



CHARLESTON PILOTS VOLVO PENTA 1013544477 - STARBOARD DIESEL ENGINE

Sample No: VPA022820

Oil Type: CHEVRON DELO 400 MULTIGRADE 15W40

SAMPLE INFORMAT	TION			
Sample Number		VPA022820	 	
Sample Date		28 Oct 2022	 	
Machine Hours		4476	 	
Oil Hours		513	 	
Oil Changed		Not Changd	 	
Sample Status		ABNORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	12.7	 	
Base Number (BN)	mg KOH/g	■8.4	 	
Oxidation (PA)	%	74	 	
CONTAMINATION				
Soot %	%	1.2	 	
Nitration (PA)	%	83	 	
Sulfation (PA)	%	70	 	
Glycol	%	NEG	 	
Fuel	%	4.4	 	
Silicon	ppm	6	 	
Sodium	ppm	1	 	
Potassium	ppm	■<1	 	
WEAR METALS				
Iron	ppm	23	 	
Copper	ppm	■ 3	 	
Lead	ppm	2	 	
Tin	ppm	1	 	
Aluminum	ppm	6	 	
Chromium	ppm	■<1	 	
Molybdenum	ppm	102	 	
Nickel	ppm	■ 0	 	
Titanium	ppm	0	 	
Silver	ppm	0	 	
Manganese	ppm	■<1	 	
Vanadium	ppm	0	 	
ADDITIVES				
Calcium	ppm	1460	 	
Magnesium	ppm	■ 648	 	
Zinc	ppm	822	 	
Phosphorus	ppm	709	 	
Barium	ppm	■0	 	
Boron	ppm	153	 	
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WESTERN BRANCH DIESEL

6881 BULLDOG DR N CHARLESTON, SC US 29406 Contact: MICHAEL JORDAN mdjordan@wbdiesel.com T: F:

Diagnosis

We advise that you check the fuel injection system. Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data updates.All component wear rates are normal. There is a moderate amount of fuel present 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: VP1165983
Unique No: 10203143
Signed: Jonathan Hester
Report Date: 14 Nov 2022

OIL ANALYSIS REPORT



