



## **CUMMINS 73881756 - PORT DIESEL ENGINE**

Sample No: VPA059997

Oil Type: VALVOLINE PREMIUM BLUE 2000 15W40

SAMPLE INFORMAT	TION			
Sample Number		VPA059997	 	
Sample Date		18 Mar 2024	 	
Machine Hours		0	 	
Oil Hours		120		
Oil Changed		Changed		
Sample Status		SEVERE	 	
OIL CONDITION				
Visc @ 100°C	cSt	<b>14.4</b>	 	
Base Number (BN)	mg KOH/g	<b>7.8</b>	 	
Oxidation (PA)	%	84	 	
CONTAMINATION				
LUNIAMINATION				
Water	%	NEG	 	
Soot %	%	■ 0.4	 	
Nitration (PA)	%	92	 	
Sulfation (PA)	%	58	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	<b>9</b>	 	
Sodium	ppm	<b>■</b> 56	 	
Potassium	ppm	<b>4</b>	 	
WEAR METALS				
Iron	ppm	<u> </u>	 	
Copper	ppm	■58	 	
Lead	ppm	<b>■</b> <1	 	
Tin	ppm	<1	 	
Aluminum	ppm	<b>A</b> 212	 	
Chromium	ppm	<b>△</b> 38	 	
Molybdenum	ppm	<b>■</b> 51	 	
Nickel	ppm	<b>2</b>	 	
Titanium	ppm	<b></b>	 	
Silver	ppm	<b>■</b> 0	 	
Manganese	ppm	<b>1</b>	 	
Vanadium	ppm	<1	 	
ADDITIVES				
Calcium	ppm	<b>1298</b>	 	
Magnesium	ppm	<b>817</b>	 	
Zinc	ppm	<b>■</b> 916	 	
Phosphorus	ppm	<b>■</b> 703	 	
Barium	ppm	<b>2</b>	 	
Boron	ppm	■30	 	
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## **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

Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Piston, ring and cylinder wear is indicated. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot:VPSMAPLAUnique No:10939500Signed:Jonathan HesterReport Date:22 Mar 2024

## **OIL ANALYSIS REPORT**



