

OIL ANALYSIS REPORT

VOLVO PENTA

VOLVO PENTA 3950006557 - CENTER IPS

Sample No: VPA020816

Oil Type: VOLVO PENTA GL-5 SAE 75W90

SAMPLE INFORMATION

Sample Number	VPA020816	VPA020713	VPA020712	VPA022610
Sample Date	31 Jan 2024	13 Nov 2023	25 Oct 2023	22 Aug 2023
Machine Hours	6951	6476	6348	6000
Oil Hours	477	444	348	500
Oil Changed	Changed	Changed	Not Changd	Changed
Sample Status	ABNORMAL	ABNORMAL	NORMAL	NORMAL

CHARLESTON NAVIGATION
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CHARLESTON, SC
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OIL CONDITION

Visc @ 40°C	cSt	█ 101	█ 101	█ 102	█ 103
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CONTAMINATION

Water	%	▲ 0.357	▲ 0.289	NEG	NEG
Silicon	ppm	█ 3	█ 1	█ 2	█ <1
Sodium	ppm	█ 39	█ 20	█ 15	█ 4
Potassium	ppm	█ 4	█ 3	█ 3	█ 3

WEAR METALS

PQ		█ 29	█ 21	█ 17	█ 19
Iron	ppm	█ 161	█ 117	█ 83	█ 83
Copper	ppm	█ 14	█ 13	█ 10	█ 3
Lead	ppm	█ 0	█ 0	█ 0	█ 0
Tin	ppm	█ <1	█ 0	█ <1	█ 0
Aluminum	ppm	█ 9	█ 2	█ 1	█ 3
Chromium	ppm	█ 1	█ <1	█ <1	█ <1
Molybdenum	ppm	█ 0	█ <1	█ <1	█ 0
Nickel	ppm	█ 3	█ 1	█ 1	█ <1
Titanium	ppm	█ 0	█ <1	█ <1	█ 0
Silver	ppm	█ 0	█ 0	█ 0	█ 0
Manganese	ppm	█ 3	█ 3	█ 2	█ 2
Vanadium	ppm	█ <1	█ 0	█ 0	█ 0

ADDITIVES

Calcium	ppm	█ 0	█ 5	█ 2	█ 4
Magnesium	ppm	█ 5	█ 9	█ 6	█ 14
Zinc	ppm	█ 91	█ 18	█ 0	█ 0
Phosphorus	ppm	█ 1404	█ 1277	█ 1402	█ 1374
Barium	ppm	█ 0	█ <1	█ 0	█ 0
Boron	ppm	█ 343	█ 311	█ 311	█ 356

Diagnosis

No corrective action is recommended at this time. 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. The condition of the oil is acceptable for the time in service.

Depot: VPCHACHA
Unique No: 10861427
Signed: Jonathan Hester
Report Date: 06 Feb 2024

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**VOLVO
PENTA**

GRAPHS

