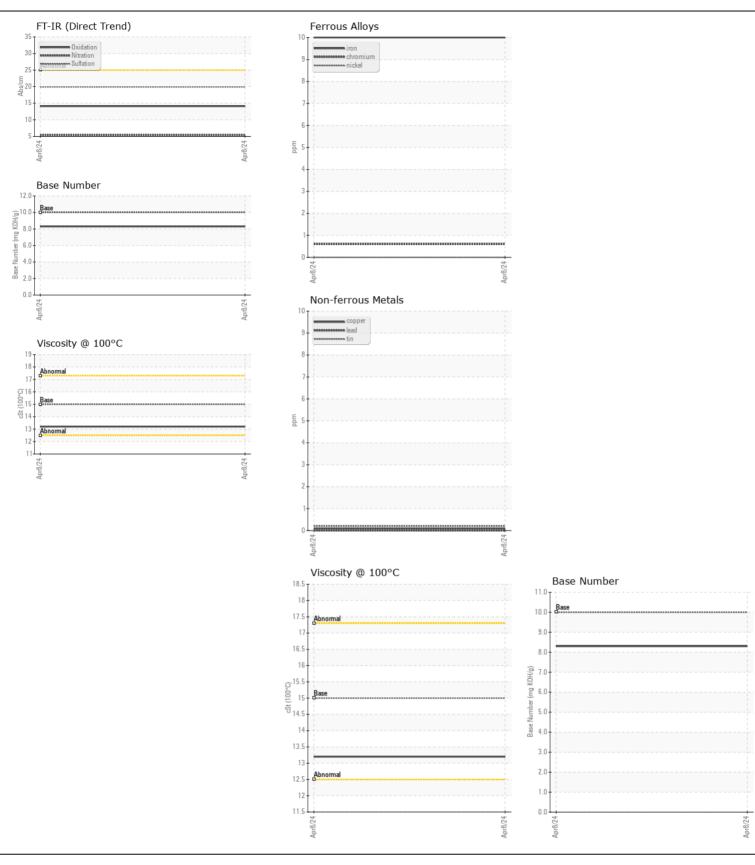


## Machine Id **VOLVO L70H 624035**

Diesel Engine

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

| VOLVO ULTRA DIESEL ENGIN                                                                                                                  | _                       |          | , , , ,                    | ···-/     |             |          |          |
|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------|----------------------------|-----------|-------------|----------|----------|
| RECOMMENDATION                                                                                                                            | Test                    | UOM      | Method                     | Limit/Abn | Current     | History1 | History2 |
|                                                                                                                                           | Sample Number           |          | Client Info                |           | ASC0004548  |          |          |
| Resample at the next service interval to monitor.                                                                                         | Sample Date             |          | Client Info                |           | 08 Apr 2024 |          |          |
|                                                                                                                                           | Machine Age             | hrs      | Client Info                |           | 1966        |          |          |
|                                                                                                                                           | Oil Age                 | hrs      | Client Info                |           | 500         |          |          |
|                                                                                                                                           | Filter Age              | hrs      | Client Info                |           | 500         |          |          |
|                                                                                                                                           | Oil Changed             |          | Client Info                |           | Changed     |          |          |
|                                                                                                                                           | Filter Changed          |          | Client Info                |           | Changed     |          |          |
|                                                                                                                                           | Sample Status           |          |                            |           | NORMAL      |          |          |
| WEAD                                                                                                                                      | Iron                    | nnm      | ASTM D5185m                | . 100     | 10          |          |          |
| WEAR All component wear rates are normal.                                                                                                 | Chromium                | ppm      | ASTM D5185m                |           | 10<br><1    |          |          |
|                                                                                                                                           | Nickel                  | ppm      | ASTM D5185m                |           | 0           |          |          |
|                                                                                                                                           | Titanium                | ppm      | ASTM D5185m                | >4        | 0           |          |          |
|                                                                                                                                           | Silver                  | ppm      | ASTM D5185m                | . 2       | 0           |          |          |
|                                                                                                                                           | Aluminum                | ppm      | ASTM D5185m                |           | 12          |          |          |
|                                                                                                                                           | Lead                    | ppm      | ASTM D5185m                |           | 0           |          |          |
|                                                                                                                                           | Copper                  | ppm      | ASTM D5185m                |           | 0<br><1     |          |          |
|                                                                                                                                           | Tin                     | ppm      | ASTM D5185m                |           | <1<br><1    |          |          |
|                                                                                                                                           | Vanadium                | ppm      | ASTM D5185m                | 710       | 0           |          |          |
|                                                                                                                                           | White Metal             | scalar   | *Visual                    | NONE      | NONE        |          |          |
|                                                                                                                                           | Yellow Metal            | scalar   | *Visual                    | NONE      | NONE        |          |          |
|                                                                                                                                           |                         |          | visuai                     |           | ·····       |          |          |
| CONTAMINATION                                                                                                                             | Silicon                 | ppm      | ASTM D5185m                | >25       | 6           |          |          |
|                                                                                                                                           | Potassium               | ppm      | ASTM D5185m                | >20       | <1          |          |          |
| There is no indication of any contamination in the oil.                                                                                   | Fuel                    |          | WC Method                  | >5        | <1.0        |          |          |
