



## NORM DETRICK 351876 VOLVO PENTA 7008553583 - STARBOARD DIESEL ENGINE

Sample No: VPA048450

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMAT	TION			
Sample Number		VPA048450	 	
Sample Date		07 Jul 2023	 	
Machine Hours		195	 	
Oil Hours		82	 	
Oil Changed		Not Changd	 	
Sample Status		NORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	<b>□</b> 13.6	 	
Base Number (BN)	mg KOH/g	<b>■ 10.1</b>	 	
Oxidation (PA)	%	60	 	
CONTAMINATION				
Soot %	%	■0.9	 	
Nitration (PA)	%	55	 	
Sulfation (PA)	%	60	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	<b>15</b>	 	
Sodium	ppm	<b>2</b>	 	
Potassium	ppm	<b>2</b>	 	
WEAR METALS				
		<b>-10</b>		
Iron	ppm	<b>■</b> 10	 	
Copper	ppm	<b>42</b>	 	
Lead	ppm	■0	 	
Tin	ppm	■0	 	
Aluminum	ppm	<b>6</b>	 	
Chromium	ppm	<b>■ &lt;1</b>	 	
Molybdenum Nickel	ppm	<b>■</b> 86	 	
Titanium	ppm	<b>□</b> 0 <b>□</b> 0	 	
Silver	ppm	<b>■</b> 0	 	
Manganese	ppm	■0	 	
Vanadium	ppm	0	 	
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ADDITIVES				
Calcium	ppm	<b>1406</b>	 	
Magnesium	ppm	1166	 	
Zinc	ppm	<b>1454</b>	 	
Phosphorus	ppm	<b>1211</b>	 	
Barium	ppm	<b>1</b> 3	 	
Boron	ppm	<b>44</b>	 	

## Skipper Marine of Ohio, LLC

6801 E. Harbor Rd., 6801 East Harbor Rd. MARBLEHEAD, OH US 43440 Contact: Craig Rosiar CRosiar@skipperbuds.com

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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: VP494046
Unique No: 10551641
Signed: Don Baldridge
Report Date: 13 Jul 2023

## **OIL ANALYSIS REPORT**



