WEAR CONTAMINATION FLUID CONDITION

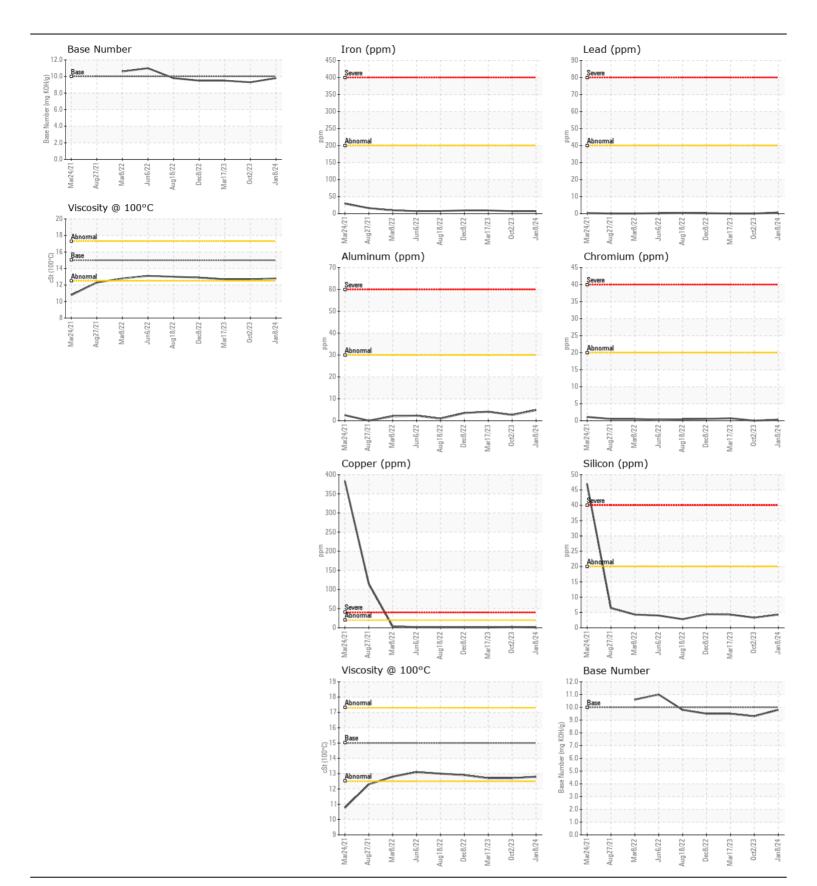
NORMAL NORMAL



VOLVO A30G 752144

Component Diesel Engine

| | | | S-3 (C | · · · · · · · · · · · · · · · · · · · | ., | | |
|---|------------------|----------|-------------|---------------------------------------|-------------|-------------|-------------|
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| | Sample Number | | Client Info | | VCP452125 | VCP429250 | VCP398779 |
| Resample at the next service interval to monitor. | Sample Date | | Client Info | | 08 Jan 2024 | 02 Oct 2023 | 17 Mar 2023 |
| | Machine Age | hrs | Client Info | | 5842 | 5308 | 4310 |
| | Oil Age | hrs | Client Info | | 0 | 0 | 500 |
| | Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| | Oil Changed | | Client Info | | Changed | N/A | Changed |
| | Filter Changed | | Client Info | | Changed | N/A | Changed |
| | Sample Status | | | | NORMAL | NORMAL | NORMAL |
| WEAR | Iron | ppm | ASTM D5185m | >200 | 7 | 7 | 9 |
| | Chromium | ppm | ASTM D5185m | >20 | <1 | 0 | <1 |
| All component wear rates are normal. | Nickel | ppm | ASTM D5185m | >10 | 1 | <1 | 4 |
| | Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| | Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| | Aluminum | ppm | ASTM D5185m | >30 | 5 | 3 | 4 |
| | Lead | ppm | ASTM D5185m | >40 | <1 | 0 | 0 |
| | Copper | ppm | ASTM D5185m | >20 | 1 | 2 | 1 |
| | Tin | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| | Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >20 | 4 | 3 | 4 |
| | Potassium | ppm | ASTM D5185m | | 1 | 0 | 0 |
| There is no indication of any contamination in the oil. | Fuel | 1-1- | WC Method | | <1.0 | <1.0 | <1.0 |
| | Water | | WC Method | >0.2 | NEG | NEG | NEG |
| | Glycol | | WC Method | | NEG | NEG | NEG |
| | Soot % | % | *ASTM D7844 | >3 | 0.4 | 0.4 | 0.4 |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 8.2 | 8.4 | 8.6 |
| | Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.6 | 21.5 | 22.1 |
| | Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| | Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| | Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | NEG |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | | 0 | 2 | 2 |
| | Boron | ppm | ASTM D5185m | 2.5 | 30 | 26 | 35 |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. | Barium | ppm | ASTM D5185m | 0.0 | <1 | 0 | 0 |
| | Molybdenum | ppm | ASTM D5185m | 0.7 | 42 | 47 | 50 |
| | Manganese | ppm | ASTM D5185m | 0.0 | <1 | <1 | 1 |
| | Magnesium | ppm | ASTM D5185m | 256 | 504 | 518 | 532 |
| | Calcium | ppm | ASTM D5185m | 2057 | 1612 | 1666 | 1737 |
| | Phosphorus | ppm | ASTM D5185m | | 932 | 940 | 972 |
| | Zinc | ppm | ASTM D5185m | 1223 | 1130 | 1140 | 1149 |
| | Sulfur | ppm | ASTM D5185m | 4079 | 3172 | 3017 | 3755 |
| | Oxidation | Abs/.1mm | *ASTM D7414 | | 19.8 | 19.5 | 20.0 |
| | Rasa Number (RN) | ma KOH/a | ASTM D2896 | 10 | 9.8 | 9.3 | 9.5 |
| | Visc @ 100°C | cSt | ASTM D445 | | V.0 | 12.7 | 12.7 |







Laboratory Sample No.

Lab Number : 06083322 Unique Number : 10870767

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : VCP452125

Test Package : MOB 1 (Additional Tests: TBN)

Received Tested Diagnosed

: 08 Feb 2024 : 08 Feb 2024

: 08 Feb 2024 - Wes Davis

10149 FISHER AVENUE

TAMPA, FL US 33619 Contact: PM Services

RIPA AND ASSOCIATES

PMServices@ripaconstruction.com T:

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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