



## ONAN 1150867525 - STARBOARD GENSET

Sample No: VPA060381

Oil Type: SHELL ROTELLA T4 15W40

SAMPLE INFORMAT	TION			
		VPA060381		
Sample Number			 	
Sample Date		13 Oct 2023	 	
Machine Hours		160	 	
Oil Hours		160	 	
Oil Changed		Not Changd	 	
Sample Status		NORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	<b>13.8</b>	 	
Base Number (BN)	mg KOH/g	<b>7.5</b>	 	
Oxidation (PA)	%	68	 	
CONTAMINATION				
Soot %	%	■ 0.1	 	
Nitration (PA)	%	62	 	
Sulfation (PA)	%	51	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	<b>7</b>	 	
Sodium	ppm	 <b></b>	 	
Potassium	ppm	■5	 	
	p p · · · ·			
WEAR METALS				
Iron	ppm	<b>■8</b>	 	
Copper	ppm	<b>■</b> 55	 	
Lead	ppm		 	
Tin	ppm	■0	 	
Aluminum	ppm	■3	 	
Chromium	ppm	<b></b>	 	
Molybdenum		<b>48</b>	 	
Nickel	ppm	<b>0</b>	 	
Titanium	ppm	_		
	ppm	<b>■</b> 15		
Silver	ppm	<b>0</b>	 	
Manganese	ppm	<b>■</b> <1	 	
Vanadium	ppm	<1	 	
<b>ADDITIDES</b>				
Calcium	ppm	<b>1493</b>	 	
Magnesium	ppm	<b>620</b>	 	
Zinc	ppm	<b>□</b> 969	 	
Phosphorus	ppm	<b>770</b>	 	
Barium	ppm	■0	 	
Boron	ppm	<b>42</b>	 	
DOTOTI	Phili			

## **SMART DIESEL SERVICE**

102 NW 133RD AVE, UNIT 103 PLANTATION, FL US 33325 Contact: ANDRES GARMENDIA smartdieselservice@gmail.com T: (954)258-8100 F:

## 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:VPSMAPLAUnique No:10702587Signed:Don BaldridgeReport Date:24 Oct 2023

## **OIL ANALYSIS REPORT**



