



BELLA LUNA VOLVO PENTA A361808 - STARBOARD DIESEL ENGINE

Sample No: VPA049849

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

SAMPLE INFORMAT	TION			
Sample Number		VPA049849	VPA046506	
Sample Date		31 Oct 2023	28 Mar 2023	
Machine Hours		0	552	
Oil Hours		50	50	
Oil Changed		N/A	Changed	
Sample Status		NORMAL	NORMAL	
OIL CONDITION				
Visc @ 100°C	cSt	13.3	13.3	
Base Number (BN)	mg KOH/g	10.1	1 0.1	
Oxidation (PA)	%	55	55	
CONTAMINATION				
Soot %	%	0.2	□0.2	
Nitration (PA)	%	43	43	
` '	%	52	53	
Sulfation (PA)	%	NEG	0.0	
Glycol	%	NEG <1.0	<1.0	
Fuel				
Silicon	ppm	■ 5	■ 8	
Sodium	ppm	8	22	
Potassium	ppm	■ <1	- <1	
WEAR METALS				
Iron	ppm	21	2 8	
Copper	ppm	9	9	
Lead	ppm	14	□ 15	
Tin	ppm	<1	1	
Aluminum	ppm	■18	71	
Chromium	ppm	2	4	
Molybdenum	ppm	69	<u></u> 57	
Nickel	ppm	1	1	
Titanium	ppm	■0	□0	
Silver	ppm	■ <1	0	
Manganese	ppm	■0	□ <1	
Vanadium	ppm	0	<1	
ADDITIVES				
Calcium	nnm	1102	□ 1011	
Magnesium	ppm	102 1083	□ 1011 □ 900	
_	ppm		□ 1156	
Zinc	ppm	1331		
Phosphorus	ppm	1180	979	
Barium	ppm	4	0	
Boron	ppm	■0	2	

Outstanding Marine

PO Box 274 GALENA, MD US 21635 Contact: Ronda Bolinger rlwb@verizon.net

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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.

Depot:VP153685Unique No:10724905Signed:Sean FeltonReport Date:03 Nov 2023

OIL ANALYSIS REPORT



