



## 36831 - STARBOARD DIESEL ENGINE

Sample No: VPA053165

Oil Type: SHELL ROTELLA T 30

SAMPLE INFORMAT	TION			
Sample Number		VPA053165	VPA034108	 
Sample Date		15 May 2024	16 Apr 2022	 
Machine Hours		2247	2168	 
Oil Hours		91	83	 
Oil Changed		Changed	Changed	 
Sample Status		NORMAL	NORMAL	 
OIL CONDITION				
Visc @ 100°C	cSt	<b>12.8</b>	□12.4	 
Base Number (BN)	3 . 3	■8.0	9.8	 
Oxidation (PA)	%	47	47	 
CONTAMINATION				
Water	%	NEG	NEG	 
Soot %	%	■ 0.2	□0.2	 
Nitration (PA)	%	49	54	 
Sulfation (PA)	%	46	47	 
Glycol	%	NEG	NEG	 
Fuel	%	<1.0	<1.0	 
Silicon	ppm	<b>7</b>	<b>6</b>	 
Sodium	ppm	<u>5</u>	<b>8</b>	 
Potassium	ppm	<b>2</b>	_2	 
WEAR METALS				
Iron	nnm	<b>1</b> 9	<b>□</b> 13	 
	ppm		<b>6</b>	
Copper Lead	ppm	<b>■8</b>	<b>□</b> 3	 
Tin	ppm	_	□ <1	
Aluminum	ppm	<b>□</b> <1 <b>□</b> 4	2	 
Chromium	ppm	4 <1	<1	 
Molybdenum	ppm	<b>■</b> 56	□72	 
Nickel	ppm			
Titanium	ppm	<b>□</b> 0 <b>□</b> 0	0	 
Silver	ppm			
	ppm	<b></b>	<1 = <1	 
Manganese Vanadium	ppm	<b>□</b> <1 0	<1 0	 
	ppm	U	0	 
ADDITIVES				
Calcium	ppm	<b>2307</b>	<b>2328</b>	 
Magnesium	ppm	<b>144</b>	<b>2</b> 36	 
Zinc	ppm	<b>1186</b>	<b>1</b> 103	 
Phosphorus	ppm	<b>■</b> 967	955	 
Barium	ppm	■0	<b>0</b>	 
Boron	ppm	<b>101</b>	<b>3</b> 9	 
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## **JOHN SIMS**

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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:VPJOHDALUnique No:11043986Signed:Sean FeltonReport Date:23 May 2024

Contact/Location: JOHN SIMS - VPJOHDAL

## **OIL ANALYSIS REPORT**



