



## **CUMMINS 46802572 - STARBOARD DIESEL ENGINE**

Sample No: VPA045575

**Oil Type:** SHELL ROTELLA T 15W40

SAMPLE INFORMAT	TION			
Sample Number		VPA045575	 	
Sample Date		23 Jan 2024	 	
Machine Hours		23 Jan 2024 0	 	
Oil Hours		0		
Oil Changed		Not Changd		
Sample Status		NORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	<b>15.1</b>	 	
Base Number (BN)	mg KOH/g	<b>6.0</b>	 	
Oxidation (PA)	%	82	 	
CONTAMINATION				
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Water	%	NEG	 	
Soot %	%	<b>1.3</b>	 	
Nitration (PA)	%	87	 	
Sulfation (PA)	%	69	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	<b>7</b>	 	
Sodium	ppm	<b>6</b>	 	
Potassium	ppm	<b>10</b>	 	
WEAR METALS				
Iron	ppm	<b>■40</b>	 	
Copper	ppm	 <b>□</b> 175	 	
Lead	ppm	<b>1</b>	 	
Tin	ppm	<b>■</b> <1	 	
Aluminum	ppm	<b>■</b> 3	 	
Chromium	ppm	<b>1</b>	 	
Molybdenum	ppm	17	 	
Nickel	ppm	<b>■</b> 3	 	
Titanium	ppm	<b>0</b>	 	
Silver	ppm	<b>■</b> <1	 	
Manganese	ppm	<b>1</b>	 	
Vanadium	ppm	0	 	
ADDITIVES				
Calcium	ppm	<b>2267</b>	 	
Magnesium	ppm	<b>49</b>	 	
Zinc	ppm	■ 1271	 	
Phosphorus	ppm	994	 	
Barium	ppm	■0	 	
Boron	ppm	<b>62</b>	 	
551011	PPIII			

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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:VP154879Unique No:10849221Signed:Don BaldridgeReport Date:30 Jan 2024





