



## JOHN CUSHMAN VOLVO PENTA 2004003063 - STARBOARD DIESEL ENGINE

Sample No: VPA036697

Oil Type: SHELL ROTELLA T 15W40

SAMPLE INFORMAT	<b>FION</b>			
Sample Number		VPA036697	 	
Sample Date		06 Mar 2024	 	
Machine Hours		442	 	
Oil Hours		442	 	
Oil Changed		Not Changd	 	
Sample Status		NORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	<b>14.4</b>	 	
Base Number (BN)	mg KOH/g	■8.8	 	
Oxidation (PA)	%	68	 	
CONTAMINATION				
Water	%	NEG	 	
Soot %	%	■ 0.1	 	
Nitration (PA)	%	52	 	
Sulfation (PA)	%	57	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	<b>6</b>	 	
Sodium	ppm	<b>1</b>	 	
Potassium	ppm		 	
WEAR METALS				
		-17	 	
Iron	ppm	<b>■</b> 17	 	
Copper Lead	ppm	<b>1</b>	 	
Tin	ppm ppm	■ <1	 	
Aluminum	ppm	<b>3</b>	 	
Chromium	ppm	<b>■</b> <1	 	
Molybdenum	ppm	<b>13</b>	 	
Nickel	ppm	<b>1</b>	 	
Titanium	ppm	<b>=</b> <1	 	
Silver	ppm	<b>0</b>	 	
Manganese	ppm	■0	 	
Vanadium	ppm	0	 	
ADDITIVES				
Calcium	nnm	<b>1935</b>	 	
Magnesium	ppm	201	 	
Zinc	ppm	■1166	 	
Phosphorus	ppm	■ 1166 ■ 1051	 	
Barium	ppm	<b>0</b>	 	
Boron	ppm	■ 0 ■ 172	 	
DOIOII	ppm	<b>II</b> 1/2	 	

## Larry`s Lighthouse Marina

1250

AQUEBOGUE, NY US 11931

Contact: MAX FUHLBRUGGE info@lighthousemarina.com

T: x: 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 acceptable for the time in service.

Depot:VP610438Unique No:10916082Signed:Don BaldridgeReport Date:11 Mar 2024

## **OIL ANALYSIS REPORT**



