



ANDREW PRUSSACK F VOLVO PENTA 7011349520 - STARBOARD DIESEL ENGINE

Sample No: VPA033623

Oil Type: VOLVO PENTA VDS 4.5

SAMPLE INFORMAT	TION			
Sample Number		VPA033623	 	
Sample Date		12 Jul 2023	 	
Machine Hours		495	 	
Oil Hours		41	 	
Oil Changed		Not Changd	 	
Sample Status		NORMAL	 	
Sample Status		NORIVIAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	■13.7	 	
Base Number (BN)	mg KOH/g	■8.9	 	
Oxidation (PA)	%	65	 	
CONTAMINATION				
Soot %	%	■ 0.1	 	
Nitration (PA)	%	54	 	
Sulfation (PA)	%	57	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon		1.0	 	
	ppm			
Sodium	ppm	2	 	
Potassium	ppm	■ 9	 	
WEAR METALS				
Iron	ppm	7	 	
Copper	ppm	5	 	
Lead	ppm	■<1	 	
Tin	ppm	■<1	 	
Aluminum	ppm	2	 	
Chromium	ppm	O	 	
Molybdenum	ppm	■17	 	
Nickel	ppm	■0	 	
Titanium	ppm	■ <1	 	
Silver	ppm	0	 	
Manganese	ppm	<1	 	
Vanadium	ppm	<1	 	
	PPI			
ADDITIVES				
Calcium	ppm	1939	 	
Magnesium	ppm	251	 	
Zinc	ppm	1088	 	
Phosphorus	ppm	903	 	
Barium	ppm	■0	 	
Boron		■ 139	 	
DOTOTI	ppm	<u> </u>		

TOTAL MARINE OF MARYLAND INC

106 WELLS COVE ROAD SUITE 2 GRASONVILLE, MD US 21638 Contact: JAMIE FLAHERTY jflaherty@totalmarine.com T: (410)604-6000 F:

Diagnosis

No corrective action is recommended at this time. 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:VP1130693Unique No:10552923Signed:Sean FeltonReport Date:14 Jul 2023

OIL ANALYSIS REPORT



