



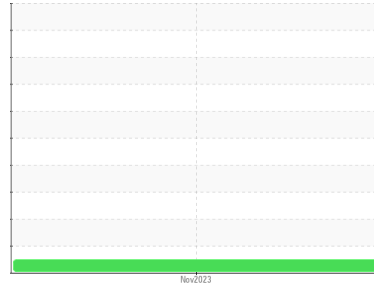
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**CATERPILLAR 745D 13393 (S/N 3T605704)**  
 Component  
**Center Differential**  
 Fluid  
**NOT GIVEN (--- GAL)**



## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info |             | <b>WC0831280</b>   | ---      | ---      |
| Sample Date   | Client Info |             | <b>17 Nov 2023</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info | <b>1915</b>        | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>1915</b>        | ---      | ---      |
| Oil Changed   | Client Info |             | <b>Changed</b>     | ---      | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | ---      | ---      |

## CONTAMINATION

|       | method    | limit/base | current    | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >.2        | <b>NEG</b> | ---      | ---      |

## WEAR METALS

|          | method | limit/base       | current    | history1 | history2 |
|----------|--------|------------------|------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >500 | <b>123</b> | ---      | ---      |
| Chromium | ppm    | ASTM D5185m >3   | <b>2</b>   | ---      | ---      |
| Nickel   | ppm    | ASTM D5185m >3   | <b>0</b>   | ---      | ---      |
| Titanium | ppm    | ASTM D5185m >2   | <b>0</b>   | ---      | ---      |
| Silver   | ppm    | ASTM D5185m >2   | <b>0</b>   | ---      | ---      |
| Aluminum | ppm    | ASTM D5185m >30  | <b>6</b>   | ---      | ---      |
| Lead     | ppm    | ASTM D5185m >13  | <b>0</b>   | ---      | ---      |
| Copper   | ppm    | ASTM D5185m >103 | <b>110</b> | ---      | ---      |
| Tin      | ppm    | ASTM D5185m >5   | <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>0</b>    | ---      | ---      |
| Barium     | ppm    | ASTM D5185m | <b>0</b>    | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185m | <b>1</b>    | ---      | ---      |
| Manganese  | ppm    | ASTM D5185m | <b>2</b>    | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185m | <b>10</b>   | ---      | ---      |
| Calcium    | ppm    | ASTM D5185m | <b>3178</b> | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185m | <b>1027</b> | ---      | ---      |
| Zinc       | ppm    | ASTM D5185m | <b>1219</b> | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185m | <b>7608</b> | ---      | ---      |

## CONTAMINANTS

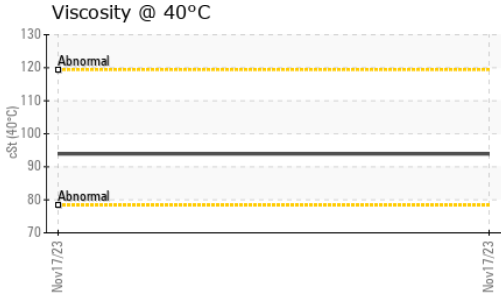
|           | method | limit/base       | current   | history1 | history2 |
|-----------|--------|------------------|-----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >100 | <b>25</b> | ---      | ---      |
| Sodium    | ppm    | ASTM D5185m      | <b>4</b>  | ---      | ---      |
| Potassium | ppm    | ASTM D5185m >20  | <b>0</b>  | ---      | ---      |

## VISUAL

|                  | method | limit/base    | current      | history1 | history2 |
|------------------|--------|---------------|--------------|----------|----------|
| White Metal      | scalar | *Visual NONE  | <b>NONE</b>  | ---      | ---      |
| Yellow Metal     | scalar | *Visual NONE  | <b>NONE</b>  | ---      | ---      |
| Precipitate      | scalar | *Visual NONE  | <b>NONE</b>  | ---      | ---      |
| Silt             | scalar | *Visual NONE  | <b>NONE</b>  | ---      | ---      |
| Debris           | scalar | *Visual NONE  | <b>NONE</b>  | ---      | ---      |
| Sand/Dirt        | scalar | *Visual NONE  | <b>NONE</b>  | ---      | ---      |
| Appearance       | scalar | *Visual NORML | <b>NORML</b> | ---      | ---      |
| Odor             | scalar | *Visual NORML | <b>NORML</b> | ---      | ---      |
| Emulsified Water | scalar | *Visual >.2   | <b>NEG</b>   | ---      | ---      |
| Free Water       | scalar | *Visual       | <b>NEG</b>   | ---      | ---      |



# OIL ANALYSIS REPORT



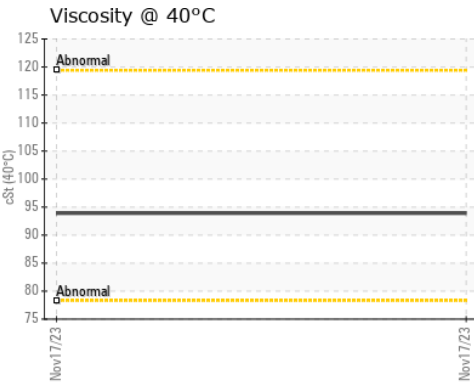
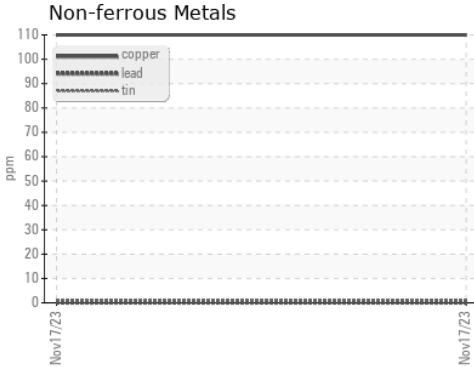
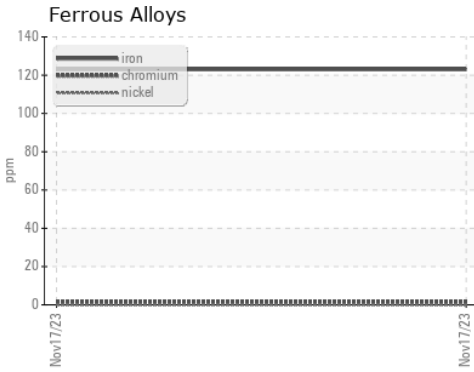
| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
|------------------|--------|------------|---------|----------|----------|

|             |     |           |             |     |     |
|-------------|-----|-----------|-------------|-----|-----|
| Visc @ 40°C | cSt | ASTM D445 | <b>93.9</b> | --- | --- |
|-------------|-----|-----------|-------------|-----|-----|

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

|        |  |  |  |          |          |
|--------|--|--|--|----------|----------|
| Color  |  |  |  | no image | no image |
| Bottom |  |  |  | no image | no image |

| GRAPHS |
|--------|
|--------|



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0831280      **Received** : 06 Dec 2023  
**Lab Number** : 06026858      **Diagnosed** : 08 Dec 2023  
**Unique Number** : 10776649      **Diagnostician** : Don Baldrige  
**Test Package** : CONST

**TRADER CONSTRUCTION CO.**  
 PO DRAWER 1578  
 NEW BERN, NC  
 US 28563  
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 mwyatt@traderconstruction.com  
 T: (252)633-1399  
 F: (252)638-4871

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)