

# OIL ANALYSIS REPORT



## ENCORE I - STARBOARD IPS

**Sample No:** VPA048580  
**Oil Type:** VOLVO PENTA GL-5 SAE 75W90

### SAMPLE INFORMATION

Sample Number	<b>VPA048580</b>	VPA045980	VPA039848	VPA040154
Sample Date	<b>23 May 2024</b>	17 Jun 2023	23 Feb 2023	07 Jul 2022
Machine Hours	<b>6466</b>	5717	0	4270
Oil Hours	<b>500</b>	470	400	350
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	ABNORMAL	ATTENTION	ATTENTION

**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>106</b>	102	102	105
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### CONTAMINATION

Water	%	<b>NEG</b>	0.141	NEG	NEG
Silicon	ppm	<b>12</b>	16	10	17
Sodium	ppm	<b>10</b>	21	14	41
Potassium	ppm	<b>&lt;1</b>	2	<1	2

### 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 condition of the oil is acceptable for the time in service.

### WEAR METALS

PQ		<b>20</b>	14	14	13
Iron	ppm	<b>77</b>	306	229	300
Copper	ppm	<b>8</b>	14	5	12
Lead	ppm	<b>0</b>	0	0	<1
Tin	ppm	<b>0</b>	0	0	0
Aluminum	ppm	<b>2</b>	9	6	8
Chromium	ppm	<b>&lt;1</b>	2	1	2
Molybdenum	ppm	<b>0</b>	0	0	<1
Nickel	ppm	<b>2</b>	3	2	0
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	2	2	4
Vanadium	ppm	<b>&lt;1</b>	0	0	0

### ADDITIVES

Calcium	ppm	<b>0</b>	2	16	3
Magnesium	ppm	<b>3</b>	3	6	6
Zinc	ppm	<b>21</b>	45	56	44
Phosphorus	ppm	<b>1461</b>	1436	1368	1365
Barium	ppm	<b>0</b>	0	0	2
Boron	ppm	<b>361</b>	278	271	373

**Depot:** VPBAYBOS  
**Unique No:** 11073210  
**Signed:** Doug Bogart  
**Report Date:** 12 Jun 2024

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# VOLVO PENTA

## GRAPHS

