



## VOLVO PENTA 1012358889 - STARBOARD DIESEL ENGINE

Sample No: VPA044313

**Oil Type:** VOLVO PENTA SAE 15W40

SAMPLE INFORMAT	TION			
		\/D4044040		
Sample Number		VPA044313	 	
Sample Date		21 Aug 2023	 	
Machine Hours		810	 	
Oil Hours		70	 	
Oil Changed		Not Changd	 	
Sample Status		NORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	<b>14.4</b>	 	
Base Number (BN)	mg KOH/g	<b>■7.5</b>	 	
Oxidation (PA)	%	74	 	
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CONTAMINATION				
Soot %	%	<b>0.4</b>	 	
Nitration (PA)	%	70	 	
Sulfation (PA)	%	60	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon		■3		
	ppm	_		
Sodium	ppm	<b>□</b> <1	 	
Potassium	ppm	■8	 	
WEAR METALS				
Iron	ppm	<b>14</b>	 	
Copper	ppm	<b>2</b>	 	
Lead	ppm	<1	 	
Tin	ppm	<b>■</b> <1	 	
Aluminum	ppm	<b>□&lt;1</b>	 	
Chromium	ppm	<b>□</b> <1	 	
Molybdenum		<b>1</b>	 	
Nickel	ppm	_		
Nickei Titanium	ppm	<b>□</b> <1	 	
	ppm	<b>0</b>		
Silver	ppm	<b>0</b>	 	
Manganese	ppm	<b>■</b> <1	 	
Vanadium	ppm	0	 	
ADDITIVES				
Calcium	ppm	<b>■</b> 2263	 	
Magnesium	ppm	■17	 	
Zinc	ppm	<b>1186</b>	 	
Phosphorus	ppm	<b>■</b> 1016	 	
Barium	ppm	<b>■</b> 0	 	
Boron	ppm	<b>204</b>	 	
DOTOTI	Phili	<b>■ 207</b>		

## **SMART DIESEL SERVICE**

102 NW 133RD AVE, UNIT 103 PLANTATION, FL US 33325 Contact: ANDRES GARMENDIA smartdieselservice@gmail.com T: (954)258-8100 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:VPSMAPLAUnique No:10617200Signed:Doug BogartReport Date:24 Aug 2023

## **OIL ANALYSIS REPORT**



