



## VOLVO A30G 742110

**Diesel Engine** 

## VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

|   |                  |            | · · · · · · · · · · · · · · · · · · · |           |              |             |             |
|---|------------------|------------|---------------------------------------|-----------|--------------|-------------|-------------|
| RECOMMENDATION  | Test             | UOM        | Method                                | Limit/Abn | Current      | History1    | History2    |
| O'll and fillen share as the time of a multiplice has been noted. No  | Sample Number    |            | Client Info                           |           | VCP443015    | VCP444138   | VCP432177   |
| Oil and filter change at the time of sampling has been noted. No<br>corrective action is recommended at this time. Resample at the next<br>service interval to monitor. | Sample Date      |            | Client Info                           |           | 06 Jun 2024  | 27 Feb 2024 | 25 Jan 2024 |
|   | Machine Age      | hrs        | Client Info                           |           | 12461        | 12015       | 11532       |
|   | Oil Age          | hrs        | Client Info                           |           | 500          | 500         | 0           |
|   | Filter Age       | hrs        | Client Info                           |           | 0            | 0           | 0           |
|   | Oil Changed      |            | Client Info                           |           | Changed      | Changed     | N/A         |
|   | Filter Changed   |            | Client Info                           |           | Changed      | Changed     | Changed     |
|   | Sample Status    |            |                                       |           | ATTENTION    | ATTENTION   | ATTENTION   |
| WEAR  | Iron             | ppm        | ASTM D5185m                           | >100      | 3            | 3           | 2           |
|   | Chromium         | ppm        | ASTM D5185m                           |           | 0            | 0           | 0           |
| All component wear rates are normal.  | Nickel           | ppm        | ASTM D5185m                           |           | 0            | <1          | <1          |
|   | Titanium         | ppm        | ASTM D5185m                           |           | 0            | 0           | 0           |
|   | Silver           | ppm        | ASTM D5185m                           | >2        | 0            | 0           | 0           |
|   | Aluminum         | ppm        | ASTM D5185m                           |           | <1           | 2           | 1           |
|   | Lead             | ppm        | ASTM D5185m                           |           | 0            | <1          | 0           |
|   | Copper           | ppm        | ASTM D5185m                           |           | 0            | <1          | 0           |
|   | Tin              | ppm        | ASTM D5185m                           |           | 0            | <1          | <1          |
|   | Vanadium         | ppm        | ASTM D5185m                           | 1.0       | 0            | <1          | 0           |
|   | White Metal      | scalar     | *Visual                               | NONE      | NONE         | NONE        | NONE        |
|   | Yellow Metal     | scalar     | *Visual                               | NONE      | NONE         | NONE        | NONE        |
|   |                  |            |                                       |           |              |             |             |
| CONTAMINATION   | Silicon          | ppm        | ASTM D5185m                           | >25       | 3            | 3           | 3           |
| Light fuel dilution occurring.  | Potassium        | ppm        | ASTM D5185m                           | >20       | <1           | 2           | 1           |
|   | Fuel             | %          | ASTM D3524                            |           | <b>A</b> 3.0 | <1.0        | <1.0        |
|   | Water            |            | WC Method                             | >0.2      | NEG          | NEG         | NEG         |
|   | Glycol           |            | WC Method                             |           | NEG          | NEG         | NEG         |
|   | Soot %           | %          | *ASTM D7844                           | >3        | 0.3          | 0.3         | 0.3         |
|   | Nitration        | Abs/cm     | *ASTM D7624                           | >20       | 7.0          | 7.5         | 7.3         |
|   | Sulfation        | Abs/.1mm   | *ASTM D7415                           |           | 20.5         | 20.2        | 20.3        |
|   | 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                           |           | 4            | 2           | 3           |
|   | Boron            |            | ASTM D5185m                           | 25        | 38           | 44          | 35          |
| Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.                               | Barium           | ppm        | ASTM D5185m                           |           | 0            | 0           | <1          |
|   | Molybdenum       | ppm<br>ppm | ASTM D5185m                           |           | 39           | 40          | 44          |
|   | Manganese        | ppm        | ASTM D5185m                           |           | <1           | <1          | <1          |
|   | Magnesium        | ppm        | ASTM D5185m                           |           | 549          | 465         | 384         |
|   | Calcium          | ppm        | ASTM D5185m                           |           | 1554         | 1593        | 1546        |
|   | Phosphorus       | ppm        | ASTM D5185m                           |           | 920          | 912         | 885         |
|   | Zinc             | ppm        | ASTM D5185m                           |           | 1038         | 1104        | 1024        |
|   | Sulfur           | ppm        | ASTM D5185m                           |           | 3409         | 3398        | 2750        |
|   | Oxidation        |            |                                       |           | 17.3         | 17.8        | 17.6        |
|   |                  |            |                                       | ~LJ       | 17.5         | 17.0        | 17.0        |

8.6

12.1

9.3

12.3

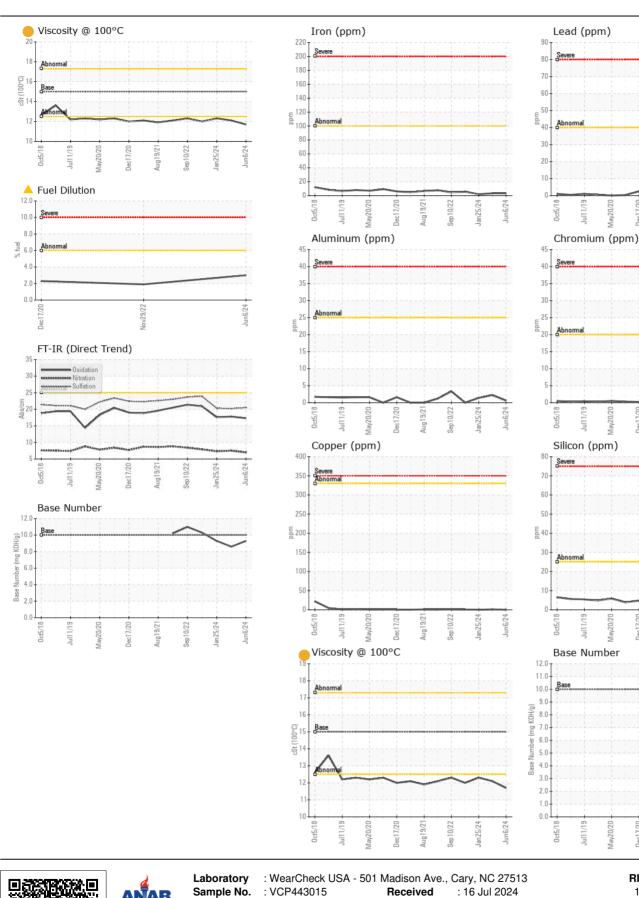
9.3

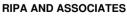
11.7

Base Number (BN) mg KOH/g ASTM D2896 10

ASTM D445 15.0

Visc @ 100°C cSt





Sep 10/22

Jun6/24

F:

an25/24

10149 FISHER AVENUE TAMPA, FL US 33619 **Contact: PM Services** PMServices@ripaconstruction.com T:

Aug19/21

Aug 19/2

en 10/22

E

Jer17/7

0c/17/20

Dec17/20 Aug 19/21 Sep 10/22

7/17/7C

an 25/24

In6/74

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.

Lab Number : 06237486

Unique Number : 11126320

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

Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

Tested

Diagnosed

: 18 Jul 2024

: 18 Jul 2024 - Sean Felton

Certificate L2367

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