



## **VOLVO PENTA 2006038570 - STARBOARD DIESEL ENGINE**

Sample No: VPA056869

**Oil Type:** DIESEL ENGINE OIL SAE 15W40

SAMPLE INFORMAT	<b>ION</b>			
Sample Number		VPA056869	VPA047290	 
Sample Date		29 Aug 2023	02 May 2022	 
Machine Hours		2088	2021	 
Oil Hours		0	0	 
Oil Changed		N/A	N/A	 
Sample Status		NORMAL	NORMAL	 
OIL CONDITION				
Visc @ 100°C	cSt	<b>14.8</b>	□13.9	 
Base Number (BN)	mg KOH/g	<b>8.7</b>	10.0	 
Oxidation (PA)	%	57	61	 
CONTAMINATION				
Soot %	%	<b>0.1</b>	■ 0.1	 
Nitration (PA)	%	50	46	 
Sulfation (PA)	%	50	56	 
Glycol	%	NEG	NEG	 
Fuel	%	<1.0	< 1.0	 
Silicon	ppm	<b>12</b>	<b>5</b>	 
Sodium	ppm	<b>4</b>	<b>1</b> 6	 
Potassium	ppm	<b>■</b> 3	<b>-</b> <1	 
WEAR METALS				
Iron	ppm	<b>13</b>	<b>7</b>	 
Copper	ppm	<b>■&lt;1</b>	<b>2</b>	 
Lead	ppm	<b>0</b>	<b>4</b>	 
Tin	ppm	<b>■&lt;1</b>	<b>-</b> <1	 
Aluminum	ppm	<b>4</b>	<b>1</b>	 
Chromium	ppm	<b></b>	<b>&lt;</b> 1	 
Molybdenum	ppm	<b>44</b>	<b>58</b>	 
Nickel	ppm	<b>0</b>	<b>0</b>	 
Titanium	ppm	■0	<b>0</b>	 
Silver	ppm	<b>■</b> 0	<b>-</b> <1	 
Manganese	ppm	<b>■</b> <1	<b>-</b> <1	 
Vanadium	ppm	0	0	 
ADDITIDDA				
Calcium	ppm	<b>1331</b>	■1107	 
Magnesium	ppm	<b>787</b>	1027	 
Zinc	ppm	<b>1316</b>	1282	 
Phosphorus	ppm	■ 1047	1118	 
Barium	ppm	■0	<b>0</b>	 
Boron	ppm	■33	5	 
	F P			

## **JOHNSTONS MARINE SERVICES**

1850 NW 15th AVENUE, SUITE 205 POMPANO BEACH, FL US 33069 Contact: NEIL JOHNSTON neil@1jms.com T: (984)448-0813

## Diagnosis

F:

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:VPJOHDEEUnique No:10629122Signed:Sean FeltonReport Date:31 Aug 2023

## **OIL ANALYSIS REPORT**



