



## THOMAS ROBBINS VOLVO PENTA A 1 106 103 - DIESEL ENGINE

Sample No: VPA055878

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMAT	TION			
Sample Number		VPA055878	 	
Sample Date		25 Oct 2023	 	
Machine Hours		160	 	
Oil Hours		30	 	
Oil Changed		Changed	 	
Sample Status		NORMAL	 	
OIL CONDITION				
Visc @ 100°C	cSt	<b>13.9</b>	 	
Base Number (BN)	mg KOH/g	9.1	 	
Oxidation (PA)	%	63	 	
` '	70			
CONTAMINATION				
Soot %	%	■ 0.3	 	
Nitration (PA)	%	48	 	
Sulfation (PA)	%	56	 	
Glycol	%	NEG	 	
Fuel	%	<1.0	 	
Silicon		□ 6		
	ppm			
Sodium	ppm	<b>3</b>	 	
Potassium	ppm	■8	 	
WEAR METALS				
Iron	ppm	<b>12</b>	 	
Copper	ppm	■8	 	
Lead	ppm	■4	 	
Tin	ppm	<u> </u>	 	
Aluminum	ppm	<b>■</b> 6	 	
Chromium	ppm	<b>=</b> <1	 	
Molybdenum		<b>1</b> 4	 	
Nickel	ppm			
Titanium	ppm	<b>1</b>	 	
	ppm	<b>=</b> <1		
Silver	ppm	<b>0</b>	 	
Manganese	ppm	<b>■</b> <1	 	
Vanadium	ppm	0	 	
ADDITIVES				
Calcium	ppm	<b>1979</b>	 	
Magnesium	ppm	<b>193</b>	 	
Zinc	ppm	<b>1164</b>	 	
Phosphorus	ppm	<b>1054</b>	 	
Barium	ppm	<b>19</b>	 	
Boron	ppm	<b>170</b>	 	
207011	77111			

## **McDonnell Marine Service**

63 Old Windsor Rd.
BLOOMFIELD, CT
US 06002-1404
Contact: Brian McDonnell
brmcdonnell@comcast.net
T:

## Diagnosis

F:

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: VP153357
Unique No: 10716170
Signed: Sean Felton
Report Date: 01 Nov 2023

## **OIL ANALYSIS REPORT**



