



## 71047578064755 - STARBOARD DIESEL ENGINE

Sample No: VPA021924

Oil Type: MOBIL DELVAC 1 5W40

SAMPLE INFORMAT	TION			
Sample Number		VPA021924	 	
Sample Date		18 Dec 2023	 	
Machine Hours		1900	 	
Oil Hours		0	 	
Oil Changed		N/A	 	
Sample Status		ABNORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	<b>13.4</b>	 	
Base Number (BN)	mg KOH/g	<b>5.6</b>	 	
Oxidation (PA)	%	181	 	
CONTAMINATION				
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Water	%	NEG	 	
Soot %	%	■ 0.4	 	
Nitration (PA)	%	70	 	
Sulfation (PA)	%	107	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	■4	 	
Sodium	ppm	<b>■</b> 0	 	
Potassium	ppm	<b>0</b>	 	
WEAR METALS				
Iron	ppm	<b>2</b> 1	 	
Copper	ppm	<u> </u>	 	
Lead	ppm	<b>■</b> 0	 	
Tin	ppm	■0	 	
Aluminum	ppm	<b>2</b>	 	
Chromium	ppm	<b>■&lt;1</b>	 	
Molybdenum	ppm	<b>47</b>	 	
Nickel	ppm	■0	 	
Titanium	ppm	<b>0</b>	 	
Silver	ppm	<b>■</b> 0	 	
Manganese	ppm	<b>■&lt;1</b>	 	
Vanadium	ppm	0	 	
ADDITIVES				
Calcium	ppm	<b>1011</b>	 	
Magnesium	ppm	<b>936</b>	 	
Zinc	ppm	<b>1301</b>	 	
Phosphorus	ppm	<b>1102</b>	 	
Barium	ppm	<b>0</b>	 	
Boron	ppm	■86	 	
	F- P			

## **ADVANCED DIESEL**

1029 INDUSTRIAL BLVD, UNIT 2 NAPLES, FL US 34104 Contact: KEITH SPICER keith\_advanceddiesel@yahoo.com T: (239)580-8731 F:

## Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. All other 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:VPADVNAPUnique No:10802521Signed:Jonathan HesterReport Date:26 Dec 2023

## **OIL ANALYSIS REPORT**