|                                                                                                                                           | Water                   |          | WC Method                  | >0.2      | NEG         |          |          |
|                                                                                                                                           | Glycol                  |          | WC Method                  |           | NEG         |          |          |
|                                                                                                                                           | Soot %                  | %        | *ASTM D7844                | >3        | 0.1         |          |          |
|                                                                                                                                           | Nitration               | Abs/cm   | *ASTM D7624                | >20       | 5.4         |          |          |
|                                                                                                                                           | Sulfation               | Abs/.1mm | *ASTM D7415                | >30       | 19.9        |          |          |
|                                                                                                                                           | Silt                    | scalar   | *Visual                    | NONE      | NONE        |          |          |
|                                                                                                                                           | Debris                  | scalar   | *Visual                    | NONE      | NONE        |          |          |
|                                                                                                                                           | Sand/Dirt               | scalar   | *Visual                    | NONE      | NONE        |          |          |
|                                                                                                                                           | Appearance              | scalar   | *Visual                    | NORML     | NORML       |          |          |
|                                                                                                                                           | Odor                    | scalar   | *Visual                    | NORML     | NORML       |          |          |
|                                                                                                                                           | <b>Emulsified Water</b> | scalar   | *Visual                    | >0.2      | NEG         |          |          |
| ELUID CONDITION                                                                                                                           | C = ali:                |          | ACTM DE10E                 |           | 4           |          |          |
| FLUID CONDITION                                                                                                                           | Sodium<br>Boron         | ppm      | ASTM D5185m                | 2.5       | <1<br>468   |          |          |
| 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<br>ASTM D5185m | 0.0       | 0           |          |          |
|                                                                                                                                           | Molybdenum              | ppm      | ASTM D5185m                |           | 87          |          |          |
|                                                                                                                                           | Manganese               | ppm      | ASTM D5185m                |           | <1          |          |          |
|                                                                                                                                           | Magnesium               | ppm      | ASTM D5185m                |           | 502         |          |          |
|                                                                                                                                           | Calcium                 | ppm      | ASTM D5185m                |           | 1417        |          |          |
|                                                                                                                                           | Phosphorus              | ppm      | ASTM D5185m                |           | 1156        |          |          |
|                                                                                                                                           | Zinc                    | ppm      | ASTM D5185m                |           | 1286        |          |          |
|                                                                                                                                           | Sulfur                  | ppm      | ASTM D5185m                |           | 3965        |          |          |
|                                                                                                                                           | Oxidation               | Abs/.1mm | *ASTM D7414                |           | 14.1        |          |          |
|                                                                                                                                           | Base Number (BN)        |          | ASTM D2896                 |           | 8.3         |          |          |
|                                                                                                                                           | Visc @ 100°C            | cSt      | ASTM D2030                 |           | 13.2        |          |          |
|                                                                                                                                           | 1100 @ 100 0            | 001      | , IO I IVI DTTO            | 10.0      | 10.2        |          |          |







Certificate L2367

Report Id: VOLVO8531 [WUSCAR] 06149951 (Generated: 04/17/2024 19:30:42) Rev: 1

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : ASC0004548 Lab Number : 06149951

Received **Tested** Unique Number : 10980029

Diagnosed Test Package : CONST (Additional Tests: TBN)

: 16 Apr 2024 : 17 Apr 2024 : 17 Apr 2024 - Wes Davis

365 - ASCENDUM MACHINERY INC - SAVANNAH

54 MEDLINE DR RICHMOND HILL, GA US 31324

Contact: JESSE WILSON jesse.wilson@ascendummachinery.com

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)

Submitted By: AMANDA KARI

F: (912)964-9515

T: