear rates are normal.

|              |        |             |       |              |      |      |
|--------------|--------|-------------|-------|--------------|------|------|
| PQ           |        | ASTM D8184  | >1250 | <b>21</b>    | 16   | 309  |
| Iron         | ppm    | ASTM D5185m | >750  | <b>32</b>    | 7    | 473  |
| Chromium     | ppm    | ASTM D5185m | >9    | <b>&lt;1</b> | <1   | 5    |
| Nickel       | ppm    | ASTM D5185m | >10   | <b>&lt;1</b> | <1   | 5    |
| Titanium     | ppm    | ASTM D5185m |       | <b>&lt;1</b> | 0    | 4    |
| Silver       | ppm    | ASTM D5185m |       | <b>0</b>     | 0    | 0    |
| Aluminum     | ppm    | ASTM D5185m | >40   | <b>1</b>     | 0    | 55   |
| Lead         | ppm    | ASTM D5185m | >15   | <b>0</b>     | 0    | <1   |
| Copper       | ppm    | ASTM D5185m | >40   | <b>&lt;1</b> | 2    | 1    |
| Tin          | ppm    | ASTM D5185m | >10   | <b>0</b>     | <1   | 0    |
| Vanadium     | ppm    | ASTM D5185m |       | <b>0</b>     | 0    | 0    |
| White Metal  | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE | NONE |

## CONTAMINATION

There is no indication of any contamination in the oil.

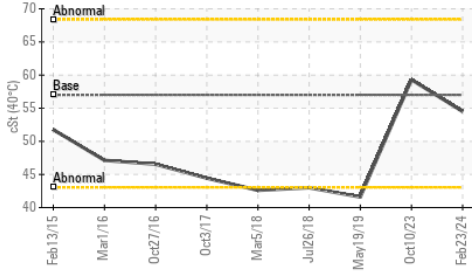
|                  |        |             |        |              |       |         |
|------------------|--------|-------------|--------|--------------|-------|---------|
| Silicon          | ppm    | ASTM D5185m | >75    | <b>8</b>     | 6     | ▲ 176   |
| Potassium        | ppm    | ASTM D5185m | >20    | <b>2</b>     | 2     | 16      |
| Water            |        | WC Method   | >0.075 | <b>NEG</b>   | NEG   | NEG     |
| Silt             | scalar | *Visual     | NONE   | <b>NONE</b>  | NONE  | ▲ HEAVY |
| Debris           | scalar | *Visual     | NONE   | <b>NONE</b>  | NONE  | NONE    |
| Sand/Dirt        | scalar | *Visual     | NONE   | <b>NONE</b>  | NONE  | NONE    |
| Appearance       | scalar | *Visual     | NORML  | <b>NORML</b> | NORML | NORML   |
| Odor             | scalar | *Visual     | NORML  | <b>NORML</b> | NORML | NORML   |
| Emulsified Water | scalar | *Visual     | >0.075 | <b>NEG</b>   | NEG   | ▲ 0.2%  |

## FLUID CONDITION

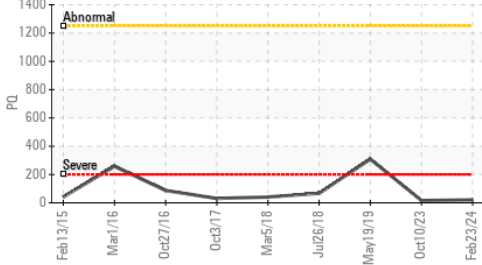
The condition of the oil is acceptable for the time in service.

|             |     |             |      |              |      |      |
|-------------|-----|-------------|------|--------------|------|------|
| Sodium      | ppm | ASTM D5185m | >51  | <b>2</b>     | 0    | 3    |
| Boron       | ppm | ASTM D5185m | 6    | <b>&lt;1</b> | 0    | 12   |
| Barium      | ppm | ASTM D5185m | 0    | <b>0</b>     | 0    | 0    |
| Molybdenum  | ppm | ASTM D5185m | 0    | <b>1</b>     | <1   | 4    |
| Manganese   | ppm | ASTM D5185m |      | <b>&lt;1</b> | <1   | 4    |
| Magnesium   | ppm | ASTM D5185m | 145  | <b>96</b>    | 92   | 63   |
| Calcium     | ppm | ASTM D5185m | 3570 | <b>3423</b>  | 3196 | 3312 |
| Phosphorus  | ppm | ASTM D5185m | 1290 | <b>915</b>   | 975  | 1183 |
| Zinc        | ppm | ASTM D5185m | 1640 | <b>1225</b>  | 1238 | 1179 |
| Sulfur      | ppm | ASTM D5185m |      | <b>3444</b>  | 4039 | 4583 |
| Visc @ 40°C | cSt | ASTM D445   | 57.0 | <b>54.5</b>  | 59.3 | 41.6 |

