

# OIL ANALYSIS REPORT

# VOLVO PENTA

## VOLVO PENTA A1072862 - STARBOARD DIESEL ENGINE

Sample No: VPA036555

Oil Type: DIESEL ENGINE OIL SAE 15W40

### SAMPLE INFORMATION

Sample Number	VPA036555	VPA048224	VPA040392	VPA034946
Sample Date	29 Aug 2023	11 Apr 2022	05 Nov 2021	19 Aug 2021
Machine Hours	768	540	454	403
Oil Hours	0	0	0	0
Oil Changed	N/A	N/A	Not Changd	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

### SUNCOAST DIESEL MARINE

6341 PORTER ROAD, SUITE 6  
SARASOTA, FL  
US 34240  
Contact: JOSHUA  
joshua@suncoastdmi.com  
T: (941)342-0033  
F: (941)342-0088

### OIL CONDITION

Visc @ 100°C	cSt	█ 13.82	█ 13.5	█ 13.5	█ 13.47
Base Number (BN)	mg KOH/g	█ 9.9	█ 11.1	---	---
Oxidation (PA)	%	█ 58	63	59	60

### CONTAMINATION

Soot %	%	█ 0.2	█ 0.5	█ 0.4	█ 0.4
Nitration (PA)	%	█ 53	63	55	52
Sulfation (PA)	%	█ 54	59	56	58
Glycol	%	█ NEG	NEG	NEG	NEG
Fuel	%	█ <1.0	<1.0	<1.0	<1.0
Silicon	ppm	█ 5	█ 6	█ 4	█ 5
Sodium	ppm	█ 0	█ 2	█ 1	█ <1
Potassium	ppm	█ <1	█ 0	█ <1	█ <1

### WEAR METALS

Iron	ppm	█ 20	█ 23	█ 15	█ 13
Copper	ppm	█ 7	█ 10	█ 6	█ 5
Lead	ppm	█ <1	█ 2	█ 2	█ 2
Tin	ppm	█ <1	█ 1	█ 1	█ <1
Aluminum	ppm	█ 1	█ 2	█ 1	█ 1
Chromium	ppm	█ <1	█ <1	█ <1	█ <1
Molybdenum	ppm	█ 63	█ 62	█ 61	█ 58
Nickel	ppm	█ 2	█ 1	█ 1	█ 1
Titanium	ppm	█ 0	█ 0	█ 0	█ 0
Silver	ppm	█ 0	█ <1	█ <1	█ <1
Manganese	ppm	█ <1	█ <1	█ <1	█ <1
Vanadium	ppm	█ 0	█ 0	█ 0	█ <1

### ADDITIVES

Calcium	ppm	█ 1120	█ 1145	█ 1102	█ 1071
Magnesium	ppm	█ 936	█ 1001	█ 978	█ 946
Zinc	ppm	█ 1241	█ 1216	█ 1246	█ 1224
Phosphorus	ppm	█ 1075	█ 1110	█ 1052	█ 1023
Barium	ppm	█ 2	█ 0	█ 0	█ 0
Boron	ppm	█ 6	█ 8	█ 8	█ 11

### 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: VP705283  
Unique No: 10631729  
Signed: Doug Bogart  
Report Date: 01 Sep 2023

# OIL ANALYSIS REPORT

# VOLVO PENTA

## GRAPHS

