



VOLVO PENTA A 1 160639 - STARBOARD DIESEL ENGINE

Sample No: VPA046601
Oil Type: NOT GIVEN

SAMPLE INFORMAT	TION			
Sample Number		VPA046601	 	
Sample Date		03 Apr 2023	 	
Machine Hours		109	 	
Oil Hours		0	 	
Oil Changed		N/A	 	
Sample Status		ABNORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	14.0	 	
Base Number (BN)	mg KOH/g	7.3	 	
Oxidation (PA)	%	64	 	
CONTAMINATION				
Soot %	%	0.1	 	
Nitration (PA)	%	58	 	
Sulfation (PA)	%	54	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	187	 	
Sodium	ppm	■ 9	 	
Potassium	ppm	■ 3	 	
WEAR METALS				
Iron	ppm	20	 	
Copper	ppm	10	 	
Lead	ppm	■ <1	 	
Tin	ppm		 	
Aluminum	ppm	3	 	
Chromium	ppm	<u>2</u>	 	
Molybdenum	ppm	1	 	
Nickel	ppm	0	 	
Titanium	ppm	□ <1	 	
Silver	ppm	0	 	
Manganese	ppm	4	 	
Vanadium	ppm	0	 	
ADDITIVES	PP			
	10.10.100	1460		
Calcium	ppm	■ 1468	 	
Magnesium	ppm	■ 579	 	
Zinc	ppm	1026	 	
Phosphorus	ppm	■869	 	
Barium	ppm	■ 0	 	
Boron	ppm	117	 	

JOHNSTONS MARINE SERVICES

1850 NW 15th AVENUE, SUITE 205 POMPANO BEACh, FL US 33069 Contact: NEIL JOHNSTON neil@1jms.com T: (984)448-0813 F:

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of seal material. 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:VPJOHDEEUnique No:10414762Signed:Angela BorellaReport Date:07 Apr 2023

OIL ANALYSIS REPORT



