



## A 1 187608 - STARBOARD DIESEL ENGINE

Sample No: VPA053387

**Oil Type:** VOLVO PENTA SAE 15W40

SAMPLE INFORMAT	TION			
Sample Number		VPA053387	 	
Sample Date		17 Jun 2024	 	
Machine Hours		184	 	
Oil Hours		129	 	
Oil Changed		Changed	 	
Sample Status		NORMAL	 	
Sample States		TTO KIND KE		
OIL CONDITION				
Visc @ 100°C	cSt	<b>12.8</b>	 	
Base Number (BN)	mg KOH/g	■9.7	 	
Oxidation (PA)	%	57	 	
` '				
CONTAMINATION				
Water	%	NEG	 	
Soot %	%	■ 0.2	 	
Nitration (PA)	%	48	 	
Sulfation (PA)	%	52	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon	ppm	<b>6</b>	 	
Sodium	ppm	<b>■</b> 3	 	
Potassium	ppm	<b></b>	 	
WEAR METALS				
Iron	ppm	<b>1</b> 3	 	
Copper	ppm	<b>7</b>	 	
Lead	ppm	<b>1</b>	 	
Tin	ppm	_ <1	 	
Aluminum	ppm	<b>10</b>	 	
Chromium	ppm	<u> </u>	 	
Molybdenum	ppm	<b>61</b>	 	
Nickel	ppm	<b>■</b> 3	 	
Titanium	ppm	<b>0</b>	 	
Silver	ppm	■0	 	
Manganese	ppm	<b>■</b> <1	 	
Vanadium	ppm	0	 	
ADDITIVES				
Calcium	ppm	<b>1144</b>	 	
Magnesium	ppm	1008	 	
Zinc	ppm	<b>■</b> 1324	 	
Phosphorus	ррт	<b>1090</b>	 	
Barium	ppm	■0	 	
Boron	ppm	<b>5</b>	 	
DOTOTI	ppiii			

## CHRIS HILDRETH

6691 SHANGRI LA CIR ANCHORAGE, AK US 99516 Contact: CHRIS HILDRETH hildreth.ak@gmail.com T:

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 suitable for further service.

Depot:VPCHRANCUnique No:11112863Signed:Jonathan HesterReport Date:09 Jul 2024

## **OIL ANALYSIS REPORT**



