

Machine Id VOLVO L90H 625060 Component Transmission (Auto) Fluid VOLVO AT 102 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

Gear wear is indicated.

CONTAMINATION

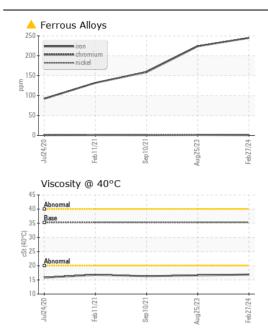
There is no indication of any contamination in the fluid.

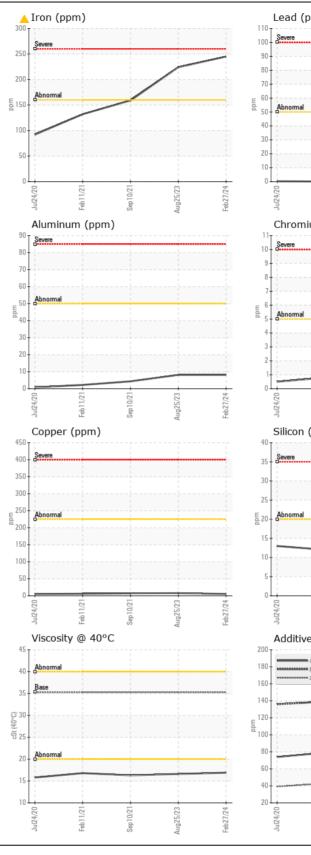
FLUID CONDITION

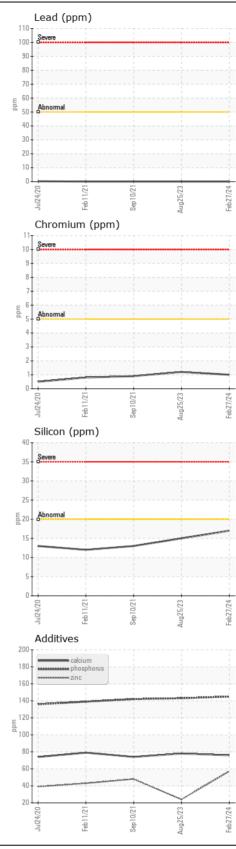
The condition of the fluid is acceptable for the time in service.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|--|--|---|---|---|---|---|
| Sample Number | | Client Info | | VCP437045 | VCP426221 | VCP326046 |
| Sample Date | | Client Info | | 27 Feb 2024 | 25 Aug 2023 | 10 Sep 2021 |
| Machine Age | hrs | Client Info | | 3331 | 2836 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 1500 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Filter Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Sample Status | | | | ABNORMAL | ABNORMAL | MARGINAL |
| Iron | ppm | ASTM D5185m | >160 | 245 | 224 | 159 |
| Chromium | ppm | ASTM D5185m | >5 | 1 | 1 | <1 |
| Nickel | ppm | ASTM D5185m | >5 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | 20 | 0 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >50 | 8 | 8 | 4 |
| Lead | ppm | ASTM D5185m | >50 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >225 | 5 | 8 | 7 |
| Tin | ppm | ASTM D5185m | >10 | <1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | LIGHT |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | |
| T CHOW MICLA | Scala | visuai | NONL | NONE | NONE | NONE |
| | 304141 | visuai | NONL | NONE | NONE | NONE |
| Silicon | ppm | ASTM D5185m | >20 | 17 | 15 | 13 |
| Silicon Potassium | | ASTM D5185m ASTM D5185m | | 17 1 | 15 3 | 13 0 |
| Silicon | ppm | ASTM D5185m ASTM D5185m WC Method | >20 >20 >20 >0.1 | 17 1 NEG | 15 3 NEG | 13 0 NEG |
| Silicon Potassium Water Silt | ppm ppm scalar | ASTM D5185m ASTM D5185m WC Method *Visual | >20 >20 >0.1 NONE | 17 1 NEG NONE | 15 3 NEG NONE | 13 0 NEG NONE |
| Silicon Potassium Water Silt Debris | ppm ppm scalar scalar | ASTM D5185m ASTM D5185m WC Method *Visual *Visual | >20 >20 >0.1 NONE NONE | 17 1 NEG NONE NONE | 15 3 NEG NONE NONE | 13 0 NEG NONE LIGHT |
| Silicon Potassium Water Silt Debris Sand/Dirt | ppm ppm scalar scalar scalar | ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual | >20 >20 >0.1 NONE NONE NONE | 17 1 NEG NONE NONE | 15 3 NEG NONE NONE NONE | 13 0 NEG NONE LIGHT NONE |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance | ppm ppm scalar scalar scalar scalar | ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual | >20 >20 >0.1 NONE NONE NONE NORML | 17 1 NEG NONE NONE NONE NORML | 15 3 NEG NONE NONE NONE NORML | 13 0 NEG NONE LIGHT NONE NORML |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor | ppm ppm scalar scalar scalar scalar scalar | ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual | >20 >20 >0.1 NONE NONE NONE NORML | 17 1 NEG NONE NONE NONE NORML NORML | 15 3 NEG NONE NONE NONE NORML NORML | 13 0 NEG NONE LIGHT NONE NORML NORML |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance | ppm ppm scalar scalar scalar scalar | ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual | >20 >20 >0.1 NONE NONE NONE NORML | 17 1 NEG NONE NONE NONE NORML | 15 3 NEG NONE NONE NONE NORML | 13 0 NEG NONE LIGHT NONE NORML |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor | ppm ppm scalar scalar scalar scalar scalar | ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual | >20 >20 >0.1 NONE NONE NONE NORML | 17 1 NEG NONE NONE NONE NORML NORML | 15 3 NEG NONE NONE NONE NORML NORML | 13 0 NEG NONE LIGHT NONE NORML NORML |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water | ppm ppm scalar scalar scalar scalar scalar scalar | ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual | >20 >20 >0.1 NONE NONE NONE NORML | 17 1 NEG NONE NONE NONE NORML NORML NEG | 15 3 NEG NONE NONE NORML NORML NEG | 13 0 NEG NONE LIGHT NONE NORML NORML NEG |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium | ppm ppm scalar scalar scalar scalar scalar scalar | ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m | >20 >20 >0.1 NONE NONE NORML NORML >0.1 | 17 1 NEG NONE NONE NORML NORML NEG | 15 3 NEG NONE NONE NORML NORML NEG 8 | 13 0 NEG NONE LIGHT NORML NORML NEG 5 |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron | ppm ppm scalar scalar scalar scalar scalar scalar gpm | ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m | >20 >20 >0.1 NONE NORME NORML >0.1 | 17 1 NEG NONE NONE NORML NORML NEG 7 26 | 15 3 NEG NONE NONE NORML NORML NEG 8 28 | 13 0 NEG NONE LIGHT NORML NORML NEG 5 36 |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium | ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm | ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m | >20 >20 >0.1 NONE NONE NORML NORML >0.1 | 17 1 NEG NONE NONE NORML NORML NEG 7 26 1 | 15 3 NEG NONE NONE NORML NORML NEG 8 28 0 | 13 0 NEG NONE LIGHT NORML NORML NORML NEG 5 36 0 |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum | ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm | ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m | >20 >20 >0.1 NONE NORME NORML >0.1 | 17 1 NEG NONE NONE NORML NORML NEG 7 26 1 0 | 15 3 NEG NONE NONE NORML NORML NEG 8 28 0 <1 | 13 0 NEG NONE LIGHT NORML NORML NEG 5 36 0 <1 |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese | ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm | ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | >20 >20 >0.1 NONE NORME NORML >0.1 187 0.0 0.0 0.0 0.0 | 17 1 NEG NONE NONE NORML NORML NEG 7 26 1 0 10 | 15 3 NEG NONE NONE NORML NORML NEG 8 28 0 <1 9 | 13 0 NEG NONE LIGHT NORML NORML NEG 5 36 0 <1 8 |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium | ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | >20 >20 >0.1 NONE NONE NORML >0.1 187 0.0 0.0 0.0 6.8 | 17 1 NEG NONE NONE NORML NORML NEG 7 26 1 0 10 2 | 15 3 NEG NONE NONE NORML NORML NEG 8 28 0 <1 9 0 | 13 0 NEG NONE LIGHT NONE NORML NEG 5 36 0 < 1 8 1 |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | >20 >20 >0.1 NONE NORML NORML >0.1 187 0.0 0.0 0.0 6.8 215 | 17 1 NEG NONE NONE NORML NORML NEG 7 26 1 0 10 10 2 2 76 | 15 3 NEG NONE NONE NORML NORML NEG 8 28 0 <1 9 0 78 | 13 0 NEG NONE LIGHT NORML NORML NEG 5 36 0 <1 8 1 1 74 |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm scalar scalar scalar scalar scalar gpm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | >20 >20 >0.1 NONE NORME NORML >0.1 187 0.0 0.0 0.0 6.8 215 445 | 17 1 NEG NONE NONE NORML NORML NEG 7 26 1 0 10 2 7 6 10 2 7 6 145 | 15 3 NEG NONE NONE NORML NORML NEG 8 28 0 28 0 4 1 9 0 78 143 | 13 0 NEG NONE LIGHT NORML NORML NEG 5 36 0 <1 8 1 74 142 |

Contact/Location: PM Services ? - RIPTAM









RIPA AND ASSOCIATES Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : VCP437045 Received 10149 FISHER AVENUE : 25 Apr 2024 Lab Number : 06160822 Tested TAMPA, FL : 26 Apr 2024 Unique Number : 10996245 : 29 Apr 2024 - Don Baldridge US 33619 Diagnosed Test Package : MOB 1 **Contact: PM Services** Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. PMServices@ripaconstruction.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: F:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: PM Services ? - RIPTAM Page 2 of 2