



# OIL ANALYSIS REPORT

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



Area  
**Store 1 - Cowen**  
Machine Id  
**JOHN DEERE 135G 1FF135GXHKF501620**  
Component  
**Swing Drive**  
Fluid  
**JOHN DEERE GL-5 80W90 (3 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 |           | <b>LEC0041402</b>  | LEC0033030  | LEC0027166  |
| Sample Date    |     | Client Info |           | <b>31 May 2023</b> | 05 Oct 2022 | 24 Mar 2022 |
| Machine Age    | hrs | Client Info |           | <b>1594</b>        | 1056        | 527         |
| Oil Age        | hrs | Client Info |           | <b>538</b>         | 1056        | 527         |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>Not Changd</b>  | Changed     | Not Changd  |
| Filter Changed |     | Client Info |           | <b>None</b>        | N/A         | N/A         |
| Sample Status  |     |             |           | <b>ABNORMAL</b>    | NORMAL      | NORMAL      |

## WEAR

All component wear rates are normal.

| PQ           | UOM    | Method      | Limit/Abn | Current      | History1 | History2 |
|--------------|--------|-------------|-----------|--------------|----------|----------|
| PQ           |        | ASTM D8184  |           | <b>23</b>    | 5        | 13       |
| Iron         | ppm    | ASTM D5185m | >151      | <b>100</b>   | <1       | 7        |
| Chromium     | ppm    | ASTM D5185m | >11       | <b>&lt;1</b> | 0        | 0        |
| Nickel       | ppm    | ASTM D5185m | >10       | <b>0</b>     | 2        | 0        |
| Titanium     | ppm    | ASTM D5185m |           | <b>&lt;1</b> | 0        | <1       |
| Silver       | ppm    | ASTM D5185m |           | <b>0</b>     | 0        | 0        |
| Aluminum     | ppm    | ASTM D5185m | >21       | <b>0</b>     | <1       | 1        |
| Lead         | ppm    | ASTM D5185m | >51       | <b>0</b>     | 0        | 0        |
| Copper       | ppm    | ASTM D5185m | >51       | <b>&lt;1</b> | 0        | 0        |
| Tin          | ppm    | ASTM D5185m | >10       | <b>0</b>     | 0        | <1       |
| Vanadium     | ppm    | ASTM D5185m |           | <b>0</b>     | <1       | 0        |
| White Metal  | scalar | *Visual     | NONE      | <b>NONE</b>  | NONE     | NONE     |
| Yellow Metal | scalar | *Visual     | NONE      | <b>NONE</b>  | NONE     | NONE     |

