

#### Machine Id VOLVO EC140 315295 Component Swing Drive Fluid GEAR OIL LS 80W90 (--- GAL)

### RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL LS 80W90. Please confirm.

### **WEAR**

All component wear rates are normal.

## CONTAMINATION

There is no indication of any contamination in the oil.

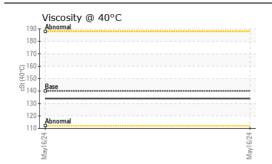
# FLUID CONDITION

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

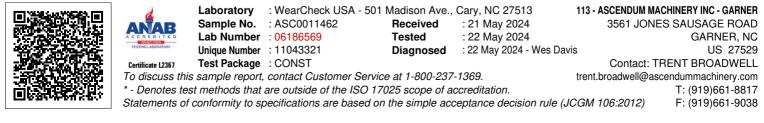
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| Test  | UOM  | Method  | Limit/Abn  | Current   | History1 | History2         |
|---|--|---|--|---|----------|------------------|
| Sample Number   |  | Client Info   |  | ASC0011462  |          |                  |
| Sample Date   |  | Client Info   |  | 16 May 2024   |          |                  |
| Machine Age   | hrs  | Client Info   |  | 460   |          |                  |
| Oil Age   | hrs  | Client Info   |  | 460   |          |                  |
| Filter Age  | hrs  | Client Info   |  | 0   |          |                  |
| Oil Changed   |  | Client Info   |  | Changed   |          |                  |
| Filter Changed  |  | Client Info   |  | N/A   |          |                  |
| Sample Status   |  |   |  | NORMAL  |          |                  |
|   |  |   | 1000   | •   |          |                  |
| Iron<br>Obvio antivita  | ppm  | ASTM D5185m   | >1200  | 9   |          |                  |
| Chromium  | ppm  | ASTM D5185m   | >10  | 0   |          |                  |
| Nickel  | ppm  | ASTM D5185m   | >10  | 0   |          |                  |
| Titanium  | ppm  | ASTM D5185m   |  | 0   |          |                  |
| Silver  | ppm  | ASTM D5185m   | . 05   | 0   |          |                  |
| Aluminum  | ppm  | ASTM D5185m   | >25  | 0   |          |                  |
| Lead  | ppm  | ASTM D5185m   | >50  | 0   |          |                  |
| Copper  | ppm  | ASTM D5185m   | >50  | 7   |          |                  |
| Tin   | ppm  | ASTM D5185m   | >10  | 0   |          |                  |
| Vanadium  | ppm  | ASTM D5185m   | NONE   | 0   |          |                  |
| White Metal   | scalar   | *Visual   | NONE   | NONE  |          |                  |
| Yellow Metal  | scalar   | *Visual   | NONE   | NONE  |          |                  |
| Silicon   | ppm  | ASTM D5185m   | >100   | 6   |          |                  |
| Potassium   |  |   | 00   | •   |          |                  |
|   | ppm  | ASTM D5185m   | >20  | 0   |          |                  |
| Water   | ppm  | WC Method   | >20<br>>0.25   | U<br>NEG  |          |                  |
| Water<br>Silt   | ppm<br>scalar  |   |  | -   |          |                  |
|   |  | WC Method   | >0.25  | NEG   | <br><br> | <br><br>         |
| Silt  | scalar   | WC Method<br>*Visual  | >0.25<br>NONE  | NEG<br>NONE   |          |                  |
| Silt<br>Debris  | scalar<br>scalar   | WC Method<br>*Visual<br>*Visual   | >0.25<br>NONE<br>NONE  | NEG<br>NONE<br>NONE   |          |                  |
| Silt<br>Debris<br>Sand/Dirt   | scalar<br>scalar<br>scalar   | WC Method<br>*Visual<br>*Visual<br>*Visual  | >0.25<br>NONE<br>NONE<br>NONE  | NEG<br>NONE<br>NONE<br>NONE   |          |                  |
| Silt<br>Debris<br>Sand/Dirt<br>Appearance   | scalar<br>scalar<br>scalar<br>scalar   | WC Method<br>*Visual<br>*Visual<br>*Visual<br>*Visual   | >0.25<br>NONE<br>NONE<br>NONE<br>NORML   | NEG<br>NONE<br>NONE<br>NORE   |          |                  |
| Silt<br>Debris<br>Sand/Dirt<br>Appearance<br>Odor<br>Emulsified Water   | scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>scalar                                     | WC Method<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual   | >0.25<br>NONE<br>NONE<br>NORML<br>NORML  | NEG<br>NONE<br>NONE<br>NORML<br>NORML<br>NEG  |          |                  |
| Silt<br>Debris<br>Sand/Dirt<br>Appearance<br>Odor<br>Emulsified Water<br>Sodium   | scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>scalar                                     | WC Method<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>ASTM D5185m   | >0.25<br>NONE<br>NONE<br>NORML<br>NORML<br>>0.25   | NEG<br>NONE<br>NONE<br>NORML<br>NORML<br>NEG  | <br><br> | <br><br><br><br> |
| Silt<br>Debris<br>Sand/Dirt<br>Appearance<br>Odor<br>Emulsified Water<br>Sodium<br>Boron  | scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>ppm  | WC Method<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>ASTM D5185m  | >0.25<br>NONE<br>NONE<br>NORML<br>NORML  | NEG<br>NONE<br>NONE<br>NORML<br>NORML<br>NEG<br><1<br>2   |          |                  |
| Silt<br>Debris<br>Sand/Dirt<br>Appearance<br>Odor<br>Emulsified Water<br>Sodium<br>Boron<br>Barium  | scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>ppm<br>ppm                                 | WC Method<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>ASTM D5185m<br>ASTM D5185m  | >0.25<br>NONE<br>NONE<br>NORML<br>NORML<br>>0.25   | NEG<br>NONE<br>NONE<br>NORML<br>NORML<br>NEG<br><1<br>2<br>1  | <br><br> | <br><br><br>     |
| Silt<br>Debris<br>Sand/Dirt<br>Appearance<br>Odor<br>Emulsified Water<br>Sodium<br>Boron<br>Barium<br>Molybdenum  | scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>ppm<br>ppm<br>ppm                          | WC Method<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | >0.25<br>NONE<br>NONE<br>NORML<br>NORML<br>>0.25   | NEG<br>NONE<br>NONE<br>NORML<br>NORML<br>NEG<br><1<br>2<br>1<br>2<br>1                                    |          |                  |
| Silt<br>Debris<br>Sand/Dirt<br>Appearance<br>Odor<br>Emulsified Water<br>Sodium<br>Boron<br>Barium<br>Molybdenum<br>Manganese   | scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>ppm<br>ppm<br>ppm<br>ppm                             | WC Method<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | >0.25<br>NONE<br>NONE<br>NORML<br>>0.25<br>150   | NEG<br>NONE<br>NONE<br>NORML<br>NORML<br>NEG<br><1<br>2<br>1<br>2<br>1<br>0<br>0                          |          |                  |
| Silt<br>Debris<br>Sand/Dirt<br>Appearance<br>Odor<br>Emulsified Water<br>Sodium<br>Boron<br>Barium<br>Malybdenum<br>Manganese<br>Magnesium                                  | scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>ppm<br>ppm<br>ppm<br>ppm                   | WC Method<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | <ul> <li>&gt;0.25</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.25</li> </ul>   | NEG<br>NONE<br>NONE<br>NORML<br>NORML<br>NEG<br><1<br>2<br>1<br>2<br>1<br>0<br>0<br>0                     |          |                  |
| Silt<br>Debris<br>Sand/Dirt<br>Appearance<br>Odor<br>Emulsified Water<br>Sodium<br>Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium                       | scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm            | WC Method<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | <ul> <li>&gt;0.25</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.25</li> </ul>  | NEG<br>NONE<br>NONE<br>NORML<br>NORML<br>NEG<br><1<br>2<br>1<br>2<br>1<br>0<br>0<br>0<br>0<br>0<br>163    |          |                  |
| Silt<br>Debris<br>Sand/Dirt<br>Appearance<br>Odor<br>Emulsified Water<br>Sodium<br>Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus         | scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | WC Method<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m                | <ul> <li>&gt;0.25</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.25</li> <li>150</li> <li>150</li> <li>10</li> <li>70</li> <li>2000</li> </ul>              | NEG<br>NONE<br>NONE<br>NORML<br>NORML<br>NEG<br><1<br>2<br>1<br>0<br>0<br>0<br>163<br>266                 |          |                  |
| Silt<br>Debris<br>Sand/Dirt<br>Appearance<br>Odor<br>Emulsified Water<br>Sodium<br>Boron<br>Barium<br>Malybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc | scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm        | WC Method<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m | <ul> <li>&gt;0.25</li> <li>NONE</li> <li>NORME</li> <li>NORML</li> <li>&gt;0.25</li> <li>150</li> <li>150</li> <li>10</li> <li>70</li> <li>2000</li> <li>50</li> </ul> | NEG<br>NONE<br>NONE<br>NORML<br>NORML<br>NEG<br><1<br>2<br>1<br>2<br>1<br>0<br>0<br>0<br>163<br>266<br>68 |          |                  |
| Silt<br>Debris<br>Sand/Dirt<br>Appearance<br>Odor<br>Emulsified Water<br>Sodium<br>Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus         | scalar<br>scalar<br>scalar<br>scalar<br>scalar<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm | WC Method<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>*Visual<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m                | <ul> <li>&gt;0.25</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.25</li> <li>150</li> <li>150</li> <li>10</li> <li>70</li> <li>2000</li> </ul>              | NEG<br>NONE<br>NONE<br>NORML<br>NORML<br>NEG<br><1<br>2<br>1<br>0<br>0<br>0<br>163<br>266                 |          |                  |

Contact/Location: TRENT BROADWELL - VOLVO0157



Ferrous Alloys 10 mqq 0 May16/24 VaV Non-ferrous Metals 10 lead mdo lav16/74 Viscosity @ 40°C 190 185 180 175 170 165 160 ਲੋਂ 145 140 135 130 125 120 115 Abnorma 110 6/24 May16/24 Mav1



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