WEAR CONTAMINATION FLUID CONDITION

NORMAL ABNORMAL ABNORMAL



VOLVO A25G 742348

Component

| Diesel Engine CHEVRON 15W40 (10 GAL) | | | | | | | |
|---|------------------|----------|-------------|-----------|--------------|--------------|----------|
| | | | | | | | |
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. | Sample Number | | Client Info | | ML0000145 | VCP413949 | |
| | Sample Date | | Client Info | | 02 Feb 2024 | 08 Aug 2023 | |
| | Machine Age | hrs | Client Info | | 3379 | 3050 | |
| | Oil Age | hrs | Client Info | | 329 | 0 | |
| | Filter Age | hrs | Client Info | | 329 | 0 | |
| | Oil Changed | | Client Info | | Changed | Changed | |
| | Filter Changed | | Client Info | | Changed | Changed | |
| | Sample Status | | | | ABNORMAL | ABNORMAL | |
| WEAR | Iron | ppm | ASTM D5185m | >200 | 2 | 3 | |
| | Chromium | ppm | ASTM D5185m | | _ <1 | 0 | |
| All component wear rates are normal. | Nickel | ppm | ASTM D5185m | | 0 | 0 | |
| | Titanium | ppm | ASTM D5185m | 7.0 | 1 | <1 | |
| | Silver | ppm | ASTM D5185m | >2 | 0 | 0 | |
| | Aluminum | ppm | ASTM D5185m | | 2 | <1 | |
| | Lead | ppm | ASTM D5185m | | 0 | 0 | |
| | Copper | ppm | ASTM D5185m | | 0 | <1 | |
| | Tin | ppm | ASTM D5185m | | <1 | <1 | |
| | Vanadium | ppm | ASTM D5185m | | 0 | 0 | |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | |
| | | | | | | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | | 4 | 4 | |
| There is a moderate amount of fuel present in the oil. | Potassium | ppm | ASTM D5185m | | 0 | <1 | |
| | Fuel | % | ASTM D3524 | | 4 3.0 | △ 3.7 | |
| | Water | | WC Method | >0.2 | NEG | NEG | |
| | Glycol | | WC Method | | NEG | NEG | |
| | Soot % | % | *ASTM D7844 | | 0.1 | 0.1 | |
| | Nitration | Abs/cm | | >20 | 6.9 | 6.8 | |
| | Sulfation | Abs/.1mm | *ASTM D7415 | | 21.2 | 20.6 | |
| | Silt | scalar | *Visual | NONE | NONE | NONE | |
| | Debris | scalar | *Visual | NONE | NONE | NONE | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | |
| | Appearance | scalar | *Visual | NORML | NORML | NORML | |
| | Odor | scalar | *Visual | NORML | NORML | NORML | |
| | Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | >50 | <1 | 1 | |
| Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. | Boron | ppm | ASTM D5185m | | 403 | 409 | |
| | Barium | ppm | ASTM D5185m | | 0 | 0 | |
| | Molybdenum | ppm | ASTM D5185m | | 82 | 91 | |
| | Manganese | ppm | ASTM D5185m | | <1 | <1 | |
| | Magnesium | ppm | ASTM D5185m | | 387 | 413 | |
| | Calcium | ppm | ASTM D5185m | | 1238 | 1433 | |
| | Phosphorus | ppm | ASTM D5185m | | 1054 | 1018 | |
| | Zinc | ppm | ASTM D5185m | | 1217 | 1230 | |
| | Sulfur | ppm | ASTM D5185m | | 3185 | ▲ 3902 | |
| | Ovidation | Aba/1mm | *ACTM D7414 | . 05 | 440 | 110 | |

14.8

6.5

11.5

14.9

6.8

11.7

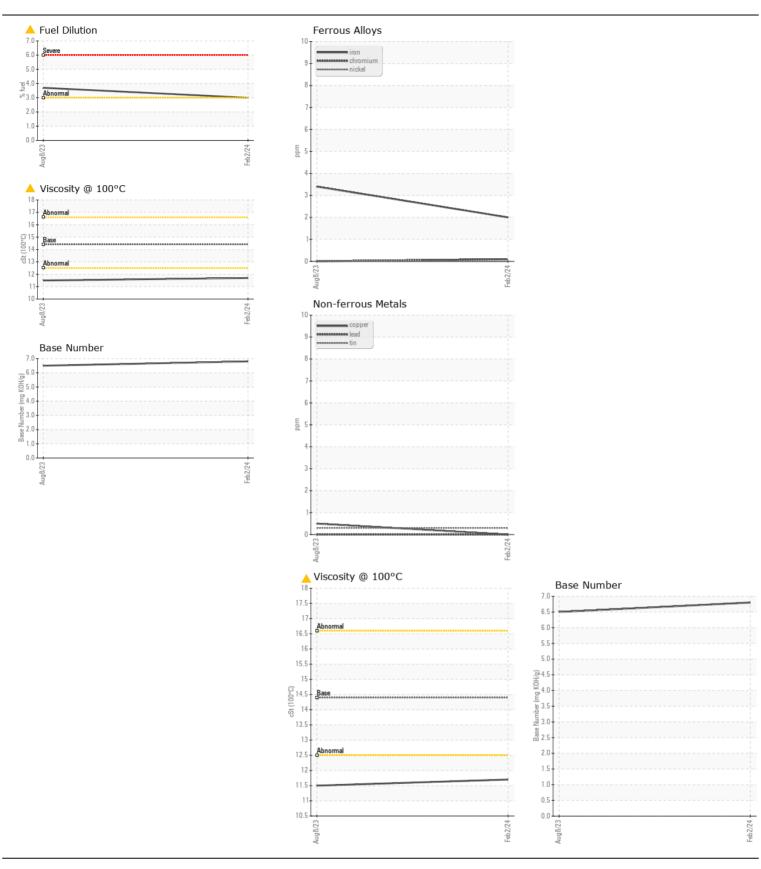
Abs/.1mm *ASTM D7414 >25

ASTM D445 14.4

Base Number (BN) mg KOH/g ASTM D2896

Oxidation

Visc @ 100°C cSt







Laboratory Unique Number: 10870369

Sample No.

: ML0000145 Lab Number : 06082924

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

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received **Tested** Diagnosed Test Package : CONST (Additional Tests: PercentFuel, TBN)

: 07 Feb 2024 : 08 Feb 2024

: 09 Feb 2024 - Don Baldridge

MCCLUNG-LOGAN EQUIPMENT CO - BALTIMORE 4601 WASHINGTON BOULEVARD $\mathsf{BALTIMORE},\,\mathsf{MD}$

US 21227 Contact: MARK CIULLA

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* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.