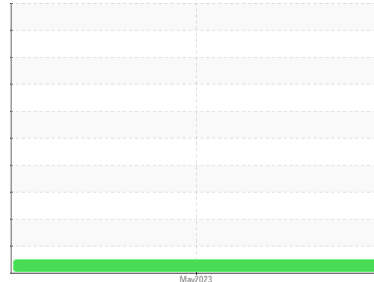




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**JOHN DEERE PE4045N015964**

Component  
**Diesel Engine**

Fluid  
**ALPHA MEGA MOLY ENGINE (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

| method        | limit/base      | current            | history1 | history2 |
|---------------|-----------------|--------------------|----------|----------|
| Sample Number | Client Info     | <b>WC0800712</b>   | ---      | ---      |
| Sample Date   | Client Info     | <b>25 May 2023</b> | ---      | ---      |
| Machine Age   | hrs Client Info | <b>0</b>           | ---      | ---      |
| Oil Age       | hrs Client Info | <b>0</b>           | ---      | ---      |
| Oil Changed   | Client Info     | <b>Not Chngd</b>   | ---      | ---      |
| Sample Status |                 | <b>NORMAL</b>      | ---      | ---      |

## CONTAMINATION

| method | limit/base     | current        | history1 | history2 |
|--------|----------------|----------------|----------|----------|
| Fuel   | WC Method >2.1 | <b>&lt;1.0</b> | ---      | ---      |
| Glycol | WC Method      | <b>NEG</b>     | ---      | ---      |

## WEAR METALS

| method   | limit/base          | current      | history1 | history2 |
|----------|---------------------|--------------|----------|----------|
| Iron     | ppm ASTM D5185m >51 | <b>32</b>    | ---      | ---      |
| Chromium | ppm ASTM D5185m >11 | <b>&lt;1</b> | ---      | ---      |
| Nickel   | ppm ASTM D5185m >5  | <b>0</b>     | ---      | ---      |
| Titanium | ppm ASTM D5185m     | <b>0</b>     | ---      | ---      |
| Silver   | ppm ASTM D5185m >3  | <b>0</b>     | ---      | ---      |
| Aluminum | ppm ASTM D5185m >31 | <b>2</b>     | ---      | ---      |
| Lead     | ppm ASTM D5185m >26 | <b>2</b>     | ---      | ---      |
| Copper   | ppm ASTM D5185m >26 | <b>3</b>     | ---      | ---      |
| Tin      | ppm ASTM D5185m >4  | <b>1</b>     | ---      | ---      |
| Vanadium | ppm ASTM D5185m     | <b>0</b>     | ---      | ---      |
| Cadmium  | ppm ASTM D5185m     | <b>0</b>     | ---      | ---      |

## ADDITIVES

| method     | limit/base      | current      | history1 | history2 |
|------------|-----------------|--------------|----------|----------|
| Boron      | ppm ASTM D5185m | <b>3</b>     | ---      | ---      |
| Barium     | ppm ASTM D5185m | <b>0</b>     | ---      | ---      |
| Molybdenum | ppm ASTM D5185m | <b>134</b>   | ---      | ---      |
| Manganese  | ppm ASTM D5185m | <b>&lt;1</b> | ---      | ---      |
| Magnesium  | ppm ASTM D5185m | <b>17</b>    | ---      | ---      |
| Calcium    | ppm ASTM D5185m | <b>4588</b>  | ---      | ---      |
| Phosphorus | ppm ASTM D5185m | <b>1176</b>  | ---      | ---      |
| Zinc       | ppm ASTM D5185m | <b>1329</b>  | ---      | ---      |
| Sulfur     | ppm ASTM D5185m | <b>5694</b>  | ---      | ---      |

## CONTAMINANTS

| method    | limit/base          | current   | history1 | history2 |
|-----------|---------------------|-----------|----------|----------|
| Silicon   | ppm ASTM D5185m >22 | <b>12</b> | ---      | ---      |
| Sodium    | ppm ASTM D5185m >31 | <b>2</b>  | ---      | ---      |
| Potassium | ppm ASTM D5185m >20 | <b>3</b>  | ---      | ---      |

## INFRA-RED

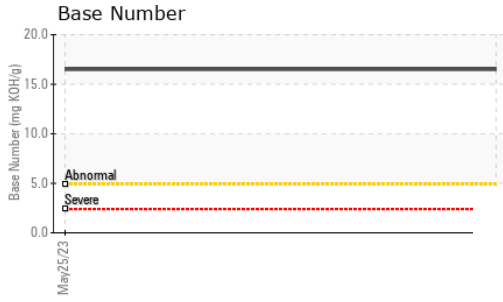
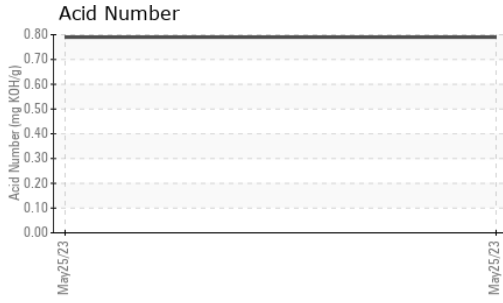
| method    | limit/base               | current     | history1 | history2 |
|-----------|--------------------------|-------------|----------|----------|
| Soot %    | % *ASTM D7844 >3         | <b>0.8</b>  | ---      | ---      |
| Nitration | Abs/cm *ASTM D7624 >20   | <b>9.4</b>  | ---      | ---      |
| Sulfation | Abs/.1mm *ASTM D7415 >30 | <b>37.8</b> | ---      | ---      |

