



MULLIGAN VOLVO PENTA 7011452341 - PORT DIESEL ENGINE

Sample No: VPA036626

Oil Type: VOLVO PENTA SAE 15W40

CONTAMINATION Soot %					
Sample Date	SAMPLE INFORM	ATION			
Sample Date	Camarala Numahan		VD4026626		
Machine Hours					
Dil Changed Not Changed Not Changed Sample Status NORMAL Sample Status NORMAL Sample Status NORMAL Sample Status NORMAL Sample Status NORMAL Sample Status NORMAL Sample Status NORMAL Sample Status NORMAL Sample Status NORMAL -	•				
Oil Changed Not Changed Normal No					
NORMAL			-		
DIL CONDITION	_		_		
Visc @ 100°C	Sample Status		NORIVIAL	 	
CONTAMINATION Soot %	OIL CONDITION				
CONTAMINATION	Visc @ 100°C	cSt	■13.19	 	
Soot %	Oxidation (PA)	%	51	 	
Soot %	CONTAMINATION				
Nitration (PA)	Soot %	0/	-0.1		
Sulfation (PA)			_		
Silicon Silicon Silicon Silicon Sodium					
Fuel % <1.0 Silicon ppm 55 Sodium ppm 22	` ′				
Silicon					
Sodium					
WEAR METALS Iron ppm 6 Copper ppm 13 Lead ppm <1					
WEAR METALS Iron ppm 6 Copper ppm 13 Lead ppm <1				 	
Tron	- Otabolani	ρρ			
Copper	WEAR METALS				
Lead	Iron	ppm	6	 	
Tin ppm <1	Copper	ppm	■13	 	
Aluminum ppm 3	Lead	ppm	■<1	 	
Chromium ppm	Tin	ppm	■<1	 	
Molybdenum ppm 12 -	Aluminum	ppm	■3	 	
Nickel ppm <t< td=""><td>Chromium</td><td>ppm</td><td>■<1</td><td> </td><td></td></t<>	Chromium	ppm	■<1	 	
Titanium ppm 0 Silver ppm <1 Manganese ppm <1 Vanadium ppm 0 ADDITIVES Calcium ppm 1945 Magnesium ppm 152 Zinc ppm 1142 Phosphorus ppm 935 Barium ppm 0		ppm	_	 	
Silver ppm <1 Manganese ppm <1	Nickel	ppm		 	
Manganese ppm <1 Vanadium ppm 0 ADDITIVES Calcium ppm 1945 Magnesium ppm 152 Zinc ppm 1142 Phosphorus ppm 935 Barium ppm 0	Titanium	ppm	_	 	
Vanadium ppm 0 ADDITIVES Calcium ppm 1945 Magnesium ppm 152 Zinc ppm 1142 Phosphorus ppm 935 Barium ppm 0	Silver	ppm	_	 	
ADDITIVES Calcium ppm 1945 Magnesium ppm 152 Zinc ppm 1142 Phosphorus ppm 935 Barium ppm 0	Manganese			 	
Calcium ppm 1945 Magnesium ppm 152 Zinc ppm 1142 Phosphorus ppm 935 Barium ppm 0	Vanadium	ppm	0	 	
Magnesium ppm 152 Zinc ppm 1142 Phosphorus ppm 935 Barium ppm 0	ADDITIVES				
Magnesium ppm 152 Zinc ppm 1142 Phosphorus ppm 935 Barium ppm 0	Calcium	ppm	1945	 	
Zinc ppm 1142 Phosphorus ppm 935 Barium ppm 0	Magnesium			 	
Phosphorus ppm 935 Barium ppm 0	Zinc				
Barium ppm 0	Phosphorus			 	
	Barium			 	
	Boron	ppm	■131	 	

Cogswell Marine & Motorsports, Inc

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Diagnosis

No corrective action is recommended at this time. 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 condition of the oil is acceptable for the time in service.

Depot:VP152133Unique No:10602576Signed:Doug BogartReport Date:11 Aug 2023

OIL ANALYSIS REPORT