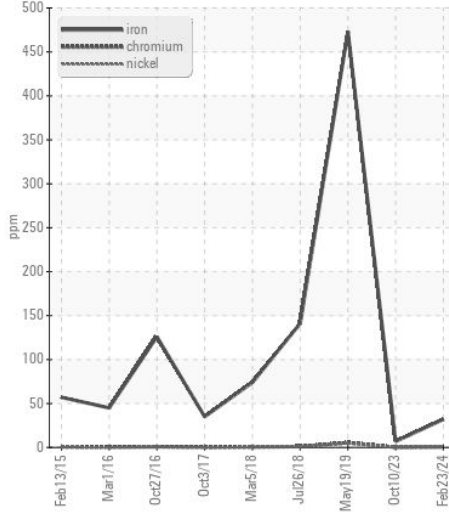
Viscosity @ 40°C



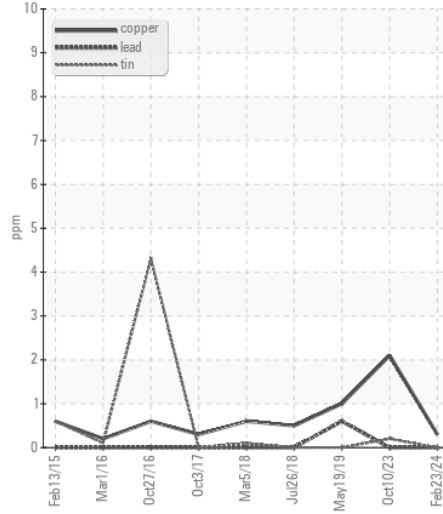
PQ



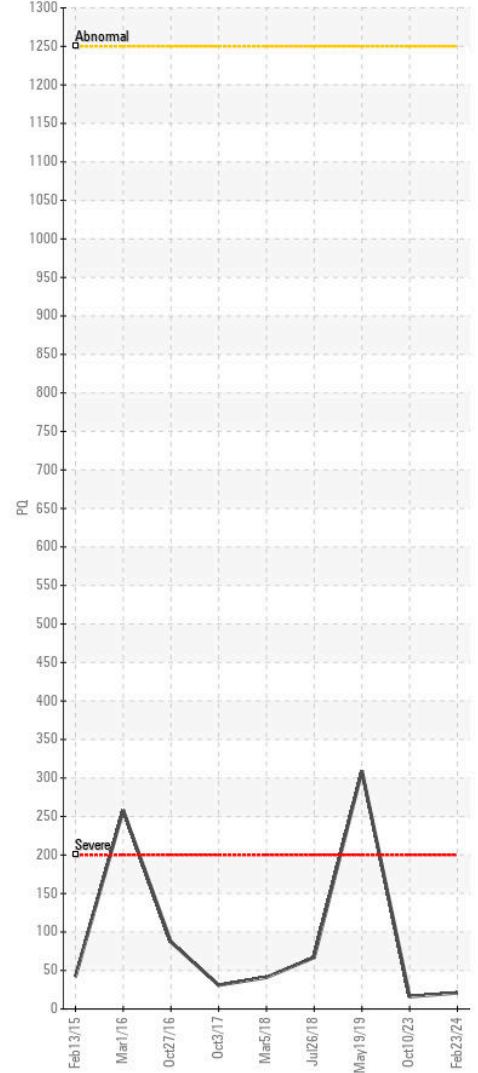
Ferrous Alloys



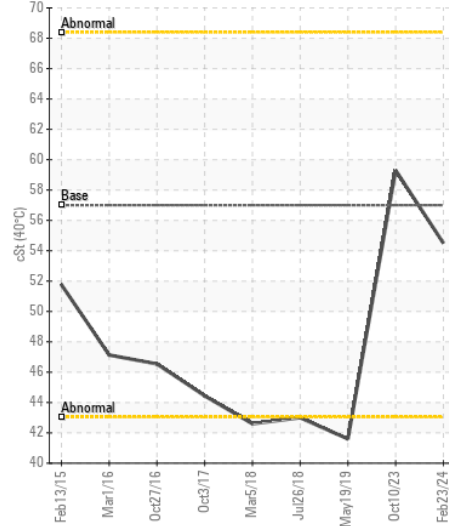
Non-ferrous Metals



PQ



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : LEC0047977 Received : 28 Feb 2024  
 Lab Number : 06103272 Tested : 01 Mar 2024  
 Unique Number : 10901502 Diagnosed : 01 Mar 2024 - Wes Davis  
 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)

T: (740)373-5570