

# OIL ANALYSIS REPORT



## SUSAN EIDE DILLON VOLVO PENTA 2006014371 - PORT DIESEL ENGINE

**Sample No:** VPA060412  
**Oil Type:** VOLVO PENTA SAE 15W40

### SAMPLE INFORMATION

Sample Number	<b>VPA060412</b>	VPA045531	VPA047481	---
Sample Date	<b>20 Feb 2024</b>	13 Mar 2023	14 Mar 2022	---
Machine Hours	<b>913</b>	882	814	---
Oil Hours	<b>0</b>	0	0	---
Oil Changed	<b>Changed</b>	Changed	N/A	---
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	---

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### OIL CONDITION

Visc @ 100°C	cSt	<b>13.3</b>	13.5	13.9	---
Base Number (BN)	mg KOH/g	<b>9.5</b>	10.1	10.3	---
Oxidation (PA)	%	<b>66</b>	66	78	---

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	---
Soot %	%	<b>0.3</b>	0.3	0.1	---
Nitration (PA)	%	<b>64</b>	67	75	---
Sulfation (PA)	%	<b>57</b>	58	63	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>&lt;1.0</b>	<1.0	0.2	---
Silicon	ppm	<b>4</b>	4	3	---
Sodium	ppm	<b>0</b>	<1	1	---
Potassium	ppm	<b>2</b>	1	1	---

### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

### WEAR METALS

Iron	ppm	<b>8</b>	10	8	---
Copper	ppm	<b>4</b>	5	4	---
Lead	ppm	<b>2</b>	2	1	---
Tin	ppm	<b>&lt;1</b>	<1	<1	---
Aluminum	ppm	<b>2</b>	2	2	---
Chromium	ppm	<b>&lt;1</b>	<1	<1	---
Molybdenum	ppm	<b>59</b>	59	63	---
Nickel	ppm	<b>&lt;1</b>	1	<1	---
Titanium	ppm	<b>&lt;1</b>	0	0	---
Silver	ppm	<b>&lt;1</b>	0	0	---
Manganese	ppm	<b>&lt;1</b>	<1	<1	---
Vanadium	ppm	<b>0</b>	0	<1	---

### ADDITIVES

Calcium	ppm	<b>936</b>	1105	1101	---
Magnesium	ppm	<b>928</b>	919	864	---
Zinc	ppm	<b>1151</b>	1234	1272	---
Phosphorus	ppm	<b>923</b>	1036	1078	---
Barium	ppm	<b>&lt;1</b>	0	0	---
Boron	ppm	<b>&lt;1</b>	7	79	---

**Depot:** VP794951  
**Unique No:** 10889470  
**Signed:** Sean Felton  
**Report Date:** 23 Feb 2024

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# VOLVO PENTA

## GRAPHS

