

# OIL ANALYSIS REPORT



## ENCORE II (S/N 3940024412) - PORT IPS

**Sample No:** VPA048575  
**Oil Type:** VOLVO PENTA GL-5 SAE 75W90

### SAMPLE INFORMATION

Sample Number	<b>VPA048575</b>	VPA045986	VPA042050	VPA042026
Sample Date	<b>20 Dec 2023</b>	17 Jun 2023	15 Jun 2023	28 Feb 2023
Machine Hours	<b>6670</b>	6229	1750	5381
Oil Hours	<b>450</b>	0	450	400
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>ABNORMAL</b>	NORMAL	NORMAL	ABNORMAL

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

### OIL CONDITION

Visc @ 40°C	cSt	<b>105</b>	105	103	105
-------------	-----	------------	-----	-----	-----

### CONTAMINATION

Water	%	<b>0.228</b>	NEG	NEG	<b>0.907</b>
Silicon	ppm	<b>29</b>	10	16	11
Sodium	ppm	<b>17</b>	0	6	86
Potassium	ppm	<b>2</b>	<1	1	4

### WEAR METALS

PQ		<b>9</b>	16	14	14
Iron	ppm	<b>33</b>	21	61	70
Copper	ppm	<b>7</b>	4	7	4
Lead	ppm	<b>&lt;1</b>	0	<1	<1
Tin	ppm	<b>&lt;1</b>	0	<1	0
Aluminum	ppm	<b>1</b>	2	1	3
Chromium	ppm	<b>1</b>	<1	1	<1
Molybdenum	ppm	<b>&lt;1</b>	0	<1	0
Nickel	ppm	<b>2</b>	0	2	<1
Titanium	ppm	<b>&lt;1</b>	0	<1	0
Silver	ppm	<b>&lt;1</b>	0	<1	0
Manganese	ppm	<b>2</b>	0	2	3
Vanadium	ppm	<b>&lt;1</b>	0	<1	0

### ADDITIVES

Calcium	ppm	<b>5</b>	<1	<1	5
Magnesium	ppm	<b>7</b>	<1	2	16
Zinc	ppm	<b>19</b>	6	53	62
Phosphorus	ppm	<b>1869</b>	1398	1308	1399
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>467</b>	318	297	277

### Diagnosis

We advise that you check for the source of water entry. 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 a light concentration of water present in the oil. Free water present. The condition of the oil is acceptable for the time in service.

**Depot:** VPBAYBOS  
**Unique No:** 10885360  
**Signed:** Sean Felton  
**Report Date:** 20 Feb 2024

# OIL ANALYSIS REPORT

# VOLVO PENTA

## GRAPHS

