



# OIL ANALYSIS REPORT

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

Machine Id  
**050-0026**  
Component  
**Diesel Engine**  
Fluid  
**SCHAEFFER SUPREME 7000 (1 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>WC0903848</b>   | WC0815122   | WC0750628   |
| Sample Date    |     | Client Info |           | <b>17 Apr 2024</b> | 06 Sep 2023 | 27 Feb 2023 |
| Machine Age    | hrs | Client Info |           | <b>1808</b>        | 1808        | 1511        |
| Oil Age        | hrs | Client Info |           | <b>1808</b>        | 0           | 0           |
| Filter Age     | hrs | Client Info |           | <b>250</b>         | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>Not Changd</b>  | Changed     | Changed     |
| Filter Changed |     | Client Info |           | <b>Not Changd</b>  | Changed     | Changed     |
| Sample Status  |     |             |           | <b>NORMAL</b>      | ABNORMAL    | NORMAL      |

## WEAR

All component wear rates are normal.

|              |        |             |      |              |       |      |
|--------------|--------|-------------|------|--------------|-------|------|
| Iron         | ppm    | ASTM D5185m | >100 | <b>81</b>    | ▲ 151 | 78   |
| Chromium     | ppm    | ASTM D5185m | >20  | <b>7</b>     | 9     | 7    |
| Nickel       | ppm    | ASTM D5185m | >4   | <b>0</b>     | <1    | 1    |
| Titanium     | ppm    | ASTM D5185m |      | <b>0</b>     | <1    | <1   |
| Silver       | ppm    | ASTM D5185m | >3   | <b>0</b>     | 0     | 0    |
| Aluminum     | ppm    | ASTM D5185m | >20  | <b>8</b>     | 12    | 11   |
| Lead         | ppm    | ASTM D5185m | >40  | <b>2</b>     | 5     | 2    |
| Copper       | ppm    | ASTM D5185m | >330 | <b>1</b>     | 3     | 2    |
| Tin          | ppm    | ASTM D5185m | >15  | <b>0</b>     | <1    | 1    |
| Vanadium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | 0     | <1   |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE  | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE  | NONE |

## CONTAMINATION

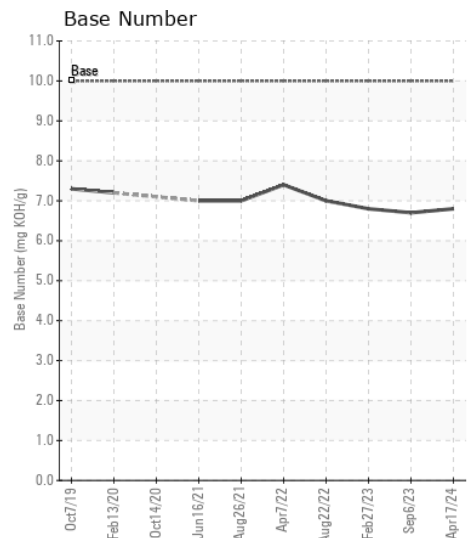
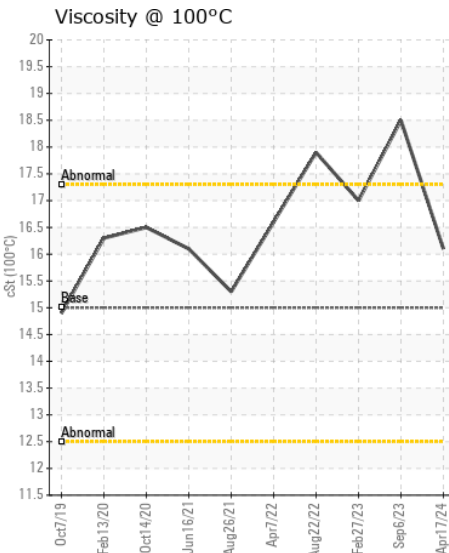
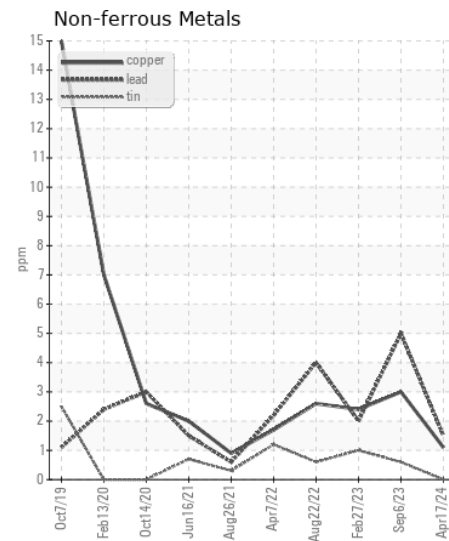
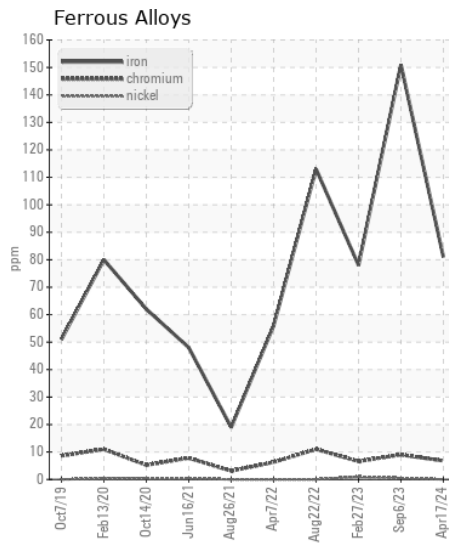
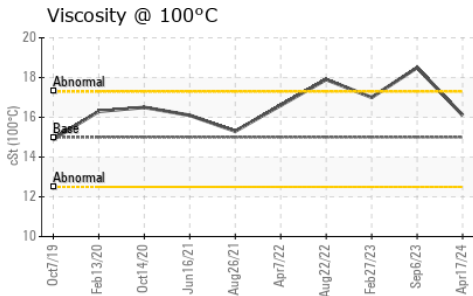
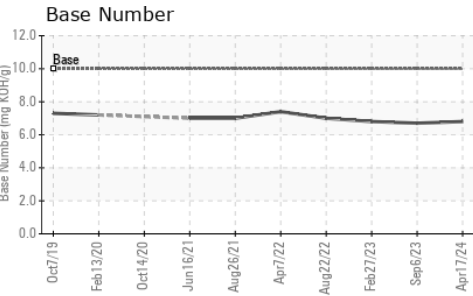
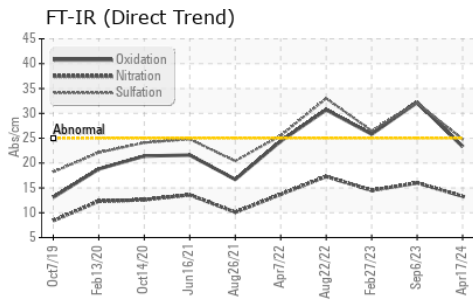
There is no indication of any contamination in the oil.

|                  |          |             |       |                |       |       |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon          | ppm      | ASTM D5185m | >25   | <b>13</b>      | 20    | 14    |
| Potassium        | ppm      | ASTM D5185m | >20   | <b>&lt;1</b>   | 2     | 3     |
| Fuel             |          | WC Method   | >5    | <b>&lt;1.0</b> | <1.0  | <1.0  |
| Water            |          | WC Method   | >0.2  | <b>NEG</b>     | NEG   | NEG   |
| Glycol           |          | WC Method   |       | <b>NEG</b>     | NEG   | NEG   |
| Soot %           | %        | *ASTM D7844 | >3    | <b>0.5</b>     | 1.1   | 0.3   |
| Nitration        | Abs/cm   | *ASTM D7624 | >20   | <b>13.3</b>    | 16.0  | 14.5  |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30   | <b>24.8</b>    | 32.1  | 26.5  |
| 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   |

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

|                  |          |             |      |              |        |      |
|------------------|----------|-------------|------|--------------|--------|------|
| Sodium           | ppm      | ASTM D5185m |      | <b>3</b>     | 5      | <1   |
| Boron            | ppm      | ASTM D5185m |      | <b>74</b>    | 75     | 68   |
| Barium           | ppm      | ASTM D5185m |      | <b>&lt;1</b> | 0      | 2    |
| Molybdenum       | ppm      | ASTM D5185m | 50   | <b>81</b>    | 88     | 90   |
| Manganese        | ppm      | ASTM D5185m |      | <b>&lt;1</b> | 2      | <1   |
| Magnesium        | ppm      | ASTM D5185m | 1000 | <b>16</b>    | 24     | 14   |
| Calcium          | ppm      | ASTM D5185m | 1400 | <b>2334</b>  | 2777   | 2654 |
| Phosphorus       | ppm      | ASTM D5185m | 985  | <b>1056</b>  | 1173   | 1072 |
| Zinc             | ppm      | ASTM D5185m | 1060 | <b>1379</b>  | 1574   | 1351 |
| Sulfur           | ppm      | ASTM D5185m | 4000 | <b>5670</b>  | 5897   | 4420 |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25  | <b>23.3</b>  | 32.2   | 25.8 |
| Base Number (BN) | mg KOH/g | ASTM D2896  | 10   | <b>6.8</b>   | 6.7    | 6.8  |
| Visc @ 100°C     | cSt      | ASTM D445   | 15   | <b>16.1</b>  | ▲ 18.5 | 17.0 |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0903848 **Received** : 23 Apr 2024  
**Lab Number** : 06157498 **Tested** : 24 Apr 2024  
**Unique Number** : 10992921 **Diagnosed** : 24 Apr 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**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)

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F: