



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

Machine Id  
**JOHN DEERE 944K E685597**

Component  
**Diesel Engine**

Fluid  
**{not provided} (--- GAL)**

### 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>JR0204568</b>   | JR0174125   | ---      |
| Sample Date    |     | Client Info |           | <b>12 Feb 2024</b> | 12 Jun 2023 | ---      |
| Machine Age    | hrs | Client Info |           | <b>9558</b>        | 8944        | ---      |
| Oil Age        | hrs | Client Info |           | <b>0</b>           | 0           | ---      |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | ---      |
| Oil Changed    |     | Client Info |           | <b>N/A</b>         | N/A         | ---      |
| Filter Changed |     | Client Info |           | <b>N/A</b>         | N/A         | ---      |
| Sample Status  |     |             |           | <b>ABNORMAL</b>    | NORMAL      | ---      |

### WEAR

Cylinder, crank, or cam shaft wear is indicated. Bearing and/or bushing wear is indicated.

|              |        |             |      |              |      |     |
|--------------|--------|-------------|------|--------------|------|-----|
| Iron         | ppm    | ASTM D5185m | >51  | <b>▲ 66</b>  | 44   | --- |
| Chromium     | ppm    | ASTM D5185m | >11  | <b>1</b>     | 2    | --- |
| Nickel       | ppm    | ASTM D5185m | >5   | <b>2</b>     | 0    | --- |
| Titanium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | 0    | --- |
| Silver       | ppm    | ASTM D5185m | >3   | <b>0</b>     | 0    | --- |
| Aluminum     | ppm    | ASTM D5185m | >31  | <b>12</b>    | 25   | --- |
| Lead         | ppm    | ASTM D5185m | >26  | <b>7</b>     | <1   | --- |
| Copper       | ppm    | ASTM D5185m | >26  | <b>▲ 31</b>  | 5    | --- |
| Tin          | ppm    | ASTM D5185m | >4   | <b>2</b>     | <1   | --- |
| Vanadium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | 0    | --- |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | --- |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | --- |

### CONTAMINATION

There is no indication of any contamination in the oil.

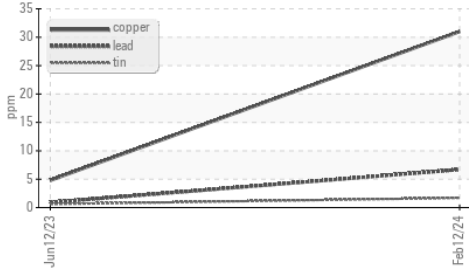
|                  |          |             |       |                |       |     |
|------------------|----------|-------------|-------|----------------|-------|-----|
| Silicon          | ppm      | ASTM D5185m | >22   | <b>15</b>      | 6     | --- |
| Potassium        | ppm      | ASTM D5185m | >20   | <b>14</b>      | 33    | --- |
| Fuel             |          | WC Method   | >2.1  | <b>&lt;1.0</b> | <1.0  | --- |
| Water            |          | WC Method   | >0.21 | <b>NEG</b>     | NEG   | --- |
| Glycol           |          | WC Method   |       | <b>NEG</b>     | NEG   | --- |
| Soot %           | %        | *ASTM D7844 | >3    | <b>1.3</b>     | 1.6   | --- |
| Nitration        | Abs/cm   | *ASTM D7624 | >20   | <b>9.6</b>     | 9.4   | --- |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30   | <b>24.2</b>    | 24.1  | --- |
| 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     | >0.21 | <b>NEG</b>     | NEG   | --- |

### FLUID CONDITION

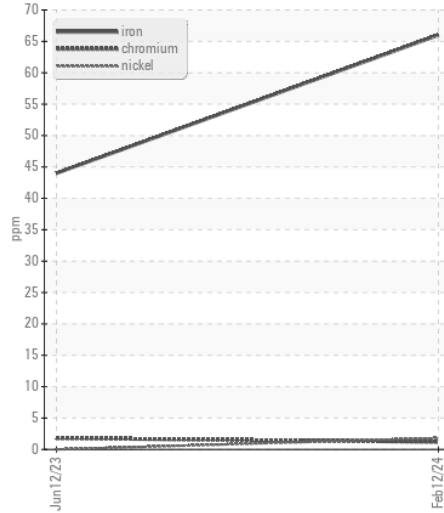
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

