



SMITTO PF VOLVO PENTA 1012583660 - STARBOARD DIESEL ENGINE

Sample No: VPA041858

Oil Type: DIESEL ENGINE OIL SAE 40

SAMPLE INFORMAT	TION			
Sample Number		VPA041858	 	
Sample Date		18 Mar 2024	 	
Machine Hours		1160	 	
Oil Hours		2	 	
Oil Changed		N/A	 	
Sample Status		NORMAL	 	
OIL CONDITION				
	-C+	=12.0		
Visc @ 100°C	cSt	■ 13.9	 	
Base Number (BN) Oxidation (PA)	mg KOH/g %	■ 9.4 60	 	
Oxidation (PA)	70		 	
CONTAMINATION				
Water	%	NEG	 	
Soot %	%	■ 0	 	
Nitration (PA)	%	46	 	
Sulfation (PA)	%	53	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	6	 	
Sodium	ppm	■ 2	 	
Potassium	ppm	2	 	
WEAR METALS				
Iron	ppm	■ 3	 	
Copper	ppm	■ <1	 	
Lead	ppm	■0	 	
Tin	ppm	■ <1	 	
Aluminum	ppm	2	 	
Chromium	ppm	<1	 	
Molybdenum	ppm	44	 	
Nickel	ppm	■ 0	 	
Titanium	ppm	■<1	 	
Silver	ppm	■0	 	
Manganese	ppm	0	 	
Vanadium	ppm	<1	 	
ADDITIVES				
Calcium	ppm	1475	 	
Magnesium	ppm	474	 	
Zinc	ppm	1163	 	
Phosphorus	ppm	923	 	
Barium	ppm	0	 	
Boron	ppm	70	 	
201011	PP111			

MAKO MARINE

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

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:VP1134331Unique No:10940388Signed:Angela BorellaReport Date:26 Mar 2024

OIL ANALYSIS REPORT



