

# OIL ANALYSIS REPORT

# VOLVO PENTA

**RICHMOND RICH/TYLER 3950006318 - STARBOARD IPS**

**Sample No:** VPA046517

**Oil Type:** VOLVO API GL-5 SAE 75W90

## SAMPLE INFORMATION

Sample Number	<b>VPA046517</b>	VPA046638	VPA037504	VPA028094
Sample Date	<b>11 Aug 2023</b>	25 Apr 2023	24 Jan 2023	31 Oct 2022
Machine Hours	<b>6253</b>	5657	5167	4645
Oil Hours	<b>596</b>	500	512	500
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

## VIRGINIA PILOT ASSOCIATION

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VIRGINIA BEACH, VA  
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## OIL CONDITION

Visc @ 40°C	cSt	<b>103</b>	105	102	102
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## CONTAMINATION

Silicon	ppm	<b>1</b>	0	5	2
Sodium	ppm	<b>2</b>	1	2	1
Potassium	ppm	<b>1</b>	0	1	0

## WEAR METALS

PQ		<b>13</b>	14	12	4
Iron	ppm	<b>22</b>	15	29	20
Copper	ppm	<b>6</b>	4	4	5
Lead	ppm	<b>0</b>	0	0	0
Tin	ppm	<b>0</b>	0	0	<1
Aluminum	ppm	<b>&lt;1</b>	1	1	2
Chromium	ppm	<b>0</b>	<1	<1	0
Molybdenum	ppm	<b>&lt;1</b>	2	<1	<1
Nickel	ppm	<b>0</b>	0	<1	0
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	0	0

## ADDITIVES

Calcium	ppm	<b>12</b>	14	17	15
Magnesium	ppm	<b>2</b>	6	5	2
Zinc	ppm	<b>0</b>	11	10	5
Phosphorus	ppm	<b>1323</b>	1348	1299	1348
Barium	ppm	<b>0</b>	0	1	0
Boron	ppm	<b>323</b>	324	317	332

## Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the fluid. The condition of the fluid is acceptable for the time in service.

**Depot:** VPVIRVIR  
**Unique No:** 10605527  
**Signed:** Don Baldrige  
**Report Date:** 17 Aug 2023

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## GRAPHS

