

OIL ANALYSIS REPORT

**VOLVO
PENTA**

3940016735 - STARBOARD IPS

Sample No: VPA026534

Oil Type: MOBIL DELVAC 1 SYNTHETIC GEAR SAE 75W90

SAMPLE INFORMATION

Sample Number	VPA026534	VPA040283	VPA040281	VPA024166
Sample Date	16 Jul 2023	23 Oct 2022	23 Oct 2021	11 Oct 2020
Machine Hours	874	742	661	590
Oil Hours	50	151	71	49
Oil Changed	Not Changd	Changed	Not Changd	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 40°C	cSt	105	108.9	115	112
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CONTAMINATION

Water	%	---	▲ 0.870	---	---
Silicon	ppm	9	16	8	17
Sodium	ppm	1	5	0	1
Potassium	ppm	0	0	0	0

WEAR METALS

PQ		23	18	20	33
Iron	ppm	61	187	42	92
Copper	ppm	7	19	7	10
Lead	ppm	<1	0	<1	0
Tin	ppm	0	<1	0	0
Aluminum	ppm	<1	3	1	2
Chromium	ppm	<1	2	<1	1
Molybdenum	ppm	<1	<1	<1	0
Nickel	ppm	<1	1	<1	2
Titanium	ppm	<1	<1	<1	0
Silver	ppm	0	<1	<1	0
Manganese	ppm	<1	2	<1	2
Vanadium	ppm	<1	0	0	0

ADDITIVES

Calcium	ppm	55	16	11	8
Magnesium	ppm	1	5	4	3
Zinc	ppm	16	25	0	14
Phosphorus	ppm	1300	1356	1373	1339
Barium	ppm	0	0	0	0
Boron	ppm	295	287	307	252

Diagnosis

Resample at the next service interval to monitor. Tests do not reveal cause for reported problem. 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.

Depot: VPKENCHI
Unique No: 10564854
Signed: Don Baldrige
Report Date: 24 Jul 2023

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GRAPHS

