

# OIL ANALYSIS REPORT

# VOLVO PENTA

## ENCORE I (S/N 3940023264) - PORT IPS

Sample No: VPA048545

Oil Type: VOLVO PENTA GL-5 SAE 75W90

### SAMPLE INFORMATION

Sample Number	VPA048545	VPA039842	VPA040153	VPA038482
Sample Date	17 Jun 2023	30 Mar 2023	07 Jul 2022	10 Sep 2021
Machine Hours	5717	0	4270	3926
Oil Hours	470	400	340	600
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	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	█ 103	█ 105	█ 106	█ 106
-------------	-----	-------	-------	-------	-------

### CONTAMINATION

Water	%	█ 0.177	▲ 0.382	NEG	NEG
Silicon	ppm	█ 12	8	14	12
Sodium	ppm	█ 18	█ 59	█ 42	█ 35
Potassium	ppm	█ 1	█ 2	█ 3	█ <1

### WEAR METALS

PQ		█ 21	█ 17	█ 19	█ 29
Iron	ppm	█ 74	█ 98	█ 85	▲ 163
Copper	ppm	█ 8	█ 8	█ 11	█ 18
Lead	ppm	0	<1	<1	1
Tin	ppm	0	0	0	0
Aluminum	ppm	4	█ 15	█ 12	█ 17
Chromium	ppm	█ <1	█ <1	█ <1	█ 2
Molybdenum	ppm	█ 0	█ 0	█ <1	█ <1
Nickel	ppm	█ 1	█ 3	█ 0	█ 4
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	█ <1	█ 2	█ 4	█ 7
Vanadium	ppm	0	0	0	0

### ADDITIVES

Calcium	ppm	█ 2	█ 6	█ 4	█ 5
Magnesium	ppm	█ 3	11	█ 6	█ 6
Zinc	ppm	█ 45	█ 81	█ 107	█ 185
Phosphorus	ppm	█ 1443	█ 1365	█ 1421	█ 1342
Barium	ppm	█ 0	█ 0	█ 2	█ 0
Boron	ppm	█ 290	█ 271	█ 359	█ 359

### 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: 10885367  
Signed: Sean Felton  
Report Date: 20 Feb 2024

# OIL ANALYSIS REPORT

# VOLVO PENTA

## GRAPHS

