

OIL ANALYSIS REPORT

VOLVO PENTA

ENCORE III - PORT IPS

Sample No: VPA048637

Oil Type: VOLVO API GL-5 SAE 75W90

SAMPLE INFORMATION

Sample Number	VPA048637	VPA045984	VPA045982	VPA040151
Sample Date	15 May 2024	21 Jun 2023	14 Jun 2023	18 Jul 2022
Machine Hours	6700	430	773	5140
Oil Hours	500	430	400	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	NORMAL	ABNORMAL	SEVERE

BAY STATE CRUISE COMPANY
200 SEAPORT BLVD, SUITE 50 LOWER LEVEL
BOSTON, MA
US 02210
Contact: CHRISTINE HOOLEY
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F:

OIL CONDITION

Visc @ 40°C	cSt	█ 105	█ 101	█ 105	█ 104
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CONTAMINATION

Water	%	▲ 0.816	█ 0.161	▲ 0.282	▲ 0.376
Silicon	ppm	█ 17	9	22	24
Sodium	ppm	█ 67	█ 0	█ 51	█ 45
Potassium	ppm	█ 3	█ <1	█ 3	█ 2

WEAR METALS

PQ		█ 27	█ 12	█ 24	█ 16
Iron	ppm	▲ 410	█ 28	▲ 331	▲ 421
Copper	ppm	█ 20	6	19	15
Lead	ppm	█ 0	0	<1	<1
Tin	ppm	█ 0	0	<1	0
Aluminum	ppm	▲ 19	2	14	47
Chromium	ppm	▲ 4	█ <1	█ 3	█ 3
Molybdenum	ppm	█ <1	█ 0	█ <1	█ <1
Nickel	ppm	▲ 4	█ <1	█ 4	█ 0
Titanium	ppm	█ <1	0	<1	<1
Silver	ppm	0	<1	<1	0
Manganese	ppm	█ 4	█ 1	█ 6	█ 6
Vanadium	ppm	<1	0	<1	0

ADDITIVES

Calcium	ppm	█ 0	█ 2	█ 6	█ 6
Magnesium	ppm	█ 10	█ 1	█ 7	█ 7
Zinc	ppm	█ 39	█ 12	█ 38	█ 93
Phosphorus	ppm	█ 1400	█ 1354	█ 1220	█ 1389
Barium	ppm	█ 0	█ 0	█ 0	█ 2
Boron	ppm	█ 359	█ 310	█ 281	█ 359

Diagnosis

We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Gear wear is indicated. Appearance is unacceptable. There is a high concentration of water present in the oil. The oil is no longer serviceable due to the presence of contaminants.

Depot: VPBAYBOS
Unique No: 11073215
Signed: Doug Bogart
Report Date: 12 Jun 2024

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GRAPHS

