



BRENDLINGER VOLVO PENTA 2071161353 - STARBOARD DIESEL ENGINE

Sample No: VPA056599

Oil Type: DIESEL ENGINE OIL SAE 40

SAMPLE INFORMAT	TION			
Sample Number		VPA056599	 	
Sample Date		30 Nov 2023	 	
Machine Hours		0	 	
Oil Hours		0	 	
Oil Changed		N/A	 	
Sample Status		NORMAL	 	
OIL CONDITION				
	cSt	=147		
Visc @ 100°C		■ 14.7 ■ 9.2	 	
Base Number (BN) Oxidation (PA)	mg KOH/g %	9.2 67	 	
	70	67	 	
CONTAMINATION				
Water	%	NEG	 	
Soot %	%	1.1	 	
Nitration (PA)	%	65	 	
Sulfation (PA)	%	56	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	5	 	
Sodium	ppm	■ 3	 	
Potassium	ppm	5	 	
WEAR METALS				
Iron	ppm	53	 	
Copper	ppm	_ ■ 19	 	
Lead	ppm	■ 4	 	
Tin	ppm	■ 0	 	
Aluminum	ppm	2	 	
Chromium	ppm	■<1	 	
Molybdenum	ppm	0	 	
Nickel	ppm	1	 	
Titanium	ppm	0	 	
Silver	ppm	■ 0	 	
Manganese	ppm	0	 	
Vanadium	ppm	0	 	
ADDITIVES				
Calcium	ppm	2315	 	
Magnesium	ppm	12	 	
Zinc	ppm	1263	 	
Phosphorus	ppm	1022	 	
Barium	ppm	■0	 	
Boron	ppm	24	 	
	- 1			

MAKO MARINE

117 HUDSON AVE FREEPORT, NY US 11520 Contact: PAUL FLOOD makomarine@optonline.net T: (516)378-7331 F: x:

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:VP1134331Unique No:10767928Signed:Doug BogartReport Date:05 Dec 2023

OIL ANALYSIS REPORT