## CONTAMINATION

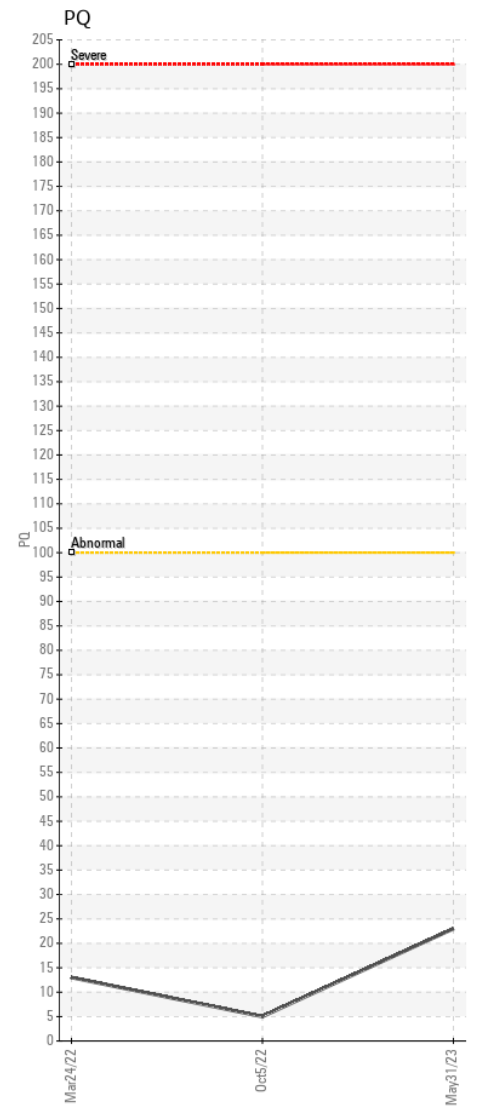
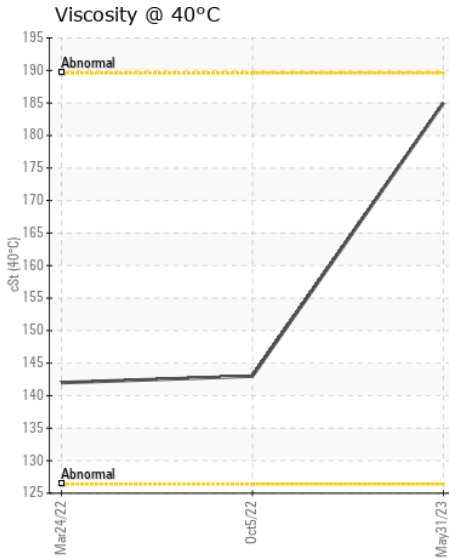
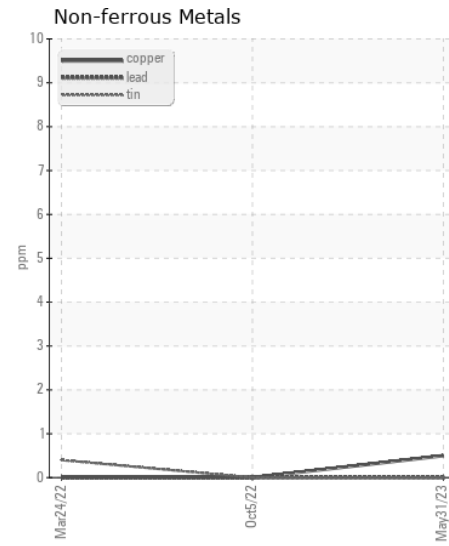
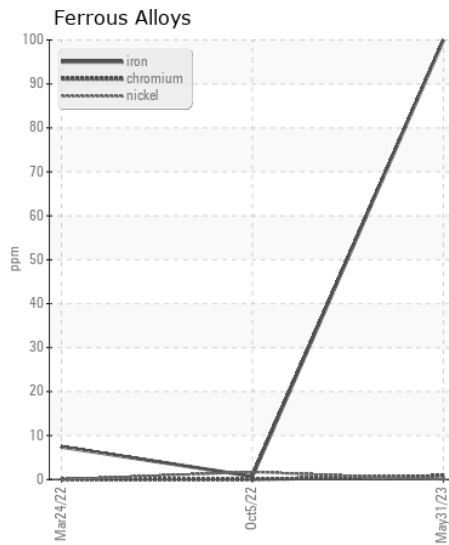
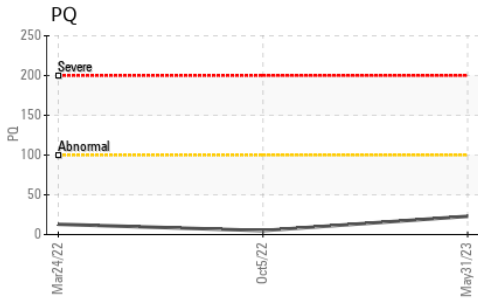
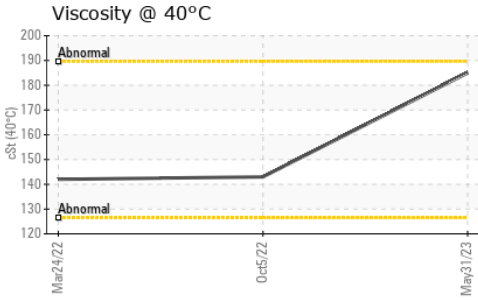
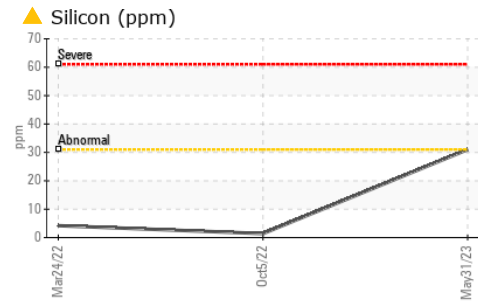
Elemental level of silicon (Si) above normal indicating ingress of seal material.

|                  |        |             |       |              |       |       |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon          | ppm    | ASTM D5185m | >31   | <b>▲ 31</b>  | 1     | 4     |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>2</b>     | <1    | 0     |
| Water            |        | WC Method   | >0.1  | <b>NEG</b>   | NEG   | NEG   |
| Silt             | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Debris           | scalar | *Visual     | NONE  | <b>LIGHT</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     | >0.1  | <b>NEG</b>   | NEG   | NEG   |

## FLUID CONDITION

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

|             |     |             |     |              |       |       |
|-------------|-----|-------------|-----|--------------|-------|-------|
| Sodium      | ppm | ASTM D5185m | >51 | <b>&lt;1</b> | 2     | 0     |
| Boron       | ppm | ASTM D5185m |     | <b>40</b>    | 2     | 2     |
| Barium      | ppm | ASTM D5185m |     | <b>0</b>     | 0     | 0     |
| Molybdenum  | ppm | ASTM D5185m |     | <b>0</b>     | <1    | <1    |
| Manganese   | ppm | ASTM D5185m |     | <b>3</b>     | <1    | 0     |
| Magnesium   | ppm | ASTM D5185m |     | <b>3</b>     | 4     | 2     |
| Calcium     | ppm | ASTM D5185m |     | <b>135</b>   | 3     | 12    |
| Phosphorus  | ppm | ASTM D5185m |     | <b>505</b>   | 252   | 309   |
| Zinc        | ppm | ASTM D5185m |     | <b>46</b>    | 1     | 0     |
| Sulfur      | ppm | ASTM D5185m |     | <b>16858</b> | 18042 | 15117 |
| Visc @ 40°C | cSt | ASTM D445   |     | <b>185</b>   | 143   | 142   |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0041402 **Received** : 02 Jun 2023  
**Lab Number** : 05863222 **Tested** : 05 Jun 2023  
**Unique Number** : 10497687 **Diagnosed** : 05 Jun 2023 - Sean Felton  
**Test Package** : CONST ( Additional Tests: PQ )

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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