



# OIL ANALYSIS REPORT

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

Area

[G15076]

Machine Id

JOHN DEERE 297532

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

## RECOMMENDATION

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current     | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number  |     | Client Info |           | WE0007258   | ---      | ---      |
| Sample Date    |     | Client Info |           | 09 May 2024 | ---      | ---      |
| Machine Age    | hrs | Client Info |           | 1061        | ---      | ---      |
| Oil Age        | hrs | Client Info |           | 0           | ---      | ---      |
| Filter Age     | hrs | Client Info |           | 0           | ---      | ---      |
| Oil Changed    |     | Client Info |           | Changed     | ---      | ---      |
| Filter Changed |     | Client Info |           | Changed     | ---      | ---      |
| Sample Status  |     |             |           | NORMAL      | ---      | ---      |

## WEAR

All component wear rates are normal.

|              |        |             |      |      |     |     |
|--------------|--------|-------------|------|------|-----|-----|
| Iron         | ppm    | ASTM D5185m | >51  | 6    | --- | --- |
| Chromium     | ppm    | ASTM D5185m | >11  | <1   | --- | --- |
| Nickel       | ppm    | ASTM D5185m | >5   | 0    | --- | --- |
| Titanium     | ppm    | ASTM D5185m |      | <1   | --- | --- |
| Silver       | ppm    | ASTM D5185m | >3   | 0    | --- | --- |
| Aluminum     | ppm    | ASTM D5185m | >31  | 3    | --- | --- |
| Lead         | ppm    | ASTM D5185m | >26  | 1    | --- | --- |
| Copper       | ppm    | ASTM D5185m | >26  | 0    | --- | --- |
| Tin          | ppm    | ASTM D5185m | >4   | 0    | --- | --- |
| Vanadium     | ppm    | ASTM D5185m |      | 0    | --- | --- |
| White Metal  | scalar | *Visual     | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual     | NONE | NONE | --- | --- |

## CONTAMINATION

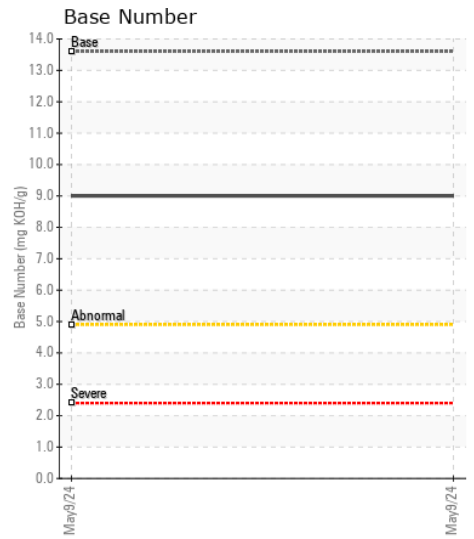
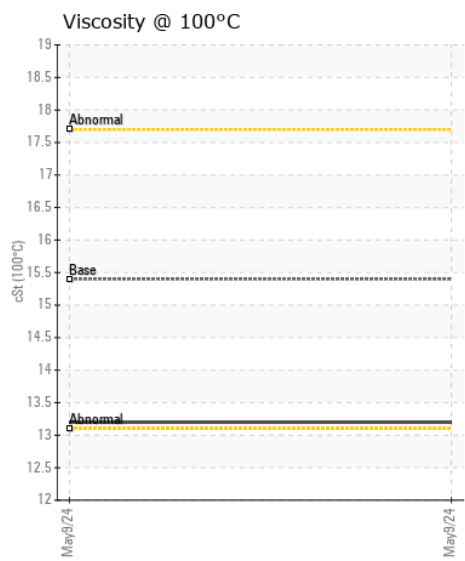
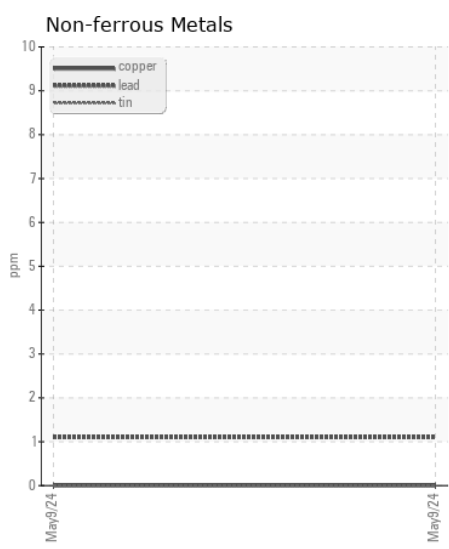
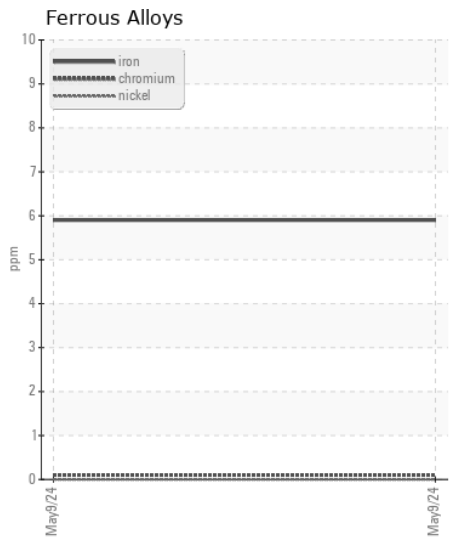
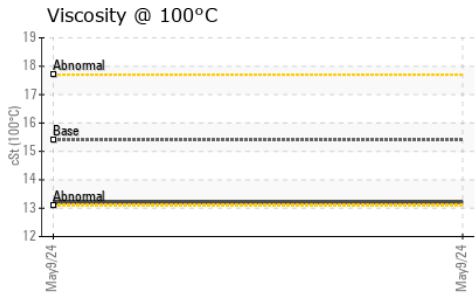
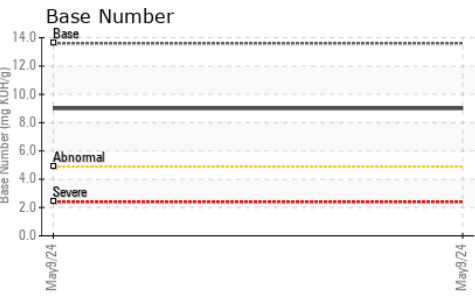
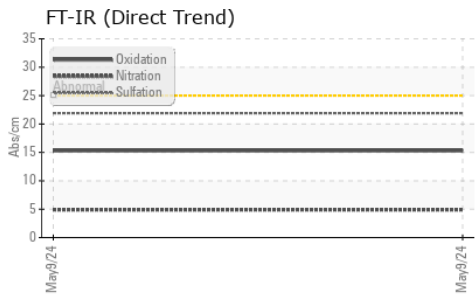
There is no indication of any contamination in the oil.

|                  |          |             |       |       |     |     |
|------------------|----------|-------------|-------|-------|-----|-----|
| Silicon          | ppm      | ASTM D5185m | >22   | 10    | --- | --- |
| Potassium        | ppm      | ASTM D5185m | >20   | <1    | --- | --- |
| Fuel             |          | WC Method   | >2.1  | <1.0  | --- | --- |
| Water            |          | WC Method   | >0.21 | NEG   | --- | --- |
| Glycol           |          | WC Method   |       | NEG   | --- | --- |
| Soot %           | %        | *ASTM D7844 | >3    | 0.1   | --- | --- |
| Nitration        | Abs/cm   | *ASTM D7624 | >20   | 4.9   | --- | --- |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30   | 21.9  | --- | --- |
| Silt             | scalar   | *Visual     | NONE  | NONE  | --- | --- |
| Debris           | scalar   | *Visual     | NONE  | NONE  | --- | --- |
| Sand/Dirt        | scalar   | *Visual     | NONE  | NONE  | --- | --- |
| Appearance       | scalar   | *Visual     | NORML | NORML | --- | --- |
| Odor             | scalar   | *Visual     | NORML | NORML | --- | --- |
| Emulsified Water | scalar   | *Visual     | >0.21 | NEG   | --- | --- |

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

|                  |          |             |      |      |     |     |
|------------------|----------|-------------|------|------|-----|-----|
| Sodium           | ppm      | ASTM D5185m | >31  | <1   | --- | --- |
| Boron            | ppm      | ASTM D5185m |      | 354  | --- | --- |
| Barium           | ppm      | ASTM D5185m |      | 0    | --- | --- |
| Molybdenum       | ppm      | ASTM D5185m |      | 128  | --- | --- |
| Manganese        | ppm      | ASTM D5185m |      | <1   | --- | --- |
| Magnesium        | ppm      | ASTM D5185m |      | 667  | --- | --- |
| Calcium          | ppm      | ASTM D5185m |      | 1593 | --- | --- |
| Phosphorus       | ppm      | ASTM D5185m |      | 788  | --- | --- |
| Zinc             | ppm      | ASTM D5185m |      | 922  | --- | --- |
| Sulfur           | ppm      | ASTM D5185m |      | 3055 | --- | --- |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25  | 15.3 | --- | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896  | 13.6 | 9.0  | --- | --- |
| Visc @ 100°C     | cSt      | ASTM D445   | 15.4 | 13.2 | --- | --- |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WE0007258 **Received** : 13 May 2024  
**Lab Number** : 06176969 **Tested** : 14 May 2024  
**Unique Number** : 11023022 **Diagnosed** : 14 May 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**WARRIOR TRACTOR AND EQUIPMENT - GRAYSVILLE**  
 4308 WATER TRAIL  
 GRAYSVILLE, AL  
 US 35073  
 Contact: BEN BYRKET  
 bbyrket@warriortractor.com  
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 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)