OIL ANALYSIS REPORT

BRUCE GOODMAN VOLVO PENTA 7011359421 - PORT DIESEL ENGINE

Sample No: VPA056655

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

Sample Number Sample Date		VPA056655	VPA039579	
Sample Date		08 Sep 2023	21 Sep 2022	
Machine Hours		646	0	
Oil Hours		0	0	
Oil Changed		N/A	N/A	
Sample Status		NORMAL	ABNORMAL	
OIL CONDITION				
	<i>c</i> .		- 10.0	
Visc @ 100°C	cSt	∎13.1	13.2	
	mg KOH/g	■ 10.1	11.5	
Oxidation (PA)	%	56	59	
CONTAMINATION				
Soot %	%	0.2	0.2	
Nitration (PA)	%	47	48	
Sulfation (PA)	%	53	55	
	%	NEG	NEG	
Fuel	%	<1.0	<1.0	
Silicon	ppm	5	4	
Sodium	ppm	1	2	
Potassium	ppm	□ <1	1	
WEAR METALS				
Iron	ppm	3	3	
Copper	ppm	1 3	11	
Lead	ppm	 <1	 < 1	
Tin	ppm	■ <1	 <1	
Aluminum	ppm	4	1	
Chromium	ppm	 <1	 <1	
Molybdenum	ppm	61	57	
Nickel	ppm	■ <1	2	
Titanium	ppm	0	0	
Silver	ppm	0	3	
Manganese	ppm	 <1	 < 1	
Vanadium	ppm	0	<1	
ADDITIVES				
Calcium	ppm	1122	1049	
Magnesium	ppm	1051	889	
	ppm	1381	1175	
Zinc				
-		1136	989	
Zinc	ppm ppm	□1136 □0	■ 989 ■ 0	

BAY MARINE

3 E MADISON ST WAUKEGAN, IL US 60085 Contact: NANCY FELHOFER NANCY.FELHOFER@BAYMARINE.NET T:

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:
 VP1174336

 Unique No:
 10647188

 Signed:
 Jonathan Hester

 Report Date:
 19 Sep 2023

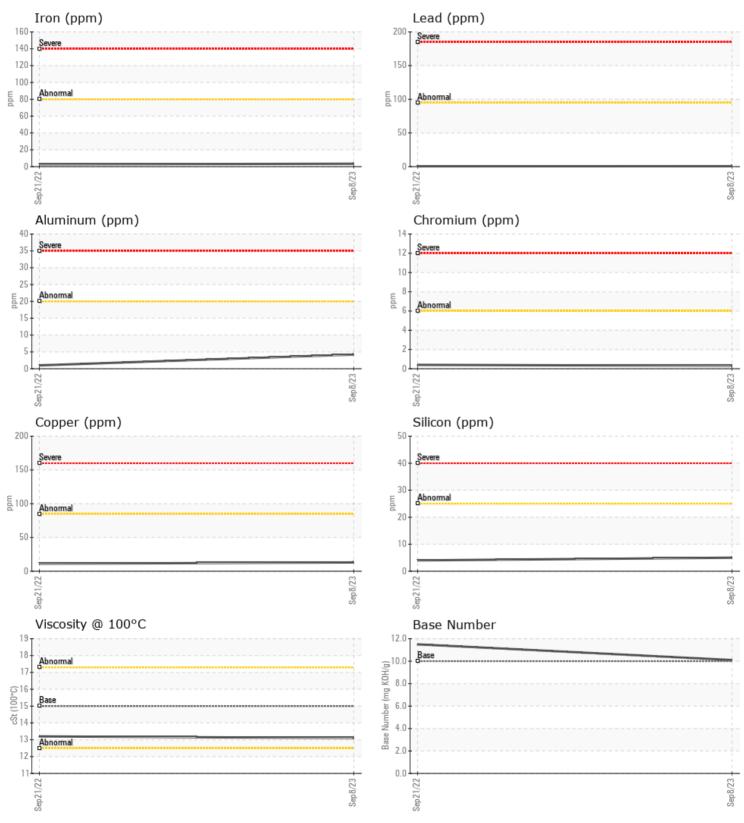
Contact/Location: NANCY FELHOFER - VP1174336



OIL ANALYSIS REPORT



GRAPHS



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