## FLUID DEGRADATION

| method           | limit/base               | current      | history1 | history2 |
|------------------|--------------------------|--------------|----------|----------|
| Oxidation        | Abs/.1mm *ASTM D7414 >25 | <b>37.3</b>  | ---      | ---      |
| Acid Number (AN) | mg KOH/g ASTM D8045      | <b>0.79</b>  | ---      | ---      |
| Base Number (BN) | mg KOH/g ASTM D2896      | <b>16.50</b> | ---      | ---      |



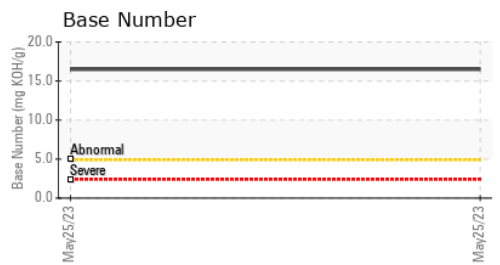
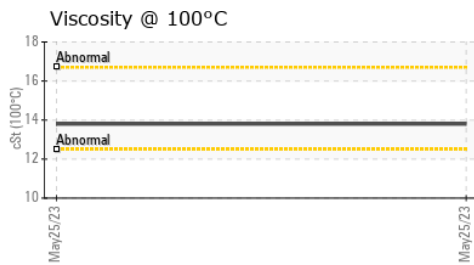
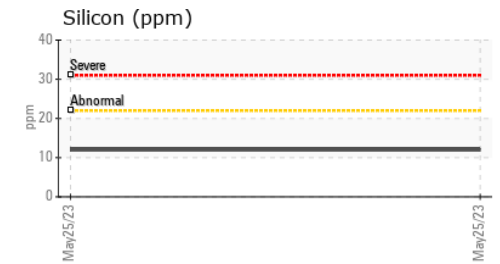
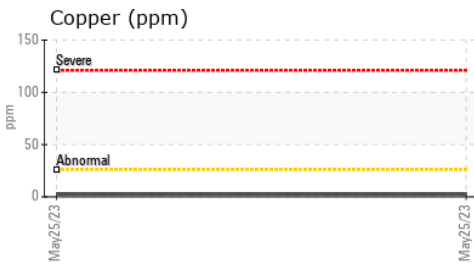
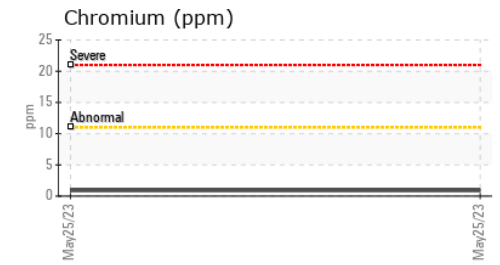
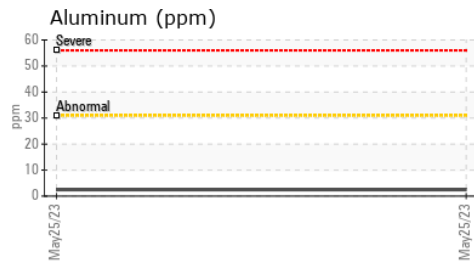
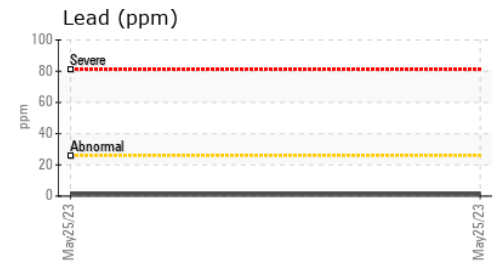
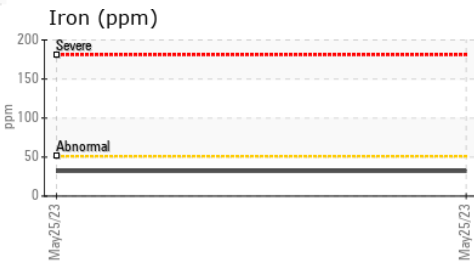
# OIL ANALYSIS REPORT



| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | ---      |
| 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      | ---      |
| Free Water       | scalar | *Visual    |         | NEG      | ---      |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 100°C     | cSt    | ASTM D445  | 13.8    | ---      | ---      |

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0800712 **Received** : 05 Jun 2023  
**Lab Number** : 05864479 **Diagnosed** : 06 Jun 2023  
**Unique Number** : 10498944 **Diagnostician** : Doug Bogart  
**Test Package** : MOB 2

**PARKE CO FIREWOOD**  
 4121 N 100 E  
 MARSHALL, IN  
 US 47859  
 Contact: ELAM SWAREY JR  
 cealey@cebridge.net  
 T: (765)597-2237  
 F:

Certificate L2367  
 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)