



BLAKE LANTZ PATRICK/502824-5250 VOLVO PENTA A326432 - STARBOARD DIESEL ENGINE

Sample No: VPA059202

Oil Type: VOLVO VDS-4.5 Premium Motor Oil 15W40

Sample Number		VPA059202	VPA056227	
Sample Date		12 Mar 2024	22 Mar 2023	
Machine Hours		739	640	
Oil Hours		0	0	
Oil Changed		Changed	Changed	
Sample Status		NORMAL	NORMAL	
OIL CONDITION				
Visc @ 100°C	cSt	13.1	□ 13.9	
Base Number (BN)	mg KOH/g	10.5	11.1	
Oxidation (PA)	%	68	63	
CONTAMINATION				
Water	%	NEG	NEG	
Soot %	%	■ 0.2	□ 0.2	
Nitration (PA)	%	45	43	
Sulfation (PA)	%	56	57	
Glycol	%	NEG	NEG	
Fuel	%	<1.0	<1.0	
Silicon	ppm	7	■8	
Sodium	ppm	■ 0	4	
Potassium	ppm	1	< 1	
WEAR METALS				
Iron	ppm	6	<u>5</u>	
Copper	ppm	5	3	
Lead	ppm	3	2	
Tin	ppm	■<1	- <1	
Aluminum	ppm	2	3	
Chromium	ppm	■<1	- <1	
Molybdenum	ppm	■ 56	4 6	
Nickel	ppm	■<1	- <1	
Titanium	ppm	■ <1	0	
Silver	ppm	■ 0	0	
Manganese	ppm	■ <1	- <1	
Vanadium	ppm	<1	<1	
ADDITIVES				
Calcium	ppm	1409	1274	
Magnesium	ppm	689	682	
Zinc	ppm	1058	■1018	
Phosphorus	ppm	916	■881	
Barium	ppm	0	2	
Boron	ppm	40	5 1	

Endor Marine LLC - Coastal Marine - 152124 4300 11th Ave. NW SEATTLE, WA US 98107 Contact: WILLOW YANARELLA service@coastalmarineengine.com T: (206)784-3703

Diagnosis

F: (206)784-8823

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:VP794951Unique No:10928144Signed:Don BaldridgeReport Date:18 Mar 2024

OIL ANALYSIS REPORT



