



# OIL ANALYSIS REPORT

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

Machine Id  
**015-R014**  
 Component  
**Front Left Final Drive**  
 Fluid  
**SCHAEFFER SCHAEFFER 293 MOLY 75W90 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample  
 Comment: Left front final drive sample @ 7393 hours )

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>WC0868308</b>   | WC0698151   | WC0548443   |
| 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           |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>Not Changd</b>  | Not Changd  | Changed     |
| Filter Changed |     | Client Info |           | <b>N/A</b>         | Not Changd  | Changed     |
| Sample Status  |     |             |           | <b>NORMAL</b>      | ABNORMAL    | NORMAL      |

## WEAR

All component wear rates are normal.

|              |        |             |      |              |      |       |
|--------------|--------|-------------|------|--------------|------|-------|
| Iron         | ppm    | ASTM D5185m | >500 | <b>26</b>    | 123  | 32    |
| Chromium     | ppm    | ASTM D5185m | >10  | <b>0</b>     | <1   | <1    |
| Nickel       | ppm    | ASTM D5185m | >10  | <b>&lt;1</b> | 0    | 0     |
| Titanium     | ppm    | ASTM D5185m |      | <b>0</b>     | <1   | 0     |
| Silver       | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | <1    |
| Aluminum     | ppm    | ASTM D5185m | >25  | <b>&lt;1</b> | 3    | 1     |
| Lead         | ppm    | ASTM D5185m | >25  | <b>0</b>     | <1   | 1     |
| Copper       | ppm    | ASTM D5185m | >50  | <b>10</b>    | 4    | 10    |
| Tin          | ppm    | ASTM D5185m | >10  | <b>&lt;1</b> | 0    | 1     |
| Vanadium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | 0     |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | LIGHT |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE  |

## CONTAMINATION

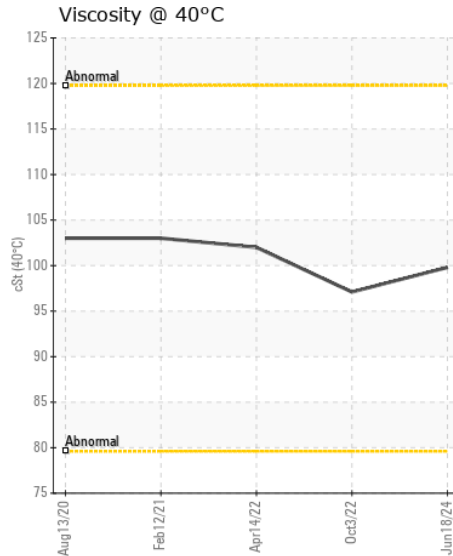
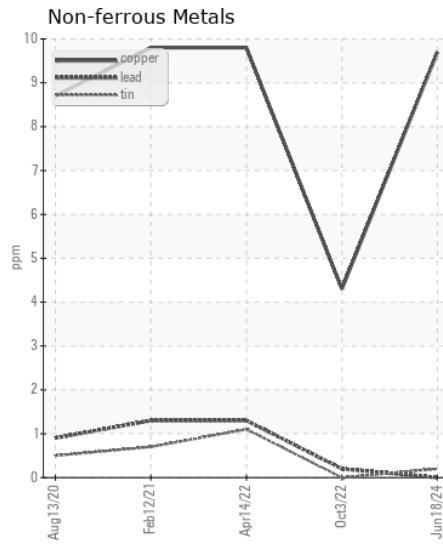
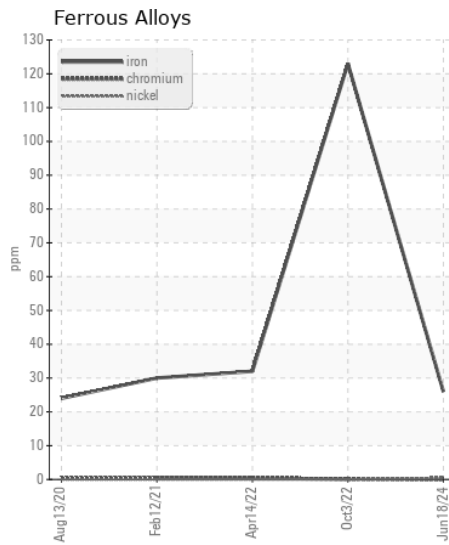
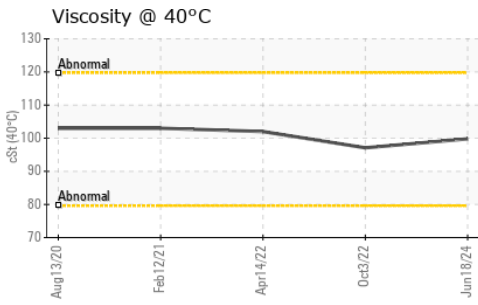
There is no indication of any contamination in the oil.

|                  |        |             |       |              |         |       |
|------------------|--------|-------------|-------|--------------|---------|-------|
| Silicon          | ppm    | ASTM D5185m | >75   | <b>3</b>     | 7       | 12    |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>4</b>     | 3       | 3     |
| Water            |        | WC Method   | >0.2  | <b>NEG</b>   | NEG     | NEG   |
| Silt             | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE    | NONE  |
| Debris           | scalar | *Visual     | NONE  | <b>NONE</b>  | ▲ MODER | 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   |

## FLUID CONDITION

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

|             |     |             |  |              |       |       |
|-------------|-----|-------------|--|--------------|-------|-------|
| Sodium      | ppm | ASTM D5185m |  | <b>10</b>    | 0     | 7     |
| Boron       | ppm | ASTM D5185m |  | <b>186</b>   | 15    | 201   |
| Barium      | ppm | ASTM D5185m |  | <b>0</b>     | 0     | 0     |
| Molybdenum  | ppm | ASTM D5185m |  | <b>0</b>     | 379   | 6     |
| Manganese   | ppm | ASTM D5185m |  | <b>2</b>     | 4     | 1     |
| Magnesium   | ppm | ASTM D5185m |  | <b>&lt;1</b> | 4     | 7     |
| Calcium     | ppm | ASTM D5185m |  | <b>15</b>    | 16    | 103   |
| Phosphorus  | ppm | ASTM D5185m |  | <b>1281</b>  | 1191  | 1331  |
| Zinc        | ppm | ASTM D5185m |  | <b>145</b>   | 30    | 70    |
| Sulfur      | ppm | ASTM D5185m |  | <b>26439</b> | 25716 | 19942 |
| Visc @ 40°C | cSt | ASTM D445   |  | <b>99.8</b>  | 97.1  | 102   |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0868308  
**Lab Number** : 06217203  
**Unique Number** : 11090067  
**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: