



## HAVLICHECK CLINT THOMPSON VOLVO PENTA 51220284004 - INBOARD - STARBOARD GEARBOX

Sample No: VPA059543

Oil Type: VOLVO DEXRON ATF

Sample Number	SAMPLE INFORM	ATION			
Sample Date         22 Nov 2023	Sample Number		VPA059543	 	
Machine Hours         2642	•				
Oil Hours         2642	•				
Oil Changed Sample Status         Changed NORMAL				 	
NORMAL					
Visc @ 40°C   CSt   27.4					
Vise @ 40°C         cSt         27.4              CONTAMINATION           Water         %         NEG			NORWAL		
Vater	OIL CONDITION				
Water         %         NEG              Solition         ppm         1   <	Visc @ 40°C	cSt	<b>27.4</b>	 	
Silicon       ppm       1 <td< td=""><td>CONTAMINATION</td><td></td><td></td><td></td><td></td></td<>	CONTAMINATION				
Sodium	Water	%	NEG	 	
Potassium         ppm         □ 0              WEAR METALS           PQ         □ 22              Iron         ppm         □ 6              Copper         ppm         □ 23              Lead         ppm         □ 0              Aluminum         ppm         □ 0              Aluminum         ppm         □ 0              Molybdenum         ppm         □ 0              Molybdenum         ppm         □ 0              Nickel         ppm         □ 0              Silver         ppm         □ 0              Manganese         ppm         □ 0              Vanadium         ppm         □ 0              ADDITIVES <td< td=""><td>Silicon</td><td>ppm</td><td><b>1</b></td><td> </td><td></td></td<>	Silicon	ppm	<b>1</b>	 	
WEAR METALS           PQ         22	Sodium	ppm	<b></b>	 	
PQ	Potassium	ppm	<b>0</b>	 	
Iron	WEAR METALS				
Copper         ppm         23 </td <td>PQ</td> <td></td> <td><b>22</b></td> <td> </td> <td></td>	PQ		<b>22</b>	 	
Lead         ppm         2	Iron	ppm	<b>6</b>	 	
Tin ppm 0 Aluminum ppm 0	Copper	ppm	<b>23</b>	 	
Aluminum ppm 0	Lead	ppm	<b>2</b>	 	
Chromium         ppm         0              Molybdenum         ppm         0              Nickel         ppm         0              Titanium         ppm         0              Silver         ppm         0              Manganese         ppm         0              Vanadium         ppm         0              ADDITIVES               Calcium         ppm         4              Magnesium         ppm         0              Zinc         ppm         4              Phosphorus         ppm         149              Barium         ppm         0	Tin	ppm	<b>0</b>	 	
Molybdenum         ppm         0              Nickel         ppm         0              Titanium         ppm         0              Silver         ppm         0              Manganese         ppm         0              Vanadium         ppm         0              ADDITIVES           Calcium         ppm         4              Magnesium         ppm         0              Zinc         ppm         4              Phosphorus         ppm         149              Barium         ppm         0	Aluminum	ppm	<b>■</b> 0	 	
Nickel         ppm         □ 0              Titanium         ppm         0              Silver         ppm         0              Manganese         ppm         0              Vanadium         ppm         0              ADDITIVES               Calcium         ppm         4              Magnesium         ppm         0              Phosphorus         ppm         149              Barium         ppm         0	Chromium	ppm	<b>0</b>	 	
Titanium         ppm         0              Silver         ppm         0              Manganese         ppm         0              Vanadium         ppm         0              ADDITIVES           Calcium         ppm         4              Magnesium         ppm         0              Zinc         ppm         4              Phosphorus         ppm         149              Barium         ppm         0	Molybdenum	ppm	0	 	
Silver         ppm         0              Manganese         ppm         0              ADDITIVES           Calcium         ppm         4              Magnesium         ppm         0              Zinc         ppm         4              Phosphorus         ppm         149              Barium         ppm         0	Nickel	ppm	<b>0</b>	 	
Manganese         ppm         0	Titanium	ppm	0	 	
Vanadium         ppm         0              ADDITIVES           Calcium         ppm         4              Magnesium         ppm         0              Zinc         ppm         4              Phosphorus         ppm         149              Barium         ppm         0	Silver	ppm	0	 	
ADDITIVES  Calcium ppm 4  Magnesium ppm 0  Zinc ppm 4  Phosphorus ppm 149  Barium ppm 0	Manganese	ppm	0	 	
Calcium         ppm         4              Magnesium         ppm         0              Zinc         ppm         4              Phosphorus         ppm         149              Barium         ppm         0	Vanadium	ppm	0	 	
Magnesium         ppm         0              Zinc         ppm         4              Phosphorus         ppm         149              Barium         ppm         0	Zavitidda				
Zinc         ppm         4              Phosphorus         ppm         149               Barium         ppm         0	Calcium	ppm	4	 	
Phosphorus         ppm         149              Barium         ppm         0	Magnesium	ppm	0	 	
Barium ppm <b>0</b>	Zinc	ppm	4	 	
Tr -	Phosphorus	ppm	149	 	
Boron nnm 67	Barium	ppm	0	 	
poron ppin or	Boron	ppm	67	 	

## **Helmuts Marine Service**

619 Canal Street SAN RAFAEL, CA US 94901-3545 Contact: NADINE URCIUOLI SERVICE@HELMUTSMARINE.COM

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## 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 condition of the oil is acceptable for the time in service.

Depot:VP152741Unique No:10768638Signed:Don BaldridgeReport Date:06 Dec 2023





