

## Machine Id VOLVO L260H 1290 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 40 (--- GAL)

| RECOMMENDATION  | Test               | UOM      | Method             | Limit/Abn | Current       | History1      | History2      |
|---|--------------------|----------|--------------------|-----------|---------------|---------------|---------------|
| Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.           | Sample Number      |          | Client Info        |           | ASC0011416    | ASC0010157    | VCP436528     |
|   | Sample Date        |          | Client Info        |           | 14 May 2024   | 10 Apr 2024   | 04 Mar 2024   |
|   | Machine Age        | hrs      | Client Info        |           | 6615          | 6351          | 6084          |
|   | Oil Age            | hrs      | Client Info        |           | 500           | 500           | 0             |
|   | Filter Age         | hrs      | Client Info        |           | 500           | 500           | 0             |
|   | Oil Changed        |          | Client Info        |           | Changed       | Changed       | Changed       |
|   | Filter Changed     |          | Client Info        |           | Changed       | Changed       | Changed       |
|   | Sample Status      |          |                    |           | NORMAL        | NORMAL        | NORMAL        |
| WEAR  | Iron               | ppm      | ASTM D5185m        | >100      | 1             | 0             | 4             |
|   | Chromium           | ppm      | ASTM D5185m        | >20       | 0             | 0             | <1            |
| All component wear rates are normal.  | Nickel             | ppm      | ASTM D5185m        |           | 0             | 0             | 0             |
|   | Titanium           | ppm      | ASTM D5185m        |           | 0             | 0             | <1            |
|   | Silver             | ppm      | ASTM D5185m        | >2        | 0             | 0             | 0             |
|   | Aluminum           | ppm      | ASTM D5185m        |           | 1             | 0             | 3             |
|   | Lead               | ppm      | ASTM D5185m        | >40       | 0             | 0             | 0             |
|   | Copper             | ppm      | ASTM D5185m        |           | 2             | 0             | 1             |
|   | Tin                | ppm      | ASTM D5185m        |           | <1            | 0             | 0             |
|   | Vanadium           | ppm      | ASTM D5185m        |           | 0             | 0             | <1            |
|   | White Metal        | scalar   | *Visual            | NONE      | NONE          | NONE          | NONE          |
|   | Yellow Metal       | scalar   | *Visual            | NONE      | NONE          | NONE          | NONE          |
|   | 0:1:               |          |                    | 05        | ••••••        | 4             | 4             |
| CONTAMINATION   | Silicon            | ppm      | ASTM D5185m        |           | 3             | 1             | 4             |
| There is no indication of any contamination in the oil.   | Potassium          | ppm      | ASTM D5185m        |           | <1            | 0             | 3             |
|   | Fuel               |          | WC Method          | >6.0      | <1.0          | <1.0          | <1.0          |
|   | Water              |          | WC Method          | >0.2      | NEG           | NEG           | NEG           |
|   | Glycol             | 0/       | WC Method          | 0         | NEG           | NEG           | NEG           |
|   | Soot %             | %        | *ASTM D7844        |           | 0.1           | 0.1           | 0.1           |
|   | Nitration          | Abs/cm   | *ASTM D7624        | >20       | 5.4           | 5.4           | 5.3           |
|   | Sulfation          | Abs/.1mm | *ASTM D7415        |           | 17.1          | 17.7          | 17.3          |
|   | Silt               | scalar   | *Visual            | NONE      | NONE          | NONE          | NONE          |
|   | Debris             | scalar   | *Visual            | NONE      | NONE          | NONE          | NONE          |
|   | Sand/Dirt          | scalar   | *Visual            | NONE      | NONE<br>NORML | NONE<br>NORML | NONE<br>NORML |
|   | Appearance<br>Odor | scalar   | *Visual            | NORML     |               | NORML         | NORML         |
|   |                    | scalar   | *Visual<br>*Visual | NORML     | NORML         |               |               |
|   | Emulsified Water   | scalar   | visuai             | >0.2      | NEG           | NEG           | NEG           |
| FLUID CONDITION   | Sodium             | ppm      | ASTM D5185m        |           | 2             | <1            | 2             |
| The DN years this discuss the table of the black is a stable of the limits representation in the  | Boron              | ppm      | ASTM D5185m        | 250       | 6             | <1            | 4             |
| 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             | 0             | 0             |
|   | Molybdenum         | ppm      | ASTM D5185m        | 100       | 59            | 60            | 88            |
|   | Manganese          | ppm      | ASTM D5185m        |           | <1            | 0             | 0             |
|   | Magnesium          | ppm      | ASTM D5185m        |           | 936           | 1038          | 1478          |
|   | Calcium            | ppm      | ASTM D5185m        |           | 1042          | 1205          | 1613          |
|   | Phosphorus         | ppm      | ASTM D5185m        | 1150      | 1040          | 1145          | 1564          |
|   | Zinc               | ppm      | ASTM D5185m        | 1350      | 1240          | 1302          | 1921          |
|   | Sulfur             | ppm      | ASTM D5185m        | 4250      | 3663          | 4007          | 5322          |
|   | <b>O I I I</b>     |          | ALOTH DEVIC        | ~ -       |               | 10.0          | 10.0          |

