



VICTOR RETTERS VOLVO PENTA A 1175170 - STARBOARD DIESEL ENGINE

Sample No: VPA045836

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMAT	TION			
		VD4045036		
Sample Number		VPA045836	 	
Sample Date		17 Jul 2023	 	
Machine Hours		196	 	
Oil Hours		194	 	
Oil Changed		Changed	 	
Sample Status		NORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	13.6	 	
Base Number (BN)	mg KOH/g	■ 10.1	 	
Oxidation (PA)	%	62	 	
` '				
CONTAMINATION				
Soot %	%	0	 	
Nitration (PA)	%	61	 	
Sulfation (PA)	%	60	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon		□ 19		
	ppm			
Sodium	ppm	5	 	
Potassium	ppm	■ 4	 	
WEAR METALS				
Iron	ppm	■33	 	
Copper	ppm	22	 	
Lead	ppm	10	 	
Tin	ppm	■4	 	
Aluminum	ppm	6	 	
Chromium	ppm	3	 	
Molybdenum		■ 58	 	
Nickel	ppm	_		
	ppm	4		
Titanium	ppm		 	
Silver	ppm	■ <1	 	
Manganese	ppm	2	 	
Vanadium	ppm	0	 	
ADDITIVES				
Calcium	ppm	1314	 	
Magnesium	ppm	938	 	
Zinc	ppm	1324	 	
Phosphorus	ppm	1086	 	
Barium	ppm	■ 0	 	
Boron	ppm	□ 27	 	
DOTOTI	PPIII	L I		

Johnson Diesel Service Inc

12262 Parkers Creek Road Biloxi, MS US 39532 Contact: ROBBY R. robbyr@johnsondiesel.com T: (512)788-4258 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:
 VP99031115

 Unique No:
 10659168

 Signed:
 Don Baldridge

 Report Date:
 23 Sep 2023





