



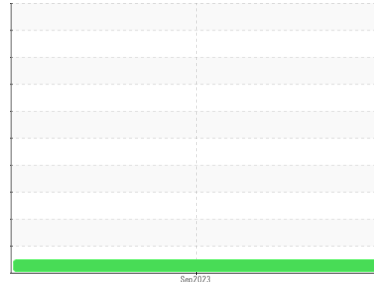
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**[19160]**  
 Machine Id  
**5066**  
 Component  
**Front Left Final Drive**  
 Fluid  
**CONOCO PHILLIPS 80W90 (--- GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: ConocoPhillips 80w/90 )

### Wear

All component wear rates are normal.

### 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>WC0818720</b>   | ---      | ---      |
| Sample Date   | Client Info |             | <b>06 Sep 2023</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info | <b>3425</b>        | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>1425</b>        | ---      | ---      |
| Oil Changed   | Client Info |             | <b>Not Chngd</b>   | ---      | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | ---      | ---      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >750 | <b>48</b>    | ---      | ---      |
| Chromium | ppm    | ASTM D5185m >9   | <b>&lt;1</b> | ---      | ---      |
| Nickel   | ppm    | ASTM D5185m >10  | <b>&lt;1</b> | ---      | ---      |
| Titanium | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Silver   | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Aluminum | ppm    | ASTM D5185m >40  | <b>&lt;1</b> | ---      | ---      |
| Lead     | ppm    | ASTM D5185m >15  | <b>&lt;1</b> | ---      | ---      |
| Copper   | ppm    | ASTM D5185m >40  | <b>3</b>     | ---      | ---      |
| Tin      | ppm    | ASTM D5185m >10  | <b>&lt;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>12</b>    | ---      | ---      |
| Barium     | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185m | <b>15</b>    | ---      | ---      |
| Manganese  | ppm    | ASTM D5185m | <b>&lt;1</b> | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Calcium    | ppm    | ASTM D5185m | <b>15</b>    | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185m | <b>302</b>   | ---      | ---      |
| Zinc       | ppm    | ASTM D5185m | <b>7</b>     | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185m | <b>19499</b> | ---      | ---      |

## CONTAMINANTS

|           | method | limit/base      | current      | history1 | history2 |
|-----------|--------|-----------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >75 | <b>4</b>     | ---      | ---      |
| Sodium    | ppm    | ASTM D5185m >51 | <b>0</b>     | ---      | ---      |
| Potassium | ppm    | ASTM D5185m >20 | <b>&lt;1</b> | ---      | ---      |

## VISUAL

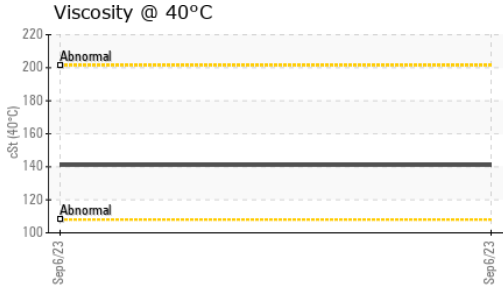
|                  | method | limit/base     | current      | history1 | history2 |
|------------------|--------|----------------|--------------|----------|----------|
| White Metal      | scalar | *Visual NONE   | <b>NONE</b>  | ---      | ---      |
| Yellow Metal     | scalar | *Visual NONE   | <b>NONE</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 >0.075 | <b>NEG</b>   | ---      | ---      |
| Free Water       | scalar | *Visual        | <b>NEG</b>   | ---      | ---      |

## FLUID PROPERTIES

|             | method | limit/base | current    | history1 | history2 |
|-------------|--------|------------|------------|----------|----------|
| Visc @ 40°C | cSt    | ASTM D445  | <b>141</b> | ---      | ---      |

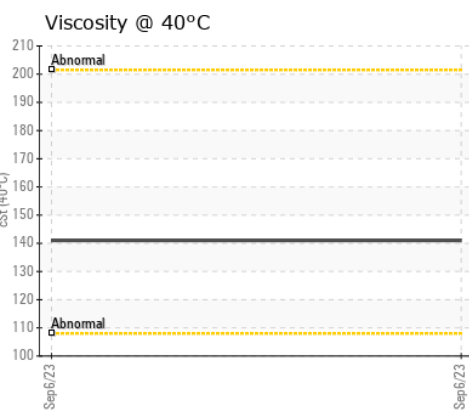
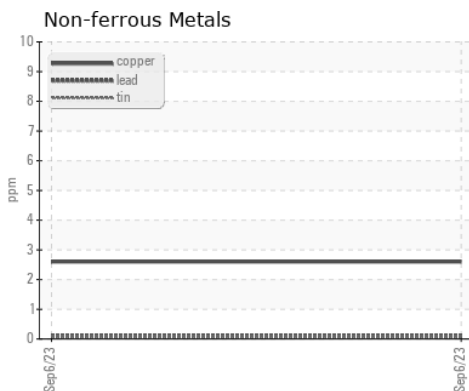
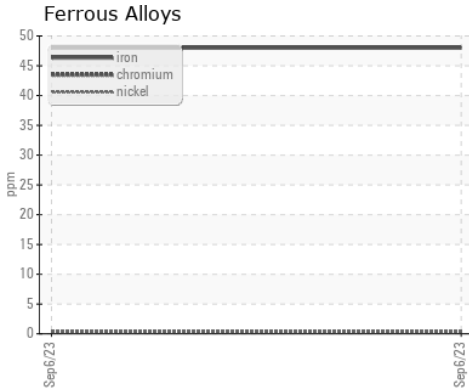


# OIL ANALYSIS REPORT



| SAMPLE IMAGES | method | limit/base | current  | history1 | history2 |
|---------------|--------|------------|----------|----------|----------|
| Color         |        |            | no image | no image | no image |
| Bottom        |        |            | no image | no image | no image |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0818720     **Received** : 03 Oct 2023  
**Lab Number** : 05968462     **Diagnosed** : 04 Oct 2023  
**Unique Number** : 10675013     **Diagnostician** : Doug Bogart  
**Test Package** : CONST

**MANHATTAN ROAD AND BRIDGE**  
 5601 S 122ND E AVE  
 TULSA, OK  
 US 74146  
 Contact: JAMES STEELMON  
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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)