



DAVE HOLT PATRICK/502207-5250 VOLVO PENTA L 160124932 - STARBOARD DIESEL ENGINE

Sample No: VPA062546

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

SAMPLE INFORMAT	TION			
Sample Number		VPA062546	VPA044970	
Sample Date		21 May 2024	07 Jul 2023	
Machine Hours		467	418	
Oil Hours		0	0	
Oil Changed		Changed	Changed	
Sample Status		NORMAL	NORMAL	
OIL CONDITION				
Visc @ 100°C	cSt	■13.6	□13.9	
Base Number (BN)		■9.3	9.1	
Oxidation (PA)	%	58	56	
CONTAMINATION				
Water	%	NEG	NEG	
Soot %	%	■0.2	■0.2	
Nitration (PA)	%	55	68	
Sulfation (PA)	%	52	52	
Glycol	%	NEG	NEG	
Fuel	%	<1.0	<1.0	
Silicon	ppm	■7	□4	
Sodium	ppm	1	3	
Potassium	ppm	2	6	
WEAR METALS				
Iron	ppm	10	□ 10	
Copper	ppm	6	1 6	
Lead	ppm	■<1	2	
Tin	ppm	<1	= <1	
Aluminum	ppm	2	2	
Chromium	ppm	 <1	<1	
Molybdenum	ppm	■ 54	16	
Nickel	ppm	1	_2	
Titanium	ppm	■ <1	<u> </u>	
Silver	ppm	= <1	0	
Manganese	ppm	■<1		
Vanadium	ppm	_ <1	<1	
ADDITIVES				
Calcium	ppm	1144	□ 1286	
Magnesium	ppm	904	791	
Zinc		■ 1240	□ 946	
Phosphorus	ppm	■ 1240 ■ 1013	□ 783	
	ppm			
Barium	ppm	0	□ 0	
Boron	ppm	10	7 2	

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

No corrective action is recommended at this time. Resample at the next service interval to monitor.Metal levels are typical for a new component breaking in. 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:11045492Signed:Sean FeltonReport Date:28 May 2024

OIL ANALYSIS REPORT



