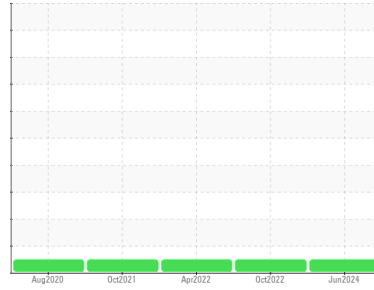




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**015-R014**

Component  
**Front Axle**

Fluid  
**SCHAEFFER SCHAEFFER 293 MOLY 75W90 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: Front Axle Sample @ 7393 hours )

#### 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>WC0868309</b>   | WC0698174   | WC0548431   |
| Sample Date        | Client Info |             |            | <b>18 Jun 2024</b> | 03 Oct 2022 | 14 Apr 2022 |
| Machine Age        | hrs         | Client Info |            | <b>7393</b>        | 21160       | 20124       |
| Oil Age            | hrs         | Client Info |            | <b>7393</b>        | 0           | 0           |
| Oil Changed        | Client Info |             |            | <b>Not Chngd</b>   | Not Chngd   | Changed     |
| Sample Status      |             |             |            | <b>NORMAL</b>      | NORMAL      | NORMAL      |

| CONTAMINATION |           | method | limit/base | current    | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water         | WC Method |        | >0.2       | <b>NEG</b> | NEG      | NEG      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >500       | <b>2</b>     | 6        | 6        |
| Chromium    | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | 0        |
| Nickel      | ppm | ASTM D5185m | >10        | <b>&lt;1</b> | 0        | 0        |
| Titanium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Silver      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | <1       |
| Aluminum    | ppm | ASTM D5185m | >25        | <b>&lt;1</b> | <1       | <1       |
| Lead        | ppm | ASTM D5185m | >25        | <b>0</b>     | <1       | <1       |
| Copper      | ppm | ASTM D5185m | >50        | <b>23</b>    | <1       | 5        |
| Tin         | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | <1       |
| Antimony    | ppm | ASTM D5185m | >5         | <b>---</b>   | ---      | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | <1       | 0        |

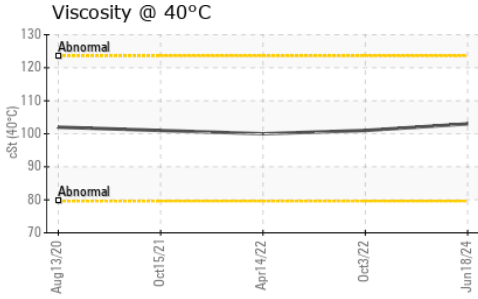
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>259</b>   | 4        | 221      |
| Barium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m |            | <b>0</b>     | 416      | 7        |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm | ASTM D5185m |            | <b>0</b>     | 9        | 9        |
| Calcium    | ppm | ASTM D5185m |            | <b>0</b>     | 33       | 128      |
| Phosphorus | ppm | ASTM D5185m |            | <b>1510</b>  | 575      | 1396     |
| Zinc       | ppm | ASTM D5185m |            | <b>27</b>    | 27       | 61       |
| Sulfur     | ppm | ASTM D5185m |            | <b>31289</b> | 14627    | 20439    |

| CONTAMINANTS |     | method      | limit/base | current  | history1 | history2 |
|--------------|-----|-------------|------------|----------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >75        | <b>4</b> | 5        | 1        |
| Sodium       | ppm | ASTM D5185m |            | <b>3</b> | 0        | 2        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>2</b> | 2        | 0        |

| VISUAL           |        | method  | limit/base | current      | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal      | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Precipitate      | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Silt             | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Debris           | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Sand/Dirt        | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Appearance       | scalar | *Visual | NORML      | <b>NORML</b> | NORML    | NORML    |
| Odor             | scalar | *Visual | NORML      | <b>NORML</b> | NORML    | NORML    |
| Emulsified Water | scalar | *Visual | >0.2       | <b>NEG</b>   | NEG      | NEG      |
| Free Water       | scalar | *Visual |            | <b>NEG</b>   | NEG      | NEG      |



# OIL ANALYSIS REPORT

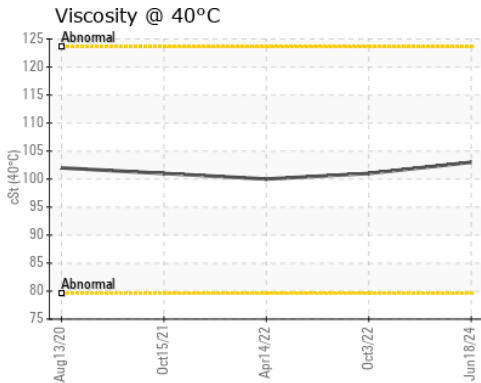
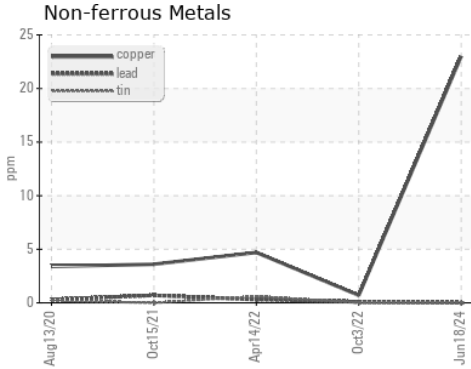
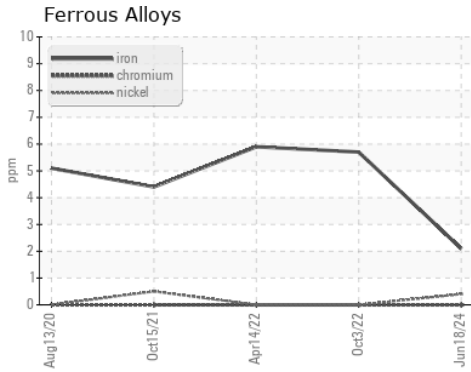


| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 103     | 101      | 100      |

| 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.** : WC0868309  
**Lab Number** : 06217205  
**Unique Number** : 11090069  
**Test Package** : CONST  
**Received** : 21 Jun 2024  
**Tested** : 24 Jun 2024  
**Diagnosed** : 24 Jun 2024 - Don Baldrige

**SHIMMICK CONSTRUCTION**  
 5535 TRAILHEAD DRIVE  
 CHATTANOOGA, TN  
 US 37415  
 Contact: DANIEL LISELLA  
 daniel.lisella@shimmick.com

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)

T:  
F: