



# OIL ANALYSIS REPORT

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

Area  
**[G15235]**

Machine Id  
**JOHN DEERE 260E 1DW260ETCJF693406**

Component  
**Center Differential**

Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (--- GAL)**

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number  |     | Client Info |           | <b>WE0006074</b>   | WE0006148   | ---      |
| Sample Date    |     | Client Info |           | <b>23 May 2024</b> | 29 Dec 2023 | ---      |
| Machine Age    | hrs | Client Info |           | <b>3415</b>        | 2914        | ---      |
| Oil Age        | hrs | Client Info |           | <b>0</b>           | 0           | ---      |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | ---      |
| Oil Changed    |     | Client Info |           | <b>Changed</b>     | Not Changd  | ---      |
| Filter Changed |     | Client Info |           | <b>Changed</b>     | Not Changd  | ---      |
| Sample Status  |     |             |           | <b>SEVERE</b>      | SEVERE      | ---      |

## WEAR

Gear wear is indicated. Bearing and/or bushing wear is indicated.

|              |        |             |      |               |        |     |
|--------------|--------|-------------|------|---------------|--------|-----|
| PQ           |        | ASTM D8184  |      | <b>▲ 1245</b> | ▲ 1091 | --- |
| Iron         | ppm    | ASTM D5185m | >500 | <b>▲ 2431</b> | ▲ 1841 | --- |
| Chromium     | ppm    | ASTM D5185m | >10  | <b>▲ 10</b>   | 8      | --- |
| Nickel       | ppm    | ASTM D5185m | >10  | <b>▲ 20</b>   | 17     | --- |
| Titanium     | ppm    | ASTM D5185m |      | <b>&lt;1</b>  | <1     | --- |
| Silver       | ppm    | ASTM D5185m |      | <b>0</b>      | <1     | --- |
| Aluminum     | ppm    | ASTM D5185m | >25  | <b>3</b>      | 3      | --- |
| Lead         | ppm    | ASTM D5185m | >25  | <b>0</b>      | <1     | --- |
| Copper       | ppm    | ASTM D5185m | >100 | <b>▲ 1457</b> | ▲ 1117 | --- |
| Tin          | ppm    | ASTM D5185m | >10  | <b>▲ 48</b>   | ▲ 39   | --- |
| Vanadium     | ppm    | ASTM D5185m |      | <b>&lt;1</b>  | <1     | --- |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>   | NONE   | --- |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>   | NONE   | --- |

## CONTAMINATION

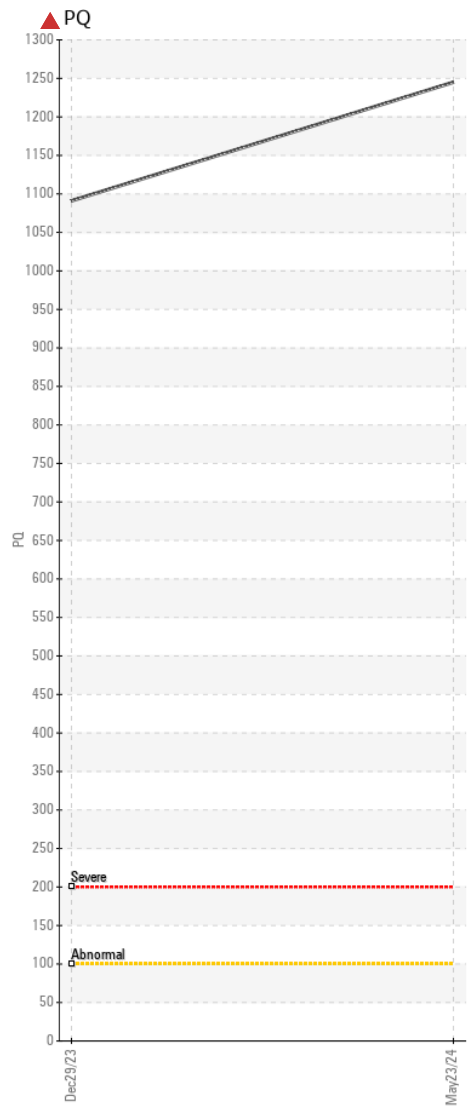
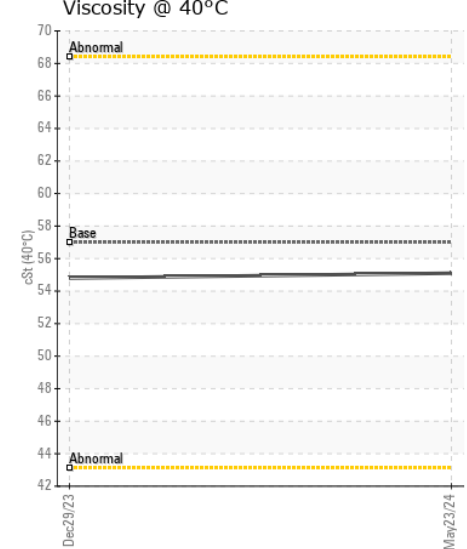
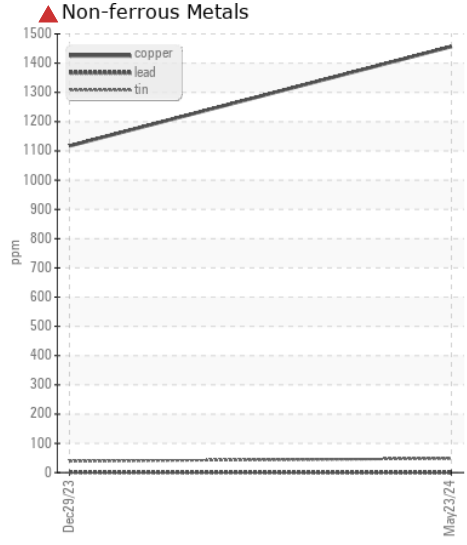
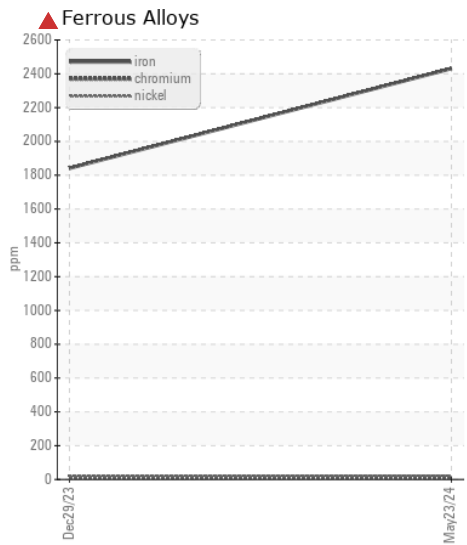
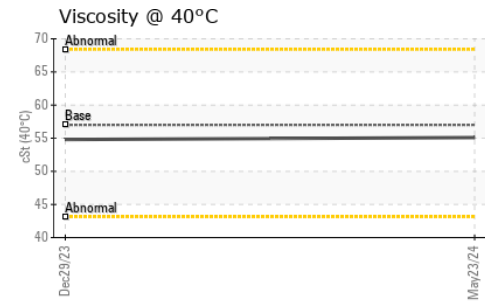
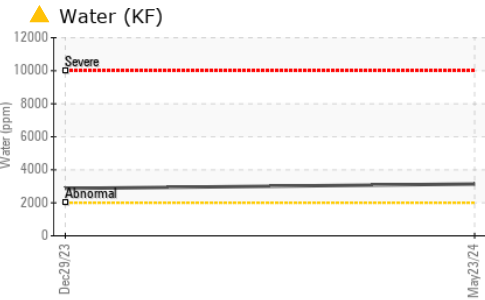
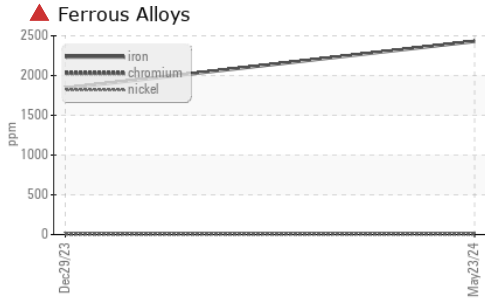
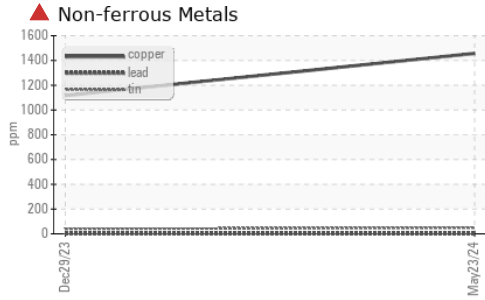
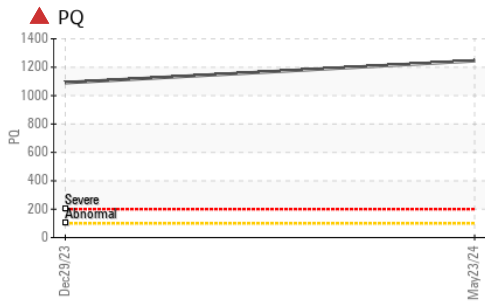
There is a light concentration of water present in the oil.

