OIL ANALYSIS REPORT

NADINE URCIUOLI BORIS BENTCHEV VOLVO PENTA A 1 100849 - PORT DIESEL ENGINE

Sample No: VPA051891

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

Sample Number		VPA051891		
Sample Date		13 Feb 2024		
Machine Hours		122		
Oil Hours		122		
Oil Changed		Changed		
Sample Status		NORMAL		
OIL CONDITION				
Visc @ 100°C	cSt	12.6		
Base Number (BN)		9.9		
Oxidation (PA)	%	63		
CONTAMINATION				
Water	%	NEG		
Soot %	%	0.1		
Nitration (PA)	%	43		
Sulfation (PA)	%	54		
Glycol	%	NEG		
uel	%	<1.0		
Silicon	ppm	24		
Sodium	ppm	5		
Potassium	ppm	5		
WEAR METALS				
Iron	ppm	1 9		
Copper	ppm	1 8		
Lead	ppm	4		
Tin	ppm	2		
Aluminum	ppm	1 2		
Chromium	ppm	1		
Molybdenum	ppm	53		
Nickel	ppm	2		
Titanium	ppm			
Silver	ppm	0		
Manganese	ppm			
Vanadium	ppm	0		
ADDITIVES				
Calcium	ppm	1194		
	ppm	832		
Magnesium		1190		
			=	
Magnesium Zinc Phosphorus	ppm			
	ppm ppm	1130 1070 11		



Helmuts Marine Service 519 Canal Street 5AN RAFAEL, CA JS 94901-3545 Contact: NADINE URCIUOLI SERVICE@HELMUTSMARINE.COM F: x:

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:
 VP152741

 Unique No:
 10885574

 Signed:
 Don Baldridge

 Report Date:
 20 Feb 2024

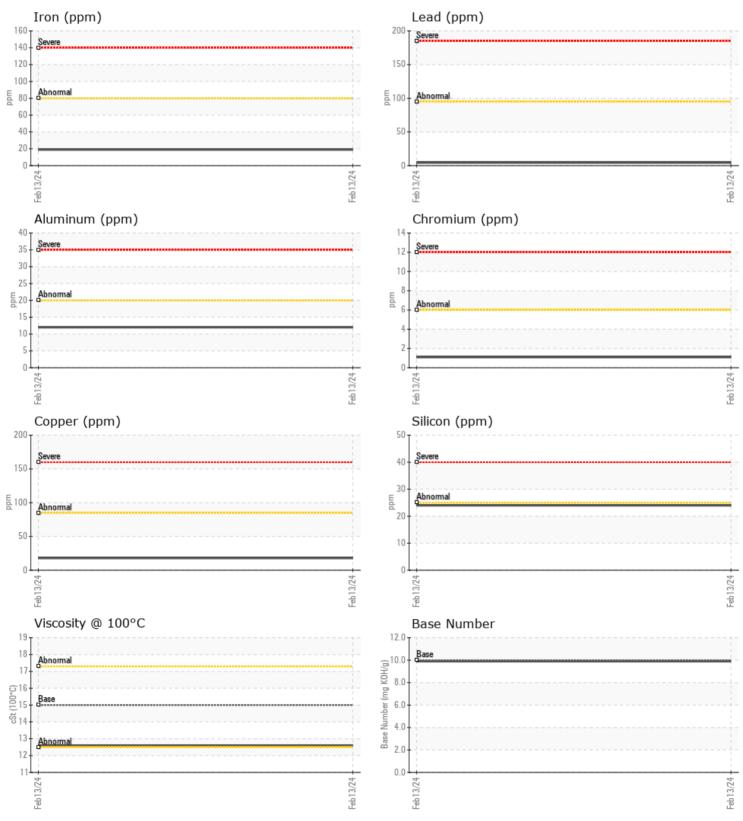
Report Id: VP152741 [WUSCAR] 06092721 (Generated: 02/22/2024 11:20:27) Rev: 1

Contact/Location: NADINE URCIUOLI - VP152741

OIL ANALYSIS REPORT



GRAPHS



Report Id: VP152741 [WUSCAR] 06092721 (Generated: 02/22/2024 11:20:29) Rev: 1

Contact/Location: NADINE URCIUOLI - VP152741