



DAVID SMITH SMITH VOLVO PENTA A219426 - CENTER DIESEL ENGINE

Sample No: VPA036792
Oil Type: NOT GIVEN

SAMPLE INFORMA	ATION			
Sample Number		VPA036792	 	
Sample Date		25 Sep 2023	 	
Machine Hours		510	 	
Oil Hours		0	 	
Oil Changed		N/A	 	
Sample Status		SEVERE	 	
OIL CONDITION				
Visc @ 100°C	cSt	15.13	 	
Oxidation (PA)	%	65	 	
CONTAMINATION				
Water	%	1.08	 	
Soot %	%	■1.3	 	
Nitration (PA)	%	99	 	
Sulfation (PA)	%	49	 	
Glycol	%	■ 0.0	 	
Fuel	%	<1.0	 	
Silicon	ppm	17	 	
Sodium	ppm	<u> </u>	 	
Potassium	ppm	^ 70	 	
WEAR METALS				
Iron	ppm	<u> </u>	 	
Copper	ppm	■17	 	
Lead	ppm	2	 	
Tin	ppm	1	 	
Aluminum	ppm	<u>^</u> 83	 	
Chromium	ppm	<u>^</u> 6	 	
Molybdenum	ppm	61	 	
Nickel	ppm	■3	 	
Titanium	ppm	□0	 	
Silver	ppm	= <1	 	
Manganese	ppm	2	 	
Vanadium	ppm	- <1	 	
ADDITIVES				
Calcium	ppm	■ 1334	 	
Magnesium	ppm	■ 1354 ■ 1154	 	
Zinc	ppm	1350	 	
Phosphorus		1148	 	
Barium	ppm	■ 1148 ■ 0	 	
Boron	ppm	13	 	
DOTOTI	ppm	<u> </u>	 	

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Diagnosis

We advise that you check for the source of water entry. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Piston, ring and cylinder wear is indicated. There is a high concentration of water present in the oil. The high sodium (Na) level indicates the possible presence of salt water. Test for glycol is negative. The oil is no longer serviceable due to the presence of contaminants.

Depot:VP867279Unique No:10662785Signed:Doug BogartReport Date:26 Sep 2023





