



## DOUG YANMAR 51604 - PORT DIESEL ENGINE

Sample No: VPA039519

**Oil Type:** DIESEL ENGINE OIL SAE 40

SAMPLE INFORMAT	TION			
Sample Number		VPA039519	VPA043043	 
Sample Date		30 Oct 2023	08 Dec 2022	 
Machine Hours		0	2721	 
Oil Hours		0	0	 
Oil Changed		N/A	N/A	 
Sample Status		NORMAL	NORMAL	 
OIL CONDITION				
Visc @ 100°C	cSt	<b>14.2</b>	■14.1	 
Base Number (BN)	mg KOH/g	<b>7.8</b>	■9.4	 
Oxidation (PA)	%	71	75	 
CONTAMINATION				
Soot %	%	■0.2	□0.2	 
Nitration (PA)	%	68	68	 
Sulfation (PA)	%	57	62	 
Glycol	%	NEG	NEG	 
Fuel	%	<1.0	<1.0	 
Silicon	ppm	<b>3</b>	<b>3</b>	 
Sodium	ppm	<b>3</b>	<b>1</b> 0	 
Potassium	ppm	<b>8</b>	<b>3</b>	 
WEAD METALS	1-1-			
WEAR METALS				
Iron	ppm	<b>5</b>	<b>5</b>	 
Copper	ppm	<b>■</b> 8	<b>4</b>	 
Lead	ppm	<b>0</b>	<b>1</b>	 
Tin	ppm	■0	<b>0</b>	 
Aluminum	ppm	<b>2</b>	<b>2</b>	 
Chromium	ppm	<b>■&lt;1</b>	<b>-</b> <1	 
Molybdenum	ppm	<b>■&lt;1</b>	<b>6</b>	 
Nickel	ppm	<b>■&lt;1</b>	<b>-</b> <1	 
Titanium	ppm	<b>0</b>	<b>0</b>	 
Silver	ppm	<b>0</b>	<b>-</b> <1	 
Manganese	ppm	<b>■</b> <1	<1	 
Vanadium	ppm	0	0	 
ADDITIVES				
Calcium	ppm	<b>2194</b>	■2089	 
Magnesium	ppm	■36	<b>1</b> 01	 
Zinc	ppm	<b>1277</b>	<b>1170</b>	 
Phosphorus	ppm	<b>1042</b>	952	 
Barium	ppm	■0	<b>□</b> 0	 
Boron	ppm	<b>165</b>	<b>□</b> 172	 
	F P			

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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 acceptable for the time in service.

 Depot:
 VP867279

 Unique No:
 10722507

 Signed:
 Sean Felton

 Report Date:
 01 Nov 2023

## **OIL ANALYSIS REPORT**



