



DANIEL 13611 VOLVO PENTA A 112 1385 - CENTER GASOLINE ENGINE

Sample No: VPA046365

Oil Type: VOLVO 10W40 FULL SYNTHETIC

SAMPLE INFORMAT	TION			
Sample Number		VPA046365	VPA044761	
Sample Date		13 Jul 2023	15 Nov 2022	
Machine Hours		80	70	
Oil Hours		10	26	
Oil Changed		Not Changd	Changed	
Sample Status		ABNORMAL	ATTENTION	
OIL CONDITION				
Visc @ 100°C	cSt	11.9	▲ 11.3	
Base Number (BN)	mg KOH/g	7.4	■8.6	
Oxidation (PA)	%	9	11	
CONTAMINATION				
Soot %	%	0	□0.1	
Nitration (PA)	%	7	8	
Sulfation (PA)	%	9	11	
Glycol	%	NEG	NEG	
Fuel	%	▲ 8.7	▲ 3.7	
Silicon	ppm	26	□ 55	
Sodium	ppm	4	0	
Potassium	ppm	2	5	
WEAR METALS				
Iron	ppm	16	2 1	
Copper	ppm	46	■84	
Lead	ppm	■0	■ <1	
Tin	ppm	■<1	<1	
Aluminum	ppm	2	2	
Chromium	ppm	 <1	2	
Molybdenum	ppm	37	39	
Nickel	ppm	■ 0	0	
Titanium		0	0	
Silver	ppm	0 0	0	
	ppm	_	9	
Manganese Vanadium	ppm	5	0	
	ppm	U	U	
ADDITIVES				
Calcium	ppm	1852	2024	
Magnesium	ppm	15	17	
Zinc	ppm	815	782	
Phosphorus	ppm	699	667	
Barium	ppm	0	0	
Boron	ppm	0	5	
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CHICAGO YACHT WORKS

2550 S ASHLAND AVE CHICAGO, IL US 60608 Contact: JONATHAN PAIGE jonathan@chicagoyachtworks.com T: (312)666-6670 F:

Diagnosis

We advise that you check the fuel injection system. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Depot:VP1080862Unique No:10564494Signed:Doug BogartReport Date:23 Jul 2023

OIL ANALYSIS REPORT



