## **OIL ANALYSIS REPORT**

#### 2300558-MYC VOLVO D4-300I-E 2004033669 - STARBOARD DIESEL ENGINE

Sample No: VPA058283

**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

#### SAMPLE INFORMATION VPA058283 Sample Number **Helmuts Marine Service** Sample Date 13 Nov 2023 Machine Hours 109 **Oil Hours** 109 Oil Changed Changed NORMAL Sample Status **OIL CONDITION** Visc @ 100°C cSt 14.9 Base Number (BN) mg KOH/g 10.1 Oxidation (PA) % 69 CONTAMINATION % NEG Water % Soot % 0.1 Nitration (PA) % 54 Sulfation (PA) % 60 Glycol % NEG Fuel % <1.0 Silicon 10 ppm Sodium 2 ppm Potassium 3 ppm WEAR METALS Iron 13 ppm 3 Copper ppm Lead ■ <1 ppm Tin 0 ppm Aluminum ppm 8 Chromium <1 ppm 114 Molybdenum ppm Nickel ■ <1 ppm Titanium ppm **||** <1 Silver 0 ppm Manganese <1 ppm Vanadium ppm <1 **ADDITIVES** Calcium 1709 ppm Magnesium 538 ppm Zinc ppm 1265 Phosphorus ppm 920 Barium 0 ppm 431 Boron ppm Depot:

Unique No: 10755172 Signed: Jonathan Hester **Report Date:** 27 Nov 2023

619 Canal Street SAN RAFAEL. CA US 94901-3545 Contact: NADINE URCIUOLI SERVICE@HEI MUTSMARINE COM T: x: F: x:

## Diagnosis

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



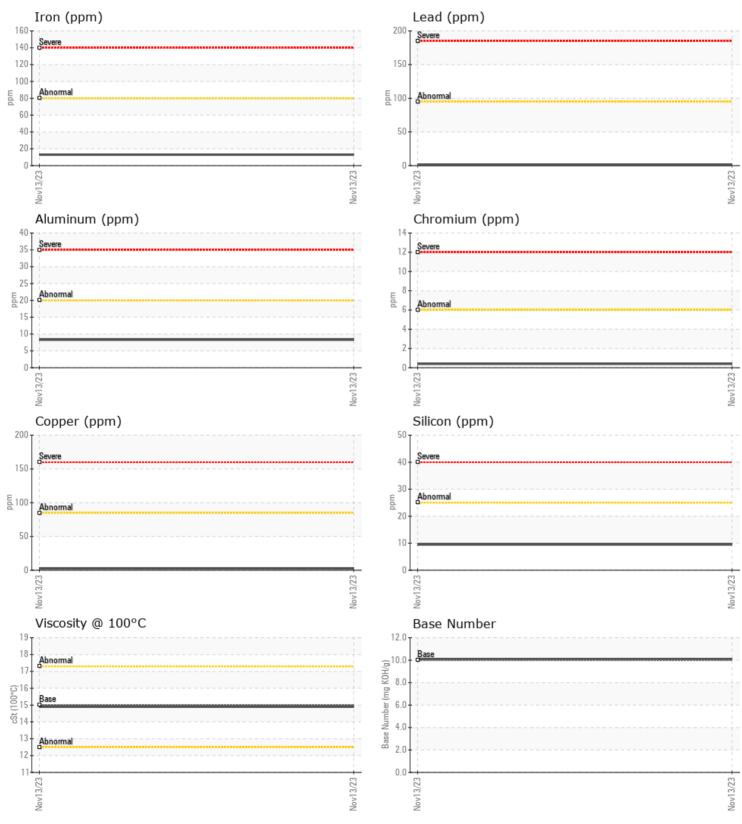
Contact/Location: NADINE URCIUOLI - VP152741

VP152741

# **OIL ANALYSIS REPORT**



### GRAPHS



Report Id: VP152741 [WUSCAR] 06016028 (Generated: 11/28/2023 16:28:47) Rev: 1

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