



## MIKE ROSS VOLVO PENTA 4012182169 - STARBOARD GASOLINE ENGINE

Sample No: VPA021920

Oil Type: DIESEL ENGINE OIL SAE 40

SAMPLE INFORMAT	TION			
Sample Number		VPA021920	VPA061972	 
Sample Date		05 May 2024	03 May 2024	 
Machine Hours		0	0	 
Oil Hours		0	0	 
Oil Changed		N/A	N/A	 
Sample Status		NORMAL	NORMAL	 
OIL CONDITION				
Visc @ 100°C	cSt	<b>14.2</b>	□14.4	 
Base Number (BN)	mg KOH/g	■9.9	■8.5	 
Oxidation (PA)	%	61	15	 
CONTAMINATION				
Water	%	NEG	NEG	 
Soot %	%	<b>■</b> 0.1	■0.1	 
Nitration (PA)	%	51	6	 
Sulfation (PA)	%	54	11	 
Glycol	%	NEG	NEG	 
Fuel	%	<1.0	<1.0	 
Silicon	ppm	<b>6</b>	<b>2</b> 7	 
Sodium	ppm	<b>■</b> 3	<b>4</b> 9	 
Potassium	ppm	<b>2</b>	<b>3</b>	 
WEAR METALS				
Iron	ppm	<b>2</b>	<b>■</b> 88	 
Copper	ppm	<b>■</b> <1	8	 
Lead	ppm	<b>■</b> 0	□6	 
Tin	ppm	<b>■&lt;1</b>	□ < 1 □	 
Aluminum	ppm	<u> </u>	<u></u> 5	 
Chromium	ppm	<1	3	 
Molybdenum	ppm	<b>42</b>	42	 
Nickel	ppm	<b>■&lt;1</b>	<b>-</b> <1	 
Titanium	ppm	<b>■&lt;1</b>	<1	 
Silver	ppm	■0	<b>0</b>	 
Manganese	ppm	<b>■</b> <1	4	 
Vanadium	ppm	<1	<1	 
ADDITIVES				
Calcium	ppm	<b>1447</b>	1687	 
Magnesium	ppm	<b>460</b>	23	 
Zinc	ppm	■ 1132	823	 
Phosphorus	ppm	977	719	 
Barium	ppm	■0	1	 
Boron	ppm	<b>67</b>	<1	 
	1-1			

## **Outstanding Marine**

PO Box 274 GALENA, MD US 21635 Contact: Ronda Bolinger rlwb@verizon.net

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## Diagnosis

No corrective action is recommended at this time. 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:VP153685Unique No:11015824Signed:Doug BogartReport Date:08 May 2024

## **OIL ANALYSIS REPORT**



