

# OIL ANALYSIS REPORT



## ENCORE V (S/N 3940023261) - PORT IPS

Sample No: VPA045983

Oil Type: VOLVO API GL-5 SAE 75W90

### SAMPLE INFORMATION

Sample Number	<b>VPA045983</b>	VPA042039	VPA040157	VPA025107
Sample Date	<b>30 Jun 2023</b>	27 Mar 2023	24 Jun 2022	26 Jul 2021
Machine Hours	<b>0</b>	1200	3827	0
Oil Hours	<b>420</b>	350	400	500
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**BAY STATE CRUISE COMPANY**  
 200 SEAPORT BLVD, SUITE 50 LOWER LEVEL  
 BOSTON, MA  
 US 02210  
 Contact: CHRISTINE HOOLEY  
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 T: (617)775-8418  
 F:

### OIL CONDITION

Visc @ 40°C	cSt	<b>103</b>	104	106	104
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### CONTAMINATION

Water	%	<b>0.169</b>	NEG	NEG	NEG
Silicon	ppm	<b>10</b>	16	14	12
Sodium	ppm	<b>4</b>	29	<1	9
Potassium	ppm	<b>&lt;1</b>	2	3	0

### WEAR METALS

PQ		<b>18</b>	17	16	23
Iron	ppm	<b>42</b>	99	30	54
Copper	ppm	<b>7</b>	8	7	10
Lead	ppm	<b>0</b>	<1	<1	<1
Tin	ppm	<b>0</b>	<1	0	0
Aluminum	ppm	<b>2</b>	6	2	3
Chromium	ppm	<b>&lt;1</b>	2	<1	<1
Molybdenum	ppm	<b>0</b>	1	1	<1
Nickel	ppm	<b>&lt;1</b>	3	0	<1
Titanium	ppm	<b>0</b>	<1	0	<1
Silver	ppm	<b>0</b>	<1	0	<1
Manganese	ppm	<b>0</b>	3	2	2
Vanadium	ppm	<b>0</b>	<1	0	0

### ADDITIVES

Calcium	ppm	<b>1</b>	2	3	3
Magnesium	ppm	<b>1</b>	5	2	2
Zinc	ppm	<b>8</b>	63	10	33
Phosphorus	ppm	<b>1402</b>	1244	1353	1351
Barium	ppm	<b>0</b>	0	2	0
Boron	ppm	<b>307</b>	309	375	400

### Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

**Depot:** VPBAYBOS  
**Unique No:** 10885371  
**Signed:** Sean Felton  
**Report Date:** 20 Feb 2024

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# VOLVO PENTA

## GRAPHS