|                  |          |             |     |              |      |     |
|------------------|----------|-------------|-----|--------------|------|-----|
| Sodium           | ppm      | ASTM D5185m | >31 | <b>10</b>    | 18   | --- |
| Boron            | ppm      | ASTM D5185m |     | <b>98</b>    | 22   | --- |
| Barium           | ppm      | ASTM D5185m |     | <b>0</b>     | 0    | --- |
| Molybdenum       | ppm      | ASTM D5185m |     | <b>251</b>   | 47   | --- |
| Manganese        | ppm      | ASTM D5185m |     | <b>&lt;1</b> | 1    | --- |
| Magnesium        | ppm      | ASTM D5185m |     | <b>798</b>   | 517  | --- |
| Calcium          | ppm      | ASTM D5185m |     | <b>1365</b>  | 1766 | --- |
| Phosphorus       | ppm      | ASTM D5185m |     | <b>817</b>   | 768  | --- |
| Zinc             | ppm      | ASTM D5185m |     | <b>1064</b>  | 931  | --- |
| Sulfur           | ppm      | ASTM D5185m |     | <b>2772</b>  | 3041 | --- |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25 | <b>16.6</b>  | 21.3 | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896  |     | <b>7.6</b>   | 9.9  | --- |
| Visc @ 100°C     | cSt      | ASTM D445   |     | <b>13.1</b>  | 12.8 | --- |

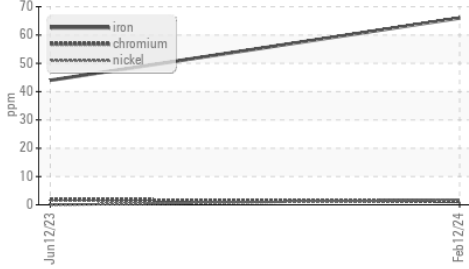
**▲ Non-ferrous Metals**



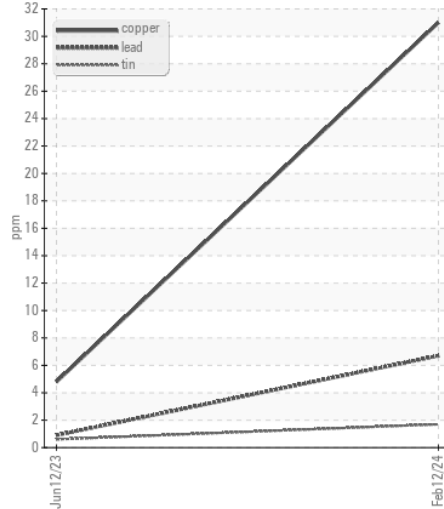
**▲ Ferrous Alloys**



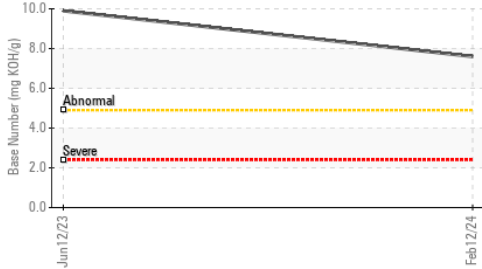
**▲ Ferrous Alloys**



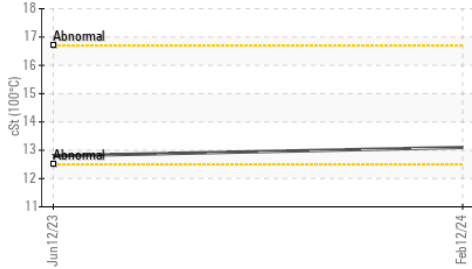
**▲ Non-ferrous Metals**



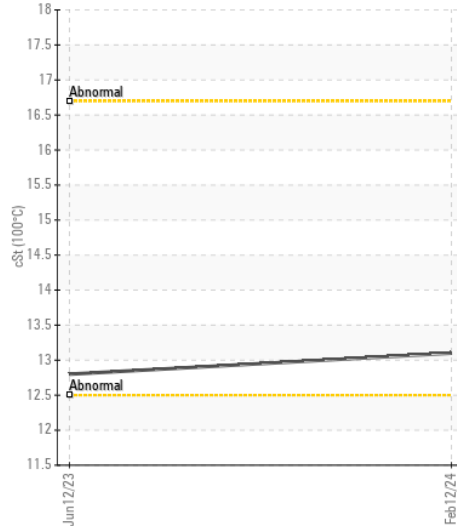
**Base Number**



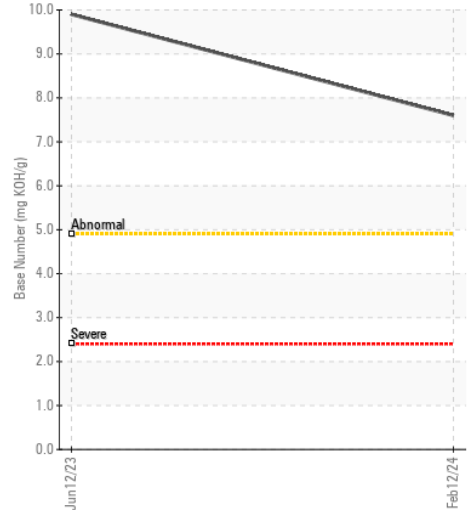
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0204568 **Received** : 13 Feb 2024  
**Lab Number** : 06087087 **Tested** : 14 Feb 2024  
**Unique Number** : 10874532 **Diagnosed** : 14 Feb 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: TBN )

**JRE - GREENSBORO**  
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 F: (336)665-9556

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)