

# OIL ANALYSIS REPORT

**VOLVO  
PENTA**

## 3940016735 - STARBOARD IPS

**Sample No:** VPA026531  
**Oil Type:** MOBIL DELVAC 1 SYNTHETIC GEAR SAE 75W90

### SAMPLE INFORMATION

Sample Number	<b>VPA026531</b>	VPA026534	VPA040283	VPA040281
Sample Date	<b>13 Apr 2024</b>	16 Jul 2023	23 Oct 2022	23 Oct 2021
Machine Hours	<b>860</b>	874	742	661
Oil Hours	<b>118</b>	50	151	71
Oil Changed	<b>Changed</b>	Not Changd	Changed	Not Changd
Sample Status	<b>ABNORMAL</b>	NORMAL	ABNORMAL	NORMAL

**KENN WOLF**  
4037 N LOWEL  
CHICAGO, IL  
US 60641  
Contact: KENN WOLF  
kwolf@hfsmaterials.com  
T: (773)339-0633  
F:

### OIL CONDITION

Visc @ 40°C	cSt	<b>101</b>	105	108.9	115
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### CONTAMINATION

Water	%	<b>NEG</b>	NEG	▲ 0.870	NEG
Silicon	ppm	<b>14</b>	9	16	8
Sodium	ppm	<b>0</b>	1	5	0
Potassium	ppm	<b>1</b>	0	0	0

### WEAR METALS

PQ		<b>34</b>	23	18	20
Iron	ppm	▲ <b>226</b>	61	187	42
Copper	ppm	<b>22</b>	7	19	7
Lead	ppm	<1	<1	0	<1
Tin	ppm	<1	0	<1	0
Aluminum	ppm	<b>2</b>	<1	3	1
Chromium	ppm	<b>2</b>	<1	2	<1
Molybdenum	ppm	<1	<1	<1	<1
Nickel	ppm	<b>3</b>	<1	1	<1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	<b>0</b>	0	<1	<1
Manganese	ppm	<b>3</b>	<1	2	<1
Vanadium	ppm	<1	<1	0	0

### ADDITIVES

Calcium	ppm	<b>10</b>	55	16	11
Magnesium	ppm	<b>3</b>	1	5	4
Zinc	ppm	<b>18</b>	16	25	0
Phosphorus	ppm	<b>1329</b>	1300	1356	1373
Barium	ppm	<b>1</b>	0	0	0
Boron	ppm	<b>324</b>	295	287	307

### Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The iron level is abnormal. All other 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:** 10983539  
**Signed:** Angela Borella  
**Report Date:** 22 Apr 2024

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## GRAPHS

