

OIL ANALYSIS REPORT

**VOLVO
PENTA**

STOURAKAS BUD YANMAR 57246 - STARBOARD DIESEL ENGINE

Sample No: VPA021908

Oil Type: SHELL ROTELLA T 15W40

SAMPLE INFORMATION

Sample Number	VPA021908	VPA041121	VPA040394	VPA031722
Sample Date	05 Dec 2023	06 Oct 2022	03 Dec 2021	19 Nov 2020
Machine Hours	1728	1627	1509	1414
Oil Hours	0	0	95	57
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

Point Judith Marina

360 Gooseberry Road
WAKEFIELD, RI
US 02879

Contact: MATT ST. ANGELO
service@pjmarina.com;canastasio@wearcheckusa.com
T: (401)789-7189
F: (401)783-5350

OIL CONDITION

Visc @ 100°C	cSt	13.6	13.7	14.1	14.2
Base Number (BN)	mg KOH/g	7.6	9	10.2	---
Oxidation (PA)	%	67	63	63	57

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.4	0.5	0.4	0.3
Nitration (PA)	%	66	79	56	52
Sulfation (PA)	%	56	55	54	52
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	5	3	2
Sodium	ppm	8	4	2	2
Potassium	ppm	2	2	<1	<1

WEAR METALS

Iron	ppm	17	20	26	8
Copper	ppm	2	15	11	7
Lead	ppm	0	<1	1	<1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	4	7	8	5
Chromium	ppm	0	1	1	<1
Molybdenum	ppm	59	89	61	61
Nickel	ppm	0	0	<1	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	2	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	1261	2063	1141	1133
Magnesium	ppm	859	264	1025	955
Zinc	ppm	1260	1277	1333	1286
Phosphorus	ppm	1051	1091	1135	1090
Barium	ppm	0	0	0	0
Boron	ppm	21	54	8	7

Diagnosis

Oil and filter change at the time of sampling has been noted. 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 acceptable for the time in service.

Depot: VP153811
Unique No: 10777224
Signed: Angela Borella
Report Date: 08 Dec 2023

OIL ANALYSIS REPORT

VOLVO PENTA

GRAPHS

