



RIO 540259 VOLVO PENTA 7011388103 - STARBOARD DIESEL ENGINE

Sample No: VPA046440

Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMAT	TION			
Sample Number		VPA046440	 	
Sample Date		05 May 2024	 	
Machine Hours		1210	 	
Oil Hours		0	 	
Oil Changed		Not Changd	 	
Sample Status		NORMAL	 	
		NORWAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	13.1	 	
Base Number (BN)	mg KOH/g	■9.9	 	
Oxidation (PA)	%	55	 	
CONTAMINATION				
Water	%	NEG	 	
Soot %	%	■0.1	 	
Nitration (PA)	%	41	 	
Sulfation (PA)	%	51	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon		■3	 	
Sodium	ppm	■ <1	 	
Potassium	ppm	1 <1	 	
	ppm			
WEAR METALS				
Iron	ppm	0	 	
Copper	ppm	2	 	
Lead	ppm		 	
Tin	ppm	■ <1	 	
Aluminum	ppm	■<1	 	
Chromium	ppm	■0	 	
Molybdenum	ppm	57	 	
Nickel	ppm	0	 	
Titanium	ppm	0	 	
Silver	ppm	■ 0	 	
Manganese	ppm	■ <1	 	
Vanadium	ppm	0	 	
ADDITIVES				
Calcium	ppm	1037	 	
Magnesium	ppm	902	 	
Zinc	ppm	1216	 	
Phosphorus	ppm	1059	 	
Barium	ppm	■0	 	
Boron	ppm	5	 	
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Marine International Diesels Inc.

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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:VP694356Unique No:11021262Signed:Don BaldridgeReport Date:13 May 2024

OIL ANALYSIS REPORT