Oxidation

Visc @ 100°C cSt

13.6

9.0

13.6

13.3

8.9

13.9

12.8

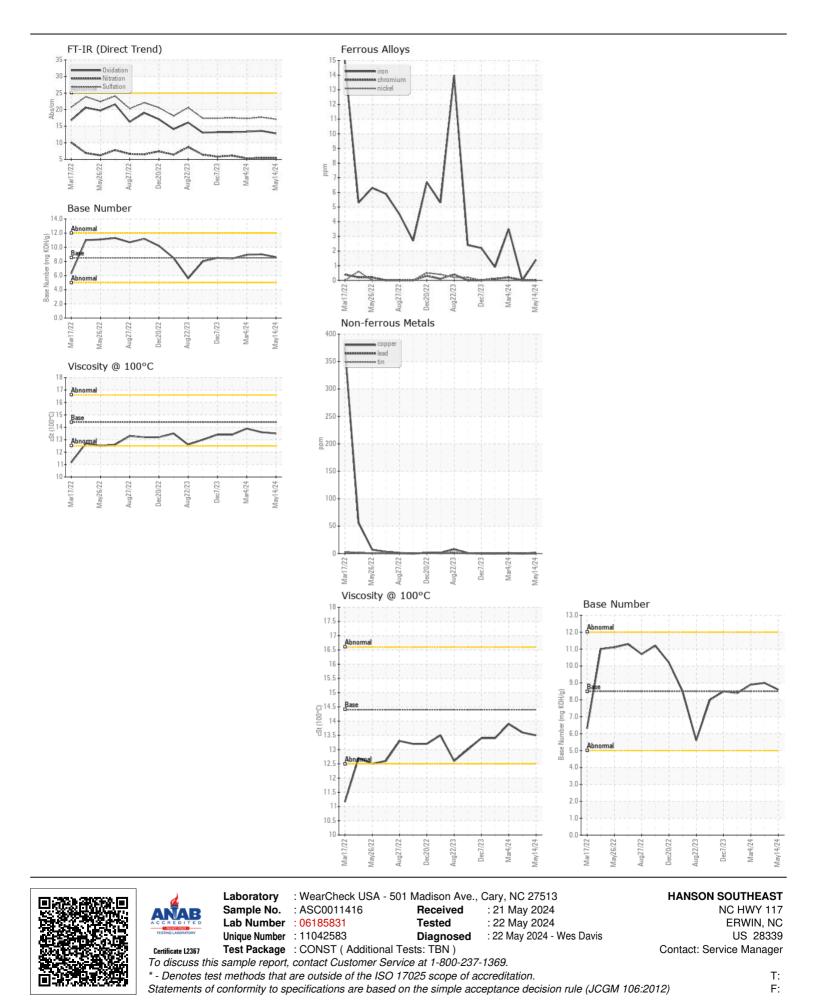
8.6

13.5

Abs/.1mm \*ASTM D7414 >25

ASTM D445 14.4

Base Number (BN) mg KOH/g ASTM D2896 8.5



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Contact/Location: Service Manager - HANERW Page 2 of 2