



## **VOLVO PENTA A345398 - STARBOARD DIESEL ENGINE**

Sample No: VPA050861

Oil Type: DIESEL ENGINE OIL SAE 15W40

SAMPLE INFORMAT	TION			
Sample Number		VPA050861	VPA043660	 
Sample Date		01 Feb 2024	21 Nov 2022	 
Machine Hours		776	591	 
Oil Hours		0	0	 
Oil Changed		N/A	N/A	 
Sample Status		NORMAL	NORMAL	 
OIL CONDITION				
Visc @ 100°C	cSt	<b>13.7</b>	■ 14.6	 
Base Number (BN)	mg KOH/g	<b>9.3</b>	<b>10.0</b>	 
Oxidation (PA)	%	56	68	 
CONTAMINATION				
Water	%	NEG	NEG	 
Soot %	%	■0.2	□ 0.3	 
Nitration (PA)	%	49	58	 
Sulfation (PA)	%	50	60	 
Glycol	%	NEG	NEG	 
Fuel	%	<1.0	<1.0	 
Silicon	ppm	■4	<b>■</b> 3	 
Sodium	ppm	<b>■&lt;1</b>	<b>2</b>	 
Potassium	ppm	<b>■</b> 3	<b>6</b>	 
WEAR METALS				
Iron	ppm	<b>1</b> 2	<b>□</b> 12	 
Copper	ppm	<b>4</b>	<b>3</b>	 
Lead	ppm	■0	<b>-</b> <1	 
Tin	ppm	■0	<b>-</b> <1	 
Aluminum	ppm	<b>2</b>	1	 
Chromium	ppm	<1	<b>-</b> <1	 
Molybdenum	ppm	<b>50</b>	<b>1</b> 0	 
Nickel	ppm	<b>■</b> 0	<b>-</b> <1	 
Titanium	ppm	<b></b>	<b>0</b>	 
Silver	ppm	■0	0	 
Manganese	ppm	■0	□ <1	 
Vanadium	ppm	<1	0	 
ADDITIVES				
Calcium	ppm	<b>1103</b>	<b>□</b> 2106	 
Magnesium	ppm	<b>746</b>	<b>161</b>	 
Zinc	ppm	■1075	1190	 
Phosphorus	ppm	■958	■ 1014	 
Barium	ppm	■0	0	 
Boron	ppm	<b>22</b>	<b>171</b>	 
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## **SUNCOAST DIESEL MARINE**

6341 PORTER ROAD, SUITE 6 SARASOTA, FL US 34240 Contact: SERVICE MANAGER info@suncoastdmi.com T: (941)342-0033 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:
 VP705283

 Unique No:
 10874257

 Signed:
 Sean Felton

 Report Date:
 14 Feb 2024

## **OIL ANALYSIS REPORT**



