



BRUCE RANNEY VOLVO PENTA 7008480215 - STARBOARD DIESEL ENGINE

Sample No: VPA059824

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

SAMPLE INFORMAT	TION				
Sample Number		VPA059824	VPA044506		
Sample Date		29 Oct 2023	25 Oct 2022		
Machine Hours		0	323		
Oil Hours		0	0		
Oil Changed		N/A	Changed		
Sample Status		NORMAL	NORMAL		
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OIL CONDITION					
Visc @ 100°C	cSt	14.3	■13.4		
Base Number (BN)	mg KOH/g	■8.1	11.4		
Oxidation (PA)	%	61	59		
CONTAMINATION					
Soot %	0/.	- 0.2	5 04		
Nitration (PA)	%	■ 0.3 48	■ 0.4 49		
Sulfation (PA)	%	55	57		
Glycol	%	NEG	NEG		
Fuel	%	<1.0	<1.0		
Silicon		₹1.0	8		
Sodium	ppm	2	1		
Potassium	ppm	6	0		
Totassium	ррш				
WEAR METALS					
Iron	ppm	6	2 5		
Copper	ppm	12	1 4		
Lead	ppm	■ 0	- <1		
Tin	ppm	■ 0	- <1		
Aluminum	ppm	■ <1	- <1		
Chromium	ppm	■<1	1		
Molybdenum	ppm	4	■58		
Nickel	ppm	■<1	2		
Titanium	ppm	■ 0	□0		
Silver	ppm	■<1	0		
Manganese	ppm	■ <1	- <1		
Vanadium	ppm	0	0		
ADDITIDDA					
Calcium	ppm	1776	□1044		
Magnesium	ppm	■146	933		
Zinc	ppm	1050	1241		
Phosphorus	ppm	■985	992		
Barium	ppm	■ 3	□0		
Boron	ppm	164	1		

BAY MARINE

3 E MADISON ST WAUKEGAN, IL US 60085 Contact: BRENDAN COWHEY brendan@baymarine.net T: (847)336-2628 F:

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: VP1174336
Unique No: 10715311
Signed: Don Baldridge
Report Date: 31 Oct 2023

OIL ANALYSIS REPORT