|                  |        |             |       |                |         |     |
|------------------|--------|-------------|-------|----------------|---------|-----|
| Silicon          | ppm    | ASTM D5185m | >75   | <b>52</b>      | 41      | --- |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>&lt;1</b>   | 3       | --- |
| Water            | %      | ASTM D6304  | >.2   | <b>▲ 0.314</b> | ▲ 0.287 | --- |
| ppm Water        | ppm    | ASTM D6304  | >2000 | <b>▲ 3140</b>  | ▲ 2870  | --- |
| Silt             | scalar | *Visual     | NONE  | <b>NONE</b>    | NONE    | --- |
| Debris           | scalar | *Visual     | NONE  | <b>NONE</b>    | NONE    | --- |
| Sand/Dirt        | scalar | *Visual     | NONE  | <b>NONE</b>    | NONE    | --- |
| Appearance       | scalar | *Visual     | NORML | <b>NORML</b>   | NORML   | --- |
| Odor             | scalar | *Visual     | NORML | <b>NORML</b>   | NORML   | --- |
| Emulsified Water | scalar | *Visual     | >.2   | <b>▲ 0.2%</b>  | 0.2%    | --- |

## FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

|             |     |             |      |             |      |     |
|-------------|-----|-------------|------|-------------|------|-----|
| Sodium      | ppm | ASTM D5185m |      | <b>8</b>    | 8    | --- |
| Boron       | ppm | ASTM D5185m | 6    | <b>54</b>   | 46   | --- |
| Barium      | ppm | ASTM D5185m | 0    | <b>9</b>    | 6    | --- |
| Molybdenum  | ppm | ASTM D5185m | 0    | <b>12</b>   | 9    | --- |
| Manganese   | ppm | ASTM D5185m |      | <b>59</b>   | 46   | --- |
| Magnesium   | ppm | ASTM D5185m | 145  | <b>63</b>   | 56   | --- |
| Calcium     | ppm | ASTM D5185m | 3570 | <b>3370</b> | 2852 | --- |
| Phosphorus  | ppm | ASTM D5185m | 1290 | <b>1226</b> | 1089 | --- |
| Zinc        | ppm | ASTM D5185m | 1640 | <b>1438</b> | 1304 | --- |
| Sulfur      | ppm | ASTM D5185m |      | <b>4116</b> | 3365 | --- |
| Visc @ 40°C | cSt | ASTM D445   | 57.0 | <b>55.1</b> | 54.8 | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WE0006074

Lab Number : 06195695

Unique Number : 11057818

Test Package : CONST ( Additional Tests: KF, PQ )

Received : 30 May 2024

Tested : 03 Jun 2024

Diagnosed : 03 Jun 2024 - Sean Felton

WARRIOR TRACTOR AND EQUIPMENT - GRAYSVILLE

4308 WATER TRAIL

GRAYSVILLE, AL

US 35073

Contact: BEN BYRKET

bbyrket@warriortractor.com

T: (205)675-9045

F:

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)