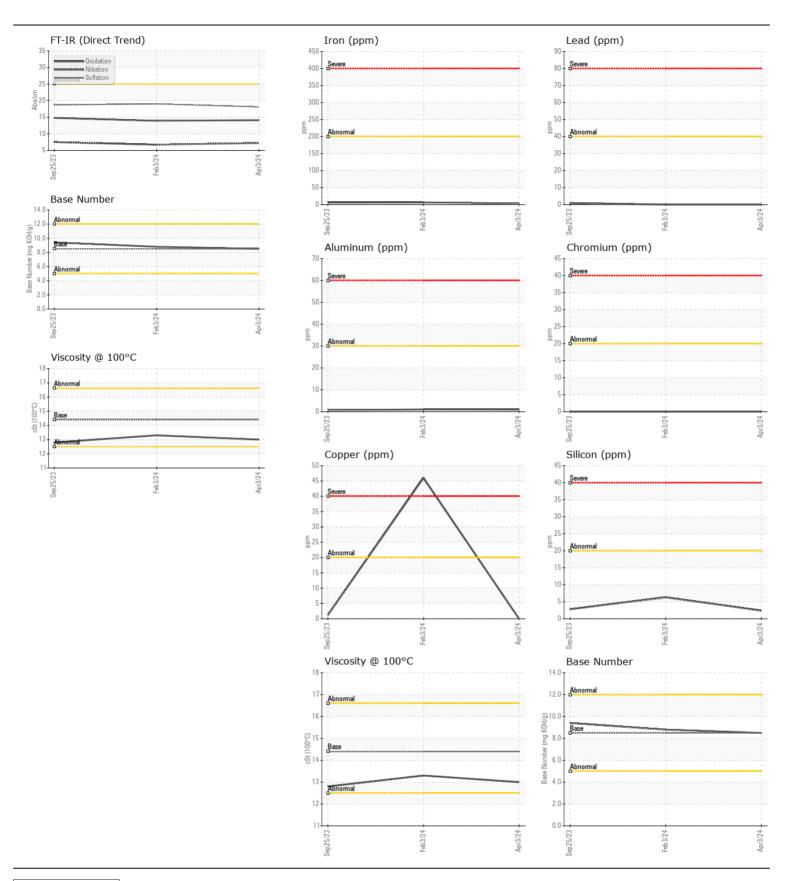
WEAR CONTAMINATION FLUID CONDITION **NORMAL NORMAL NORMAL**

[SPM688850]

VOLVO L150H 7240
Component
Diesel Engine

| DIESEL ENGINE OIL SAE 15W | 40 (GAL) | | | | | | |
|---|------------------|----------|-------------|-----------|-------------|-------------|-------------|
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| | Sample Number | | Client Info | | VCP436170 | VCP413982 | VCP415006 |
| Resample at the next service interval to monitor. | Sample Date | | Client Info | | 03 Apr 2024 | 03 Feb 2024 | 25 Sep 2023 |
| | Machine Age | hrs | Client Info | | 2120 | 1622 | 582 |
| | Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| | Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| | Oil Changed | | Client Info | | Changed | Changed | Changed |
| | Filter Changed | | Client Info | | Changed | Changed | Changed |
| | Sample Status | | | | NORMAL | ABNORMAL | NORMAL |
| WEAR | Iron | ppm | ASTM D5185m | >200 | 3 | 6 | 6 |
| All component wear rates are normal. | Chromium | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| | Nickel | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| | Titanium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| | Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| | Aluminum | ppm | ASTM D5185m | >30 | <1 | 1 | <1 |
| | Lead | ppm | ASTM D5185m | >40 | 0 | 0 | <1 |
| | Copper | ppm | ASTM D5185m | >20 | 0 | <u>4</u> 46 | 1 |
| | Tin | ppm | ASTM D5185m | >20 | 0 | <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 | 2 | 6 | 3 |
| | Potassium | ppm | ASTM D5185m | | 0 | 2 | 0 |
| There is no indication of any contamination in the oil. | Fuel | 1-1- | WC Method | >6.0 | <1.0 | <1.0 | <1.0 |
| | Water | | WC Method | >0.2 | NEG | NEG | NEG |
| | Glycol | | WC Method | | NEG | NEG | NEG |
| | Soot % | % | *ASTM D7844 | >3 | 0.2 | 0.2 | 0.1 |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 7.2 | 6.7 | 7.5 |
| | Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 18.1 | 19.0 | 18.7 |
| | 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 | >158 | <1 | 1 | 1 |
| | Boron | ppm | ASTM D5185m | 250 | 0 | 3 | 0 |
| 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 | 10 | 0 | 11 | 0 |
| | Molybdenum | ppm | ASTM D5185m | 100 | 61 | 58 | 59 |
| | Manganese | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | Magnesium | ppm | ASTM D5185m | 450 | 1076 | 783 | 990 |
| | Calcium | ppm | ASTM D5185m | 3000 | 1160 | 1019 | 1022 |
| | Phosphorus | ppm | ASTM D5185m | | 1097 | 872 | 1013 |
| | Zinc | ppm | ASTM D5185m | | 1360 | 1119 | 1272 |
| | Sulfur | ppm | ASTM D5185m | | 3978 | 3019 | 3015 |
| | Oxidation | Abs/.1mm | *ASTM D7414 | | 14.1 | 13.9 | 14.8 |
| | Base Number (BN) | | | | 8.5 | 8.8 | 9.4 |
| | Visc @ 100°C | cSt | ASTM D445 | 14.4 | 13.0 | 13.3 | 12.8 |





Certificate L2367

Laboratory Sample No.

: VCP436170 Lab Number : 06160018 Unique Number : 10995441

Received **Tested** Diagnosed

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 25 Apr 2024 : 25 Apr 2024

: 25 Apr 2024 - Wes Davis

Test Package : MOB 1 (Additional Tests: TBN)

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.

SIMS METAL MANAGEMENT

2500 S. PAULINA CHICAGO, IL US 60608

Contact: RYAN WISE ryan.wise@simsmm.com

T: F:

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