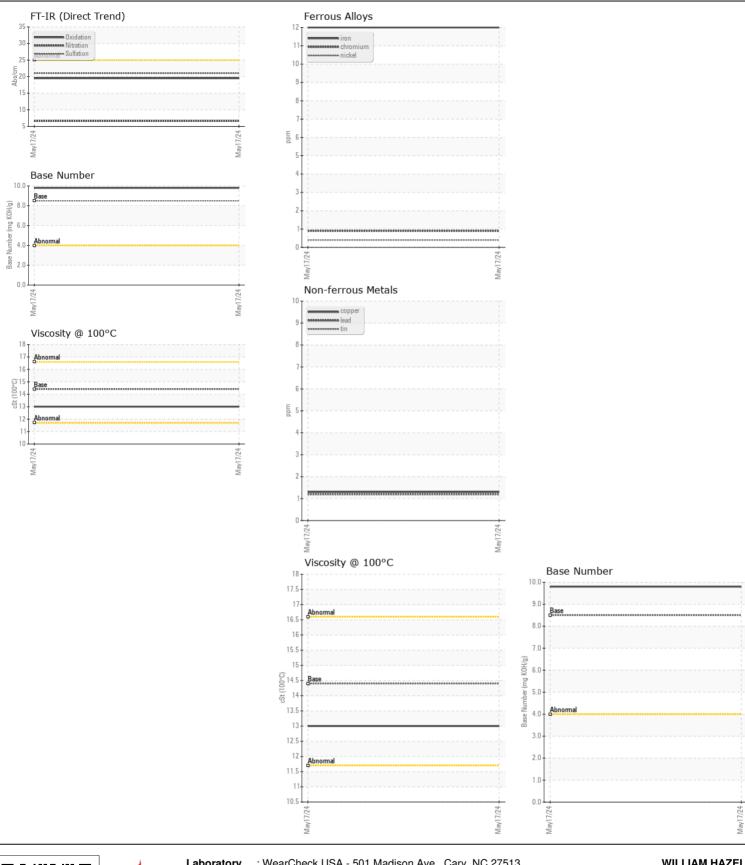


Machine Id VOLVO L70H 622411 onen **Diesel Engine**

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

| | / | | | | | | |
|---|------------------|----------|-------------|-----------|-------------|----------|----------|
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| | Sample Number | | Client Info | | ML0001569 | | |
| Resample at the next service interval to monitor. | Sample Date | | Client Info | | 17 May 2024 | | |
| | Machine Age | hrs | Client Info | | 11424 | | |
| | Oil Age | hrs | Client Info | | 0 | | |
| | Filter Age | hrs | Client Info | | 0 | | |
| | Oil Changed | | Client Info | | Changed | | |
| | Filter Changed | | Client Info | | Changed | | |
| | Sample Status | | | | NORMAL | | |
| | | | | | | | |
| WEAR All component wear rates are normal. | Iron | ppm | ASTM D5185m | >100 | 12 | | |
| | Chromium | ppm | ASTM D5185m | >10 | <1 | | |
| | Nickel | ppm | ASTM D5185m | >10 | <1 | | |
| | Titanium | ppm | ASTM D5185m | | <1 | | |
| | Silver | ppm | ASTM D5185m | >2 | <1 | | |
| | Aluminum | ppm | ASTM D5185m | >10 | 4 | | |
| | Lead | ppm | ASTM D5185m | >20 | 1 | | |
| | Copper | ppm | ASTM D5185m | >15 | 1 | | |
| | Tin | ppm | ASTM D5185m | >10 | 1 | | |
| | Vanadium | ppm | ASTM D5185m | | <1 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | | | | | | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | - | 8 | | |
| There is no indication of any contamination in the oil. | Potassium | ppm | ASTM D5185m | | 2 | | |
| | Fuel | | WC Method | | <1.0 | | |
| | Water | | WC Method | >0.1 | NEG | | |
| | Glycol | | WC Method | | NEG | | |
| | Soot % | % | *ASTM D7844 | | 0.2 | | |
| | Nitration | Abs/cm | *ASTM D7624 | | 6.6 | | |
| | Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.0 | | |
| | Silt | scalar | *Visual | NONE | NONE | | |
| | Debris | scalar | *Visual | NONE | NONE | | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| | Appearance | scalar | *Visual | NORML | NORML | | |
| | Odor | scalar | *Visual | NORML | NORML | | |
| | Emulsified Water | scalar | *Visual | >0.1 | NEG | | |
| | 0 | | | 450 | • | | |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | | 2 | | |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. | Boron | ppm | ASTM D5185m | | 56 | | |
| | Barium | ppm | ASTM D5185m | | 0 | | |
| | Molybdenum | ppm | ASTM D5185m | 100 | 45 | | |
| | Manganese | ppm | ASTM D5185m | 450 | <1 | | |
| | Magnesium | ppm | ASTM D5185m | | 509 | | |
| | Calcium | ppm | ASTM D5185m | | 1719 | | |
| | Phosphorus | ppm | ASTM D5185m | | 732 | | |
| | Zinc | ppm | ASTM D5185m | | 972 | | |
| | Sulfur | ppm | ASTM D5185m | | 2888 | | |
| | Oxidation | Abs/.1mm | *ASTM D7414 | | 19.5 | | |
| | Base Number (BN) | | ASTM D2896 | | 9.8 | | |
| | Visc @ 100°C | cSt | ASTM D445 | 14.4 | 13.0 | | |



WILLIAM HAZEL Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : ML0001569 Received PO BOX 600 : 24 May 2024 Lab Number : 06190303 Tested CHANTILLY, VA : 27 May 2024 Unique Number : 11047055 Diagnosed : 29 May 2024 - Don Baldridge US 20153 Test Package : CONST (Additional Tests: TBN) Contact: SERVICE MANAGER Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. jimmy_elswick@wahazel.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (703)378-8300 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

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