



## ROBERT KADE VOLVO PENTA 4012058650 - PORT GASOLINE ENGINE

Sample No: VPA055517
Oil Type: NOT GIVEN

SAMPLE INFORMAT	LIUN			
	IION			
Sample Number		VPA055517	VPA055525	 
Sample Date		25 Oct 2023	25 Sep 2023	 
Machine Hours		559	555	 
Oil Hours		0	0	 
Oil Changed		N/A	N/A	 
Sample Status		ATTENTION	ABNORMAL	 
OIL CONDITION				
Visc @ 100°C	cSt	<b>■13.3</b>	<b>□</b> 12.8	 
Base Number (BN)	mg KOH/g	■8.3	<b>□</b> 5.6	 
Oxidation (PA)	%	18	15	 
CONTAMINATION				
	0/		<b>5</b> 0.1	
Soot %	%	<b>■</b> 0	0.1	 
Nitration (PA)	%		10	 
Sulfation (PA)	%	13	12	 
Glycol	%	NEG	NEG	 
Fuel	%	<1.0	<1.0	 
Silicon	ppm	■8	<b>1</b> 2	 
Sodium	ppm	<u> </u>	<b>△</b> 736	 
Potassium	ppm	<b>16</b>	<b>▲</b> 37	 
WEAR METALS				
Iron	ppm	<b>5</b> 4	<u> </u>	 
Copper	ppm	<b>28</b>	<u>^</u> 201	 
Lead	ppm	1	<b>1</b> 2	 
Tin	ppm	<1	<1	 
Aluminum	ppm	<b>5</b>	<u></u> 13	 
Chromium	ppm	<b>-</b> <1	2	 
Molybdenum	ppm	11	44	 
Nickel	ppm	 	<b>3</b>	 
Titanium	ppm	<1	0	 
Silver	ppm	■0	0	 
Manganese	ppm	<1	3	 
Vanadium		<1	0	 
	ppm	ζ1	0	 
ADDITIVES				
Calcium	ppm	1924	1768	 
Magnesium	ppm	159	125	 
Zinc	ppm	1176	796	 
Phosphorus	ppm	1124	649	 
Barium	ppm	0	0	 
Boron	ppm	241	27	 

## **MELBOURNE MARINE DIESEL**

MELBOURNE, FL US Contact: SERVICE MANAGER info@melbournemarinediesel.com T: (321)425-2517 F:

## Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. Sodium and/or potassium levels are high. Test for glycol is negative. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: VP1222400
Unique No: 10713534
Signed: Jonathan Hester
Report Date: 31 Oct 2023





