



NADINE URCIUOLI MAYTAG VOLVO PENTA A 1093632 - STERNDRIVE - STARBOARD DIESEL ENGINE

Sample No: VPA051761

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

SAMPLE INFORMAT	TION			
Sample Number		VPA051761	 	
Sample Date		01 Aug 2023	 	
Machine Hours		140	 	
Oil Hours		140	 	
Oil Changed		Not Changd	 	
Sample Status		NORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	13.3	 	
Base Number (BN)	mg KOH/g	10.1	 	
Oxidation (PA)	%	57	 	
Oxidation (171)	70			
CONTAMINATION				
Soot %	%	■ 0	 	
Nitration (PA)	%	40	 	
Sulfation (PA)	%	52	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	■8	 	
Sodium	ppm	<u></u> 2	 	
Potassium	ppm	■ <1	 	
WEAR METALS				
Iron	ppm	9	 	
Copper	ppm	3	 	
Lead	ppm	■<1	 	
Tin	ppm	■ <1	 	
Aluminum	ppm	7	 	
Chromium	ppm	□ <1	 	
Molybdenum	ppm	60	 	
Nickel	ppm	1	 	
Titanium	ppm	■0	 	
Silver	ppm	0	 	
Manganese	ppm	■ <1	 	
Vanadium	ppm	<1	 	
ADDITIVES				
		=404:		
Calcium	ppm	1244	 	
Magnesium	ppm	■ 992	 	
Zinc	ppm	1351	 	
Phosphorus	ppm	1106	 	
Barium	ppm	0	 	
Boron	ppm	7	 	

Helmuts Marine Service

619 Canal Street SAN RAFAEL, CA US 94901-3545 Contact: NADINE URCIUOLI SERVICE@HELMUTSMARINE.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 acceptable for the time in service.

Depot: VP152741
Unique No: 10591421
Signed: Sean Felton
Report Date: 10 Aug 2023

OIL ANALYSIS REPORT



