

# OIL ANALYSIS REPORT



## WALTER LYNCH DHARMA VOLVO PENTA 3940020562 - STARBOARD IPS

**Sample No:** VPA047930  
**Oil Type:** VOLVO PENTA GL-5 SAE 75W90

### SAMPLE INFORMATION

Sample Number	<b>VPA047930</b>	VPA041918	VPA027152	VPA022527
Sample Date	<b>22 Jun 2023</b>	25 May 2022	10 Mar 2020	07 Jun 2019
Machine Hours	<b>509</b>	460	366	0
Oil Hours	<b>45</b>	120	0	30
Oil Changed	<b>Changed</b>	Changed	N/A	Not Changd
Sample Status	<b>SEVERE</b>	ATTENTION	ABNORMAL	SEVERE

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### OIL CONDITION

Visc @ 40°C	cSt	<b>109</b>	107	102	99.3
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### CONTAMINATION

Water	%	<b>1.58</b>	0.556	0.324	1.50
Silicon	ppm	<b>22</b>	12	39	40
Sodium	ppm	<b>136</b>	36	35	87
Potassium	ppm	<b>6</b>	1	2	5

### WEAR METALS

PQ		<b>12</b>	23	22	20
Iron	ppm	<b>191</b>	135	204	194
Copper	ppm	<b>16</b>	15	16	31
Lead	ppm	<b>&lt;1</b>	<1	<1	<1
Tin	ppm	<b>0</b>	<1	0	<1
Aluminum	ppm	<b>3</b>	3	2	3
Chromium	ppm	<b>1</b>	<1	2	2
Molybdenum	ppm	<b>&lt;1</b>	<1	0	0
Nickel	ppm	<b>2</b>	2	2	3
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	<b>0</b>	<1	0	0
Manganese	ppm	<b>3</b>	2	4	6
Vanadium	ppm	<b>0</b>	0	0	0

### ADDITIVES

Calcium	ppm	<b>22</b>	9	8	21
Magnesium	ppm	<b>23</b>	11	23	80
Zinc	ppm	<b>40</b>	49	48	30
Phosphorus	ppm	<b>1310</b>	1364	1413	1197
Barium	ppm	<b>0</b>	0	<1	0
Boron	ppm	<b>324</b>	303	301	212

### Diagnosis

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Appearance is milky. There is a high concentration of water present in the oil. The oil is no longer serviceable due to the presence of contaminants.

**Depot:** VP288530  
**Unique No:** 10536397  
**Signed:** Jonathan Hester  
**Report Date:** 06 Jul 2023

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# VOLVO PENTA

## GRAPHS